# APPENDIX A: Background

# INTENSITY-DURATION-FREQUENCY

Compilation of A.E.S. Hydrometeorology Division data for Toronto International Airport, Fergus Shand Dam and Heart Lake (weighted by total years of record)

INTENSITY (mm/h) - (RAINFALL AMOUNT - (mm))

_			FREQ	UENCY		
Duration (min)	2 year	5 year	10 year	25 year	50 year	100 year
5	104.64	135.36	155.64	181.44	200.40	219.36
	(8.72)	(11.28)	(12.97)	(15.12)	(16.70)	(18.28)
10	73.08	94.68	109.02	127.08	140.46	153.78
	(12.18)	(15.78)	(18.17)	(21.18)	(23.41)	(25.63)
15	61.60	82.88	97.04	114.84	128.08	141.24
•	(15.40)	(20.72)	(24.26)	(28.71)	(32.02)	(35.31)
30	41.22	56.96	67.40	80.58	90.32	100.06
	(20.61)	(28.48)	(33.70)	(40.29)	(45.16)	(50.03)
60	24,23	35.32	42.68	51.97	58.85	65.69
	(24.23)	(35.32)	(42.68)	(5t.97)	(58.85)	(65.69)
120	14.73	21.23	25.54	30.98	35.01	39.02
	(29.45)	(42.45)	(51.07)	(61.95)	(70.01)	(78.03)
360	6.51	9.11	10.83	13.00	14.61	16.22
	(39.05)	(54.63)	(64.96)	(78.00)	(87.67)	(97.29)
720	3.76	5.21	6.17	7.37	8.27	9.16
	(45.16)	(62.49)	(73.98)	(88.49)	(99.25)	(109.95)
1440	2.44	3.01	3.56	4.26	4.78	5.29
	(58.49)	(72.21)	(85.50)	(102.26)	(114.69)	(127.05)
•	СНІ	CAGO RAII I = A	NFALL DIS	STRIBUTIO	N .	
Α.	586.10	946.46	1173.48	1368.91	1622.45	1777.20
A		7 <b>.</b> 0		8.0	9.0	9.0
B	6.0		8.0			
<b>C</b> .	760	788	794	789	797	795

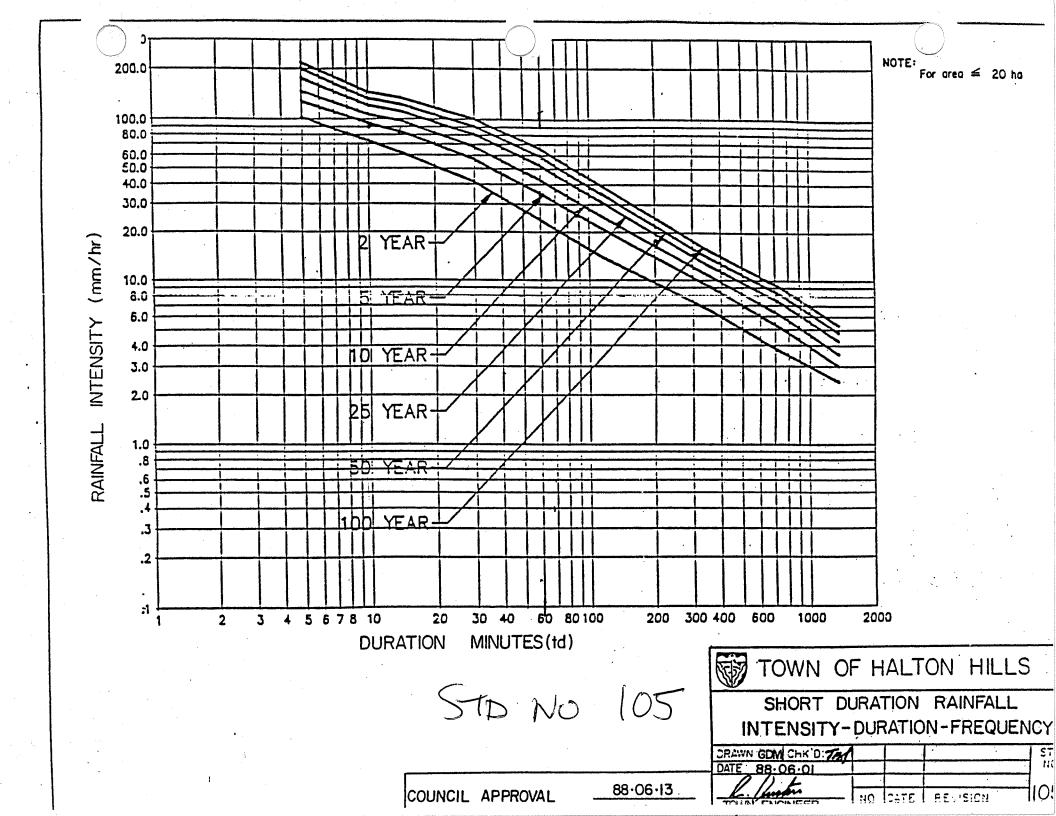
88.06.13

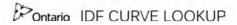
COUNCIL APPROVAL

TOWN	OF	HALTON	HILLS

INTENSITY DURATION FREQUENCY CHICAGO RAINFALL DISTRIBUTION

	DRAWN: GDM CHK'D:				STD
-	DATE: 88,06.01				NO.
	1 linter				108
	TOWN ENGINEER	NO.	DATE	REVISION	100





## **Active coordinate**

43° 38' 45" N, 79° 51' 44" W (43.645833,-79.862500)

Retrieved: Fri, 17 Feb 2023 14:51:37 GMT



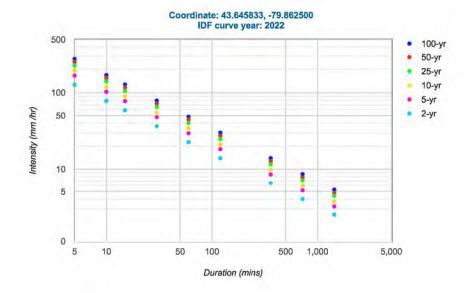
#### **Location summary**

These are the locations in the selection.

IDF Curve: 43° 38' 45" N, 79° 51' 44" W (43.645833,-79.862500)

#### Results

An IDF curve was found.



#### **Coefficient summary**

IDF Curve: 43° 38' 45" N, 79° 51' 44" W (43.645833,-79.862500)

Retrieved: Fri, 17 Feb 2023 14:51:37 GMT

Data year: 2010 IDF curve year: 2022

**Statistics** 

## Rainfall intensity (mm hr<sup>-1</sup>)

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	126.7	78.1	58.9	36.3	22.4	13.9	6.5	4.0	2.5
5-yr	166.4	102.6	77.4	47.7	29.4	18.2	8.5	5.2	3.2
10-yr	192.6	118.7	89.5	55.2	34.0	21.0	9.8	6.0	3.7
25-yr	226.1	139.4	105.0	64.8	39.9	24.6	11.5	7.1	4.4
50-yr	250.5	154.4	116.4	71.7	44.2	27.3	12.7	7.8	4.8
100-yr	274.9	169.5	127.7	78.7	48.5	29.9	13.9	8.6	5.3

#### Rainfall depth (mm)

Duration	5-min	10-min	15-min	30-min	1-hr	2-hr	6-hr	12-hr	24-hr
2-yr	10.6	13.0	14.7	18.1	22.4	27.8	39.0	48.0	60.0
5-yr	13.9	17.1	19.4	23.9	29.4	36.4	51.0	62.4	76.8
10-yr	16.0	19.8	22.4	27.6	34.0	42.0	58.8	72.0	88.8
25-yr	18.8	23.2	26.3	32.4	39.9	49.2	69.0	85.2	105.6
50-yr	20.9	25.7	29.1	35.9	44.2	54.6	76.2	93.6	115.2
100-yr	22.9	28.3	31.9	39.4	48.5	59.8	83.4	103.2	127.2

#### Terms of Use

You agree to the Terms of Use of this site by reviewing, using, or interpreting these data.

Ontario Ministry of Transportation | Terms and Conditions | About Last Modified: September 2016



March 17, 2020

Jeffrey Reid, C.E.T., LET Project Manager, Halton Region 1151 Bronte Road Oakville, ON L6M 3L1

#### Dear Mr. Reid:

Re: Norval West Bypass Transportation Corridor Improvements

Guelph Street (Highway 7) to 10 Sideroad (Regional Road 10), including 10 Sideroad from Tenth Line to Winston Churchill Boulevard/Adamson Street

(Regional Road 19) Town of Halton Hills

Halton Region File Number: PR-2921B

Notice of Study Commencement

Further to receipt of the Notice of Study Commencement dated January 23, 2020, CVC staff offer the following preliminary comments:

It is the understanding of CVC staff that Halton Region is initiating a Municipal Class Environmental Assessment (Class EA) to consider options for road improvements along both the Norval West Bypass and 10 Side Road Corridors.

#### Site Characteristics:

The study area is traversed by Silver Creek (Guelph Street/Highway 7) and adjacent to Levi Creek (10 Sideroad & 10<sup>th</sup> Line) and their associated floodplains. The study area is also traversed by the valley slope associated with the Credit River. In addition, the study area contains provincially significant wetlands (Hungry Hollow Wetland Complex).

The study area contains a portion of the Hungry Hollow Environmentally Significant Area (ESA). These areas contain significant natural features within the Credit River Watershed and include valley and watercourse corridors, wetlands and woodlands. The designation of these is based on criteria related to terrain, flora and fauna, hydrological significance, aesthetic qualities and educational values. Our objective is to protect these sensitive areas from impacts related to construction or development activities.

A portion of the study area is located within the Credit River Watershed Natural Heritage System (CRWNHS). The CRWNHS consists of High Functioning and Supporting terrestrial and aquatic natural heritage features, buffers, and complementary natural heritage areas (Centres for Biodiversity). Based on a watershed scale, the CRWNHS is intended to support Provincial, Regional and local municipal natural heritage systems as identified in their respective Strategies or Plans. As a watershed based management agency and landowner,

March 17, 2020

Re: Norval West Bypass Transportation Corridor Improvements

**Town of Halton Hills** 

Halton Region File Number: PR-2921B Notice of Study Commencement

CVC intends to implement the CRWNHS by using it as a strategic program guidance tool; to inform further development of CVC projects and policies; to assist CVC staff in providing technical advice to landowners and stakeholders at a watershed scale; and to promote a more consistent approach to natural heritage system planning across CVC's jurisdiction. For more detailed information or questions please contact the undersigned to discuss further.

The study area is partially within an area designated as Natural Heritage System Key Feature by the Region of Halton. It is the policy of the Region of Halton to protect the form and function of these natural areas. CVC provides technical support to this agency with respect to delineation of natural features and reviewing potential impacts from development within and adjacent to these lands.

The subject property contains a portion of the Georgetown Credit Valley Area of Natural and Scientific Interest (ANSI). CVC and the Province of Ontario do not support incompatible development within or adjacent to ANSIs. Provincial policy states that development and site alteration may be permitted in an ANSI if it has been demonstrated that there will be no negative impacts on the natural features or the ecological functions for which the area is identified.

The study area may contain or provide habitat for a known Species-at-Risk. Under the Provincial Policy Statement, the Province protects the significant habitat of endangered and threatened species from development. Additionally, the Endangered Species Act 2007 provides legal protection and recovery for species-at-risk and their habitats. Consultation with the Ministry of Environment, Conservation and Parks is recommended to determine if any approvals are necessary.

The study area may be subject to the Approved Source Protection Plan: CTC Source Protection Region. You may also refer to the CTC Source Water Protection website www.ctcswp.ca.

## **Hydraulics and Erosion Hazard**

Any alterations to any watercourse crossings may require a hydraulic analysis to ensure that there are no negative up or downstream impacts. In addition, the road improvements or reconstruction at a minimum should maintain existing depth flooding on the road or improve the road such that it is flood free under Regional Storm conditions.

Any new culverts should address the erosion hazard associated with the watercourse.

#### Stormwater Management

The project should include quality and quantity control measures to treat stormwater runoff in accordance with Ministry of Environment, Conservation and Parks and CVC guidelines. Typically we request that the proponent provide treatment for all new proposed impervious areas and where possible existing road surfaces. Opportunities to use LID techniques should be investigated.

March 17, 2020

Re: Norval West Bypass Transportation Corridor Improvements

**Town of Halton Hills** 

Halton Region File Number: PR-2921B Notice of Study Commencement

## **Erosion and Sediment Controls**

As part of future detailed design, all proposed methods to control sedimentation during construction and potential erosion following the completion of the project should be detailed. Furthermore, as means of minimizing impacts to aquatic habitat all works should be completed in the dry.

Methods to prevent encroachment into sensitive areas during construction should also be detailed. These methods can be combined with the erosion and sediment controls.

#### Restoration

Any disturbed areas will need to be stabilized and restored with native/non-invasive seed mixes and woody species.

#### Conclusion

Given CVC's interest, staff would like to be kept informed of future meetings and proceedings through the Environmental Assessment and detail design process. Please forward any information or plans to the undersigned when available.

Should you have any further questions please contact the Tyler Slaght at (905) 670-1615 extension 406 or Tyler.Slaght@cvc.ca.

Regards,

Elec Sleeglie
Tyler Slaght

Regulations Officer

# **APPENDIX B: Hydrologic Model Files**

# Norval West Bypass - 165010598 Existing Conditions

Soil Type	Hydrologic Soil Group
Fine Sandy Loam	Α
Loamy Sand	В
Clay Loam, Silty Clay Loam	C
Clay	D

	TABLE OF CURVE NUMBERS (CN's)												
Land Use			Hydrologic Soil Type										
		Α	AB	В	BC	С	CD	D					
Meadow	"Good"	30	44	58	64.5	71	74.5	78	MTO				
Woodlot	"Fair"	36	48	60	66.5	73	76	79	MTO				
Lawns	"Good"	39	50	61	67.5	74	77	80	USDA				
Pasture/Ran	ge	58	61.5	65	70.5	76	78.5	81	MTO				
Crop		66	70	74	78	82	84	86	MIO				
Bare Soil (Fal	llow)	77	82	86	89	91	93	94	MTO				
Lakes/Wetla	nd	100	100	100	100	100	100	100	USDA				
Impervious		98	98	98	98	98	98	98	MTO				

MTO - Ministry of Transportation Ontario Drainage Manual (1997), Design Chart 1.09-Soil/Land Use Curve Numbers USDA - United States Department of Agriculture (2004), National Engineering Handbook, Part 630 Hydrology, Chapter 9 Hydrologic Soil Cover Compexes

			HYDRO	LOGIC SOIL	TYPE (%)			
Catchment			Нус	drologic Soil	Туре			
Number	A	AB	В	BC	С	CD	D	TOTAL
Existing Condition	ns							
100					100			100
105				1 - 1	100	-		100
110	1		4	L- 5	100			100
115					100			100

LAND USE (%)											
Catchment Meadow	Woodlot	Lawns	Pasture	Crop	Bare Soil	Lakes and	Impervious	Total			
Number				Range			Wetlands	impervious	10101		
Existing Condit	ions										
100		25	5	5	60	7		5	100		
105		25	25		25	- 0		25	100		
110					98			2	100		
115			-		95			5	100		

	CURVE NUMBER (CN)											
Catchment	Meadow	Woodlot	Lawns	Pasture	Crop	Bare Soil	Lakes and	Impervious	Weighted CN	Weighted CN		
Number				Range			Wetlands	Impervious	w/ imp area	w/o imp area		
xisting Conditi	ons											
100		18	4	4	49			5	80	79		
105		18	19		21			25	82	76		
110					80			2	82	82		
115					78			5	83	82		

Notes:

AMC II assumed

Hydrological Soil Groups taken from MTO Drainage Manual and OMAFRA

# Norval West Bypass - 165010598

# **Proposed Conditions**

Soil Type	Hydrologic Soil Group
Fine Sandy Loam	A
Loamy Sand	В
Clay Loam, Silty Clay Loam	С
Clay	D

			HYDRO	LOGIC SOIL	TYPE (%)							
Catchment		Hydrologic Soil Type										
Number	A	AB	В	BC	С	CD	D	TOTAL				
Proposed Condit	ions							•				
200					100			100				
201				1	100			100				
202					100			100				
203					100			100				
204		(			100			100				
205				H	100			100				
210					100			100				
215			1	11 1	100			100				
220					100			100				
225			1 1	1	100	1		100				

				LA	ND USE (%	5)			
Catchment	Meadow	Woodlot	Lawns	Pasture Range	Crop	Bare Soil	Lakes and	January Carry	Total
Number						LATE	Wetlands	Impervious	
Proposed Cond	ditions								
200	5	23	2	5	60			5	100
201	15	35	25	10				15	100
202			60					40	100
203	50		35					15	100
204			40					60	100
205		30	25		25			20	100
210	10-5				95	>======================================		5	1.00
215					95			5	100
220			20	38				42	100
225	1		10	11	74	-		5	100

				CURVE	NUMBER	(CN)				
Catchment	Meadow	Woodlot	Lawns	Pasture	Crop	Bare Soil	Lakes and	Paris 900 \$ 20.	Weighted CN	Weighted CN
Number				Range			Wetlands	Impervious	w/ imp area	w/o imp area
Proposed Cond	ditions									
200	4	17	1	4	49			5	80	79
201	11	26	19	8		1		15	77	73
202			44	11 11 11				39	84	73
203	36		26					15	76	72
204			30					59	88	72
205		22	19		21			20	81	76
210					78			5	83	82
215					78			5	83	82
220			15	29				41	85	74
225			7	8	61			5	81	80

Notes:

AMC II assumed

Hydrological Soil Groups taken from MTO Drainage Manual and OMAFRA

#### Norval West Bypass - 165010598 **SWMHYMO Parameters**

Catchment	VO Command	Area (ha)	CN	TIMP	XIMP	Length P (m)	Slope (%)	Tc (hrs)	Tp (hrs)	MNP	MNI
xisting Condition	ns										
100	DESIGN NASHYD	23.5	80			600	3.1	0.82	0.49	0.25	0.013
105	DESIGN STANDHYD	7.9	76	0.20	0.10	250	8.0			0.25	0.013
110	DESIGN NASHYD	16.6	82		-	750	1.3	1.22	0.73	0.25	0.013
115	DESIGN NASHYD	23.8	83		-	1000	1,0	1.55	0.93	0.25	0.013
Total	to Silver Creek	23.5									
Total to Levi Creek		23.8									
Total To Norval / Credit River		24.5									

Notes:

71.7 CN calculated for pervious areas only for DESIGN STANDHYD. CN is a weighed average for DESIGN NASHYD

TIMP Total percent impervious

Total

XIMP Percent impervious directly connected

Time of Concentration calculated using the Airport Method (For areas less than 100 ha, and RC less than 0.4)

Time of Concentration calculated using the SCS Lag Equation (For areas greater than 100 ha)

Time to Peak Tp = 0.6Tc Tc = [ 3.26 (1.1-C)  $L^{0.5}$ ] /  $S^{0.33}$ 

C = Runoff Coefficient = 0.2 for undeveloped areas

L = Length of Overland Flow (m)

S = Slope (%)

 $Tc = [259L^{0.8} [(1000 / CN) - 9] 0.7] / [1900S^{0.5}]$ 

L = Length of Overland Flow (m)

CN = SCS Curve Number

S = Slope (%)

#### Norval West Bypass - 165010598 **SWMHYMO Parameters**

Catchment	SWMHYMO Command	Area (ha)	CN	TIMP	XIMP	Length (m)	Slope (%)	Tc (hrs)	Tp (hrs)	MNP	MNI
roposed Condi	tions										
200	DESIGN NASHYD	20.3	80	5.00		500	3.6	0.72	0.43	0.25	0.013
201	DESIGN NASHYD	3.2	77	15.00		160	13.8	0.26	0.16	0.25	0.013
202	DESIGN STANDHYD	4.6	73	40.00	32.00	500	5.0			0.25	0.013
203	DESIGN NASHYD	1.6	76	15.00		110	2.0	0.41	0.24	0.25	0.013
204	DESIGN STANDHYD	1.9	72	60.00	48.00	300	1.0	-	1-3-1-1	0.25	0.013
205	DESIGN STANDHYD	7.9	76	20.00	10.00	250	5.0		K ZATE	0.25	0.013
210	DESIGN NASHYD	6.8	83	5.00		400	1.3	0.90	0.54	0.25	0.013
215	DESIGN NASHYD	15.8	83	5.00	-	600	1.1	1.16	0.70	0.25	0.013
220	DESIGN STANDHYD	5.6	80	42.00	33.60	250	2.0			0.25	0.013
225	DESIGN NASHYD	4.0	81	5.00		500	1.2	1.03	0.62	0.25	0.013
Tota	al to Silver Creek	28.1									
Total to Levi Creek		29.0									
7.3725											

Notes:

CN calculated for pervious areas only for DESIGN STANDHYD. CN is a weighed average for DESIGN NASHYD

14.7

71.7

TIMP Total percent impervious

Total To Norval / Credit River Total

XIMP Percent impervious directly connected

Time of Concentration calculated using the Airport Method (For areas less than 100 ha, and RC less than 0.4)

Time of Concentration calculated using the SCS Lag Equation (For areas greater than 100 ha)

Time to Peak Tp = 0.6Tc  $Tc = [3.26 (1.1-C) L^{0.5}] / S^{0.33}$ 

C = Runoff Coefficient = 0.2 for undeveloped areas L = Length of Overland Flow (m) S = Slope (%)

 $Tc = [259L^{0.8}[(1000 / CN) - 9] 0.7] / [1900S^{0.5}]$ 

L = Length of Overland Flow (m)

CN = SCS Curve Number

S = Slope (%)



Existing Visual OTTHYMO Model Schematic

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(v 6.2.2015)
                              VV I SSSSS UUUUUU A A LLLLL
                       OOO TTTTT TTTTT H H Y Y M M OOO TM O O T T H H H YY MM MM O O O O O T T H H H Y M M O O OOO T T H H Y M M OOO
         Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2022 Smart City Water Inc
                                                      ***** DETAILED OUTPUT*****
           Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
         Output filename: C:\Users\uyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\78c88c4a-7d71-4da5-832f-bf5be4aa0cd6\scen
       Summary \ filename: C: Users \ nyokich\ App Data\ Local \ Civica\ VH5\ 3783a080-e662-4500-89be-26df3e227620\ '78c88c4a-7d71-4da5-832f-bf5be4aa0cd6\ scen
         DATE: 03/11/2024 TIME: 11:36:37
         USER:
         COMMENTS:
           ** SIMULATION : Chicago_100yr **
                  READ STORM | Filename: C:\Users\nyokich\AppD
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8a20bc98-3229-45bd-86a2-c24eba0248e6\dd8f026f
          Ptotal= 82.62 mm | Comments: Chicago_100yr
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```

```
    0.17
    7.80 | 0.92
    21.80 | 1.67
    29.05 | 2.42
    9.65

    0.25
    8.36 | 1.00
    27.68 | 1.75
    23.59 | 2.50
    9.02

    0.33
    9.02 | 1.08
    37.92 | 1.83
    19.87 | 2.58
    8.47

    0.42
    9.81 | 1.17
    59.55 | 1.92
    17.18 | 2.67
    7.99

    0.50
    10.76 | 1.25
    128.51 | 2.00
    15.16 | 2.75
    7.57

    0.58
    11.94 | 1.33
    206.77 | 2.08
    13.57 | 2.83
    7.19

    0.67
    13.42 | 1.42
    89.93 | 2.17
    12.30 | 2.92
    6.85

| (ALID | | (ASHYD ( 0115) | Area (ha)= 23.79 Curve Number (CN)= 83.0 | (ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (U.H. Tp(hrs)= 0.93
     Unit Hyd Qpeak (cms)= 0.977
      PEAK FLOW (cms)= 1.455 (i)
TIME TO PEAK (hrs)= 2.500
     RUNOFF VOLUME (mm)= 46.469
TOTAL RAINFALL (mm)= 82.617
RUNOFF COEFFICIENT = 0.562
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
 | Junction Command(0005) |
 AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)
INFLOW: ID=2 (0115) 23.79 1.46 2.50 46.47
OUTFLOW: ID=2 (0005) 23.79 1.46 2.50 46.47
CALIB
Unit Hyd Qpcak (cms)= 0.869
     PEAK FLOW (cms)= 1.183 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 45.169
TOTAL RAINFALL (mm)= 82.617
RUNOFF COEFFICIENT = 0.547
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
     Unit Hyd Qpeak (cms)= 1.829
```

CALIB IMPERVIOUS PERVIOUS (i) Surface Area (ha)= 1.58 6.32 Dep. Storage (mm)= 2.00 5.00 Average Slope (%)= 2.00 5.00 Length (m)= 50.00 250.00 Mannings n = 0.013 0.250 
 Max.Eff.Inten.(mm/hr)= over (min)
 200.00

 Storage Coeff. (min)=
 1.02 (ii)
 19.09 (ii)

 Unit Hyd. Tyeak (min)=
 5.00
 20.00

 Unit Hyd. peak (cms)=
 0.34
 0.06

 \*TOTALS\*
 Max.Eff.Inten.(mm/hr)= 206.77 75.00 \*\*\*\*\* WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
\*\*\*\*\* WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20% YOU SHOULD CONSIDER SPLITTING THE AREA. (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EOUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. ID = 3 (0006): 24.50 1.723 1.92 45.07 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. 

```
PEAK FLOW (cms)= 2.094 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 42.688
TOTAL RAINFALL (mm)= 82.617
RUNOFF COEFFICIENT = 0.517
   (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
 Junction Command(0007)
                     AREA OPEAK TPEAK R.V.
 (ha) (cms) (hrs) (mm)
INFLOW: ID=2( 0100) 23.46 2.09 1.92 42.69
OUTFLOW: ID=2( 0007) 23.46 2.09 1.92 42.69
     V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U AAA L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSS UUUUU A A LLLLL
     OOO TITTT TITTT H H Y Y M M OOO TM
O O T T H H YY MM M O O
O O T T H H Y Y M M O O
OOO T T H H Y M M OO
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All rights reserved.
              ***** DETAILED OUTPUT *****
 Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\6be8793b-d09d-4878-aed7-7a795994f00a\scen
Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\6be8793b-d09d-4878-aed7-7a795994f00a\scen
DATE: 03/11/2024
                                           TIME: 11:36:37
```

(ha) (cms) (hrs) (mm) INFLOW: ID=2( 0115) 23.79 0.77 2.50 24.56 OUTFLOW: ID=2( 0005) 23.79 0.77 2.50 24.56 COMMENTS: \*\* SIMULATION : Chicago\_10yr \*\* Unit Hyd Qpeak (cms)= 0.869 READ STORM | Filename: C:\Users\nyokich\AppD ata\Local\Temp\ 8a20bc98-3229-45bd-86a2-c24eba0248e6\964de38b PEAK FLOW (cms)= 0.616 (i) TIME TO PEAK (hrs)= 2.250 RUNOFF VOLUME (mm)= 23.693 TOTAL RAINFALL (mm)= 55.074 RUNOFF COEFFICIENT = 0.430 Ptotal= 55.07 mm | Comments: Chicago\_10yr TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |

10.00 4.53 | 0.75 | 10.06 | 1.50 | 35.03 | 2.25 | 7.36 |

0.08 4.80 | 0.83 | 11.72 | 1.58 | 24.56 | 2.33 | 6.80 |

0.17 5.12 | 0.92 | 14.17 | 1.67 | 18.87 | 2.42 | 6.33 |

0.25 5.49 | 1.00 | 17.98 | 1.75 | 15.33 | 2.50 | 5.92 |

0.33 5.92 | 1.08 | 24.65 | 1.83 | 12.92 | 2.58 | 5.56 |

0.42 6.43 | 1.17 | 38.96 | 1.92 | 11.19 | 2.67 | 5.25 |

0.50 7.04 | 1.25 | 86.93 | 2.00 | 9.88 | 2.75 | 4.97 |

0.58 7.80 | 1.33 | 144.84 | 2.08 | 8.86 | 2.83 | 4.72 |

0.67 8.76 | 1.42 | 59.59 | 2.17 | 8.04 | 2.92 | 4.50 | (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. | STANDHYD ( 0105)| Area (ha)= 7.90 |ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00 IMPERVIOUS PERVIOUS (i) Surface Area (ha)= 1.58 6.32
Dep. Storage (mm)= 2.00 5.00
Average Slope (%)= 2.00 5.00
Length (m)= 50.00 250.00
Mannings n = 0.013 0.250 Mannings n Max.Eff.Inten.(mm/hr)= 144.84 | Max.Eff.micen.(mim/nr)|= | 144.84 | 34.31 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | 34.51 | Unit Hyd Qpeak (cms)= 0.977 PEAK FLOW (cms)= 0.765 (i) TIME TO PEAK (hrs)= 2.500 RUNOFF VOLUME (mm)= 24.559 TOTAL RAINFALL (mm)= 55.074 RUNOFF COEFFICIENT = 0.446 PEAK FLOW (cms)= 0,32 0,35 0,384 (iii)
TIME TO PEAK (hrs)= 1.42 1.83 1.42
RUNOFF VOLUME (mm)= 55.07 21.02 24.23
TOTAL RANFALL (mm)= 55.07 55.07
RUNOFF COEFFICIENT - 0,96 0,38 0.44 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. \*\*\*\*\* WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP! \*\*\*\*\* WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20% YOU SHOULD CONSIDER SPLITTING THE AREA. Junction Command(0005) (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL AREA QPEAK TPEAK R.V. THAN THE STORAGE COEFFICIENT. file:///V/...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM] O O T T H H Y M M O O OOO T T H H Y M M M OOO Developed and Distributed by Smart City Water Inc Copyright 2007 - 2022 Smart City Water Inc (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. All rights reserved. | ADD HYD ( 0006)| | 1 + 2 = 3 | AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) ID1=1 ( 0105): 7.90 0.384 1.42 24.23 + ID2=2 ( 0110): 16.60 0.616 2.25 23.69 ID = 3 ( 0006): 24.50 0.914 2.08 23.86 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

file:///V/...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/\$20-%20All%20Storms.txt[3/11/2024 11:41:21 AM] \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\* Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\46abef7ad8ad-44e8-9991-7819ace2374f\()scen Summary filename: C\(\)Users\(\)uyokich\\AppData\(\)Local\(\)Civica\(\)VH5\\\3783a080-e662-4500-89be-26df3e227620\46abef7a-d8ad-44e8-9991-7819ace2374f\scen DATE: 03/11/2024 TIME: 11:36:37 TISER-COMMENTS: READ STORM | Filename: C:\Users\nyokich\AppD ata\Local\Temp\ 8a20bc98-3229-45bd-86a2-c24eba0248e6\ae79c4fd Ptotal= 65.95 mm | Comments: Chicago\_25yr TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN CALIB

```
| NASHYD ( 0115)| Area (ha)= 23.79 Curve Number (CN)= 83.0
|ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                                                                                                                                                                       --- U.H. Tp(hrs)= 0.93
       Unit Hyd Qpeak (cms)= 0.977
      PEAK FLOW (cms)= 1.026 (i)
TIME TO PEAK (hrs)= 2.500
                                                                                                                                                                        PEAK FLOW (cms)= 0.37 0.51 0.562 (iii)
TIME TO PEAK (lns)= 1.42 1.75 1.75
RUNOFF VOLUME (mm)= 65.95 28.48 32.03
TOTAL RAINFALL (mm)= 65.95 65.95
RUNOFF COEFFICIENT = 0.97 0.43 0.49
      RUNOFF VOLUME (mm)= 32.879
TOTAL RAINFALL (mm)= 65.946
RUNOFF COEFFICIENT = 0.499
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                     ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                     ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                                                                                                                                                                                YOU SHOULD CONSIDER SPLITTING THE AREA
                                                                                                                                                                         (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
    Junction Command(0005)
    THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                        (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                    | ADD HYD ( 0006)|
                                                                                                                                                                    | 1 + 2 = 3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | (ml) (1015): 7.90 0.562 1.75 32.03 | +1D2 = 2 ( 0110): 16.60 0.829 2.25 31.83
   CALIB
  Unit Hyd Qpeak (cms)= 0.869
                                                                                                                                                                          ID = 3 ( 0006): 24.50 1.222 2.00 31.89
      PEAK FLOW (cms)= 0.829 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 31.828
TOTAL RAINFALL (mm)= 65.946
RUNOFF COEFFICIENT = 0.483
                                                                                                                                                                        NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                        Unit Hyd Qpeak (cms)= 1.829
                                                                                                                                                                        PEAK FLOW (cms)= 1.454 (i)
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 29.846
TOTAL RAINFALL (mm)= 65.946
RUNOFF COEFFICIENT = 0.453
   CALIB
   | STANDHYD ( 0105)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                         IMPERVIOUS PERVIOUS (i)
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
file:///V/...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]
                                                                                                                                                                file:///V/...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/$20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]
                                                                                                                                                                        READ STORM | Filename: C:\Users\nyokich\AppD
    Junction Command(0007)
                                                                                                                                                                                              ata\Local\Temp\
8a20bc98-3229-45bd-86a2-c24eba0248e6\248c7391
                                                                                                                                                                     Ptotal=33.13 mm | Comments: Chicago_2yr
                        AREA QPEAK TPEAK R.V.
    (ha) (cms) (hrs) (mm)
INFLOW: ID=2( 0100) 23.46 1.45 2.00 29.85
OUTFLOW: ID=2( 0007) 23.46 1.45 2.00 29.85
                                                                                                                                                                                  TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                                                 IIME RAIN | IIME RAIN | IIME RAIN | IIME |

ISS mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |

0.00 3.00 | 0.75 6.21 | 1.50 | 19.92 | 2.25 4.68 |

0.08 3.17 | 0.83 7.16 | 1.58 | 14.20 | 2.33 4.36 |

0.17 3.36 | 0.92 8.53 | 1.67 | 11.11 | 2.42 4.08 |

0.25 3.58 | 1.00 | 10.62 | 1.75 9.17 | 2.50 3.83 |

0.33 3.83 | 1.08 | 14.25 | 1.83 7.84 | 2.58 3.62 |

0.42 4.14 | 1.17 | 22.09 | 1.92 | 6.87 | 2.67 3.43 |

0.50 4.50 | 1.25 | 50.42 | 2.00 | 6.13 | 2.75 3.27 |

0.58 4.94 | 33 8.93 | 2.08 5.51 2.83 3.12 |
       V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U AA L
V V I SS U U AAAAA L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
                                                                                                                                                                                  0.58 4.94 | 1.33 89.35 | 2.08 5.55 | 2.83 
0.67 5.48 | 1.42 33.74 | 2.17 5.07 | 2.92
         OOO TTTTT TTTTT H H Y Y M M OOO TM
```

| READ STORM | Filename: C\Users\uparts\upar

PEAK FLOW (cms)= 0.236 (i) TIME TO PEAK (hrs)= 2.333 RUNOFF VOLUME (mm)= 9.434 TOTAL RAINFALL (mm)= 33.132 RUNOFF COEFFICIENT = 0.285 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. STANDHYD ( 0105) Area (ha)= 7.90 ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00 IMPERVIOUS PERVIOUS (i) Max.Eff.Inten.(mm/lr)= 89,35 9,04 over (min) 5,00 45,00 Storage Coeff. (min)= 1,43 (ii) 43,54 (ii) Unit Hyd. Tpeak (min)= 5,00 45,00 Unit Hyd. peak (cms)= 0,33 0,03 \*\*TOTALS\*\* PEAK FLOW (cms)= 0.19 0.09 0.202 (iii)
TIME TO PEAK (lrs)= 1.42 2.17 1.42
RUNOFF VOLUME (mm)= 31.13 8.23 10.52
TOTAL RAINFALL (mm)= 33.13 33.13
RUNOFF COEFFICIENT = 0.94 0.25 0.32 \*\*\*\*\* WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP! \*\*\*\*\* WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20% YOU SHOULD CONSIDER SPLITTING THE AREA. (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT. (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. ID = 3 ( 0006): 24.50 0.337 2.25 9.78 file: ///V/...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]

4756-4d49-abb4-8ef2717e91d0\scen Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\253ffa72-4756-4d49-abb4-8ef2717e91d0\scen DATE: 03/11/2024 TIME: 11:36:37 USER: COMMENTS: \* \*\* SIMULATION : Chicago\_50yr \*\* READ STORM | Filename: C:\Users\nvokich\AppD ata\Local\Temp\ 8a20bc98-3229-45bd-86a2-c24eba0248e6\6e087507 Ptotal= 74.64 mm | Comments: Chicago\_50yr TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN CALIB | DASHYD ( 0115) | Area (ha)= 23.79 Curve Number (CN)= 83.0 | ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 --- U.H. Tp(hrs)= 0.93 Unit Hyd Qpeak (cms)= 0.977 PEAK FLOW (cms)= 1.248 (i) TIME TO PEAK (hrs)= 2.500 RUNOFF VOLUME (mm)= 39.859 TOTAL RAINFALL (mm)= 74.637 RUNOFF COEFFICIENT = 0.534

```
***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
  ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
           YOU SHOULD CONSIDER SPLITTING THE AREA.
      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
     CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
     THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
  | ADD HYD ( 0006)|
   H2 = 3 | AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) (D1=1 (0105): 7.90 0.728 1.75 38.60 + 1D2-2 (0110). 16.60 1.012 2.25 38.67
       ID = 3 ( 0006): 24.50 1.506 2.00 38.65
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
  CALIB
 | CALIB | | NASHYD ( 0100) | Area (ha)= 23.46 Curve Number (CN)= 80.0 | | ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | | U.H. Tp(hrs)= 0.49
     Unit Hyd Qpeak (cms)= 1.829
    PEAK FLOW (cms)= 1.783 (i)
TIME TO PEAK (hrs)= 1.917
RUNOFF VOLUME (mm)= 36.421
TOTAL RAINFALL (mm)= 74.637
RUNOFF COEFFICIENT = 0.488
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   Junction Command(0007)
                    AREA QPEAK TPEAK R.V.
  (ha) (cms) (hrs) (mm)
INFLOW: ID= 2( 0100) 23.46 1.78 1.92 36.42
OUTFLOW: ID= 2( 0007) 23.46 1.78 1.92 36.42
file:///V/...4%20Updated%20EA%20Analyxis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]
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V V I SSSSS U U A L (V
V V I SS U U AA L
V V I SS U U AAAAA L
V V I SS U U AAAAA L
V V I SSSSS UUUUU A A LLLLL
                                                                 (v 6.2.2015)
    OOO TITTT TITTT H H Y Y M M OOO TM
O O T T H H YY MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
Developed and Distributed by Smart City Water Inc
    Copyright 2007 - 2022 Smart City Water Inc
     All rights reserved.
                   ***** DETAILED OUTPUT *****
      Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
    Output filename: C:\Users\uyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\2438d19e-6780-4528-b8ea-fd18a03934f8\scen
    Summary filename: C:\Users\nyokich\AppData\Loca\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\2438d19e-6780-4528-b8ea-fd18a03934f8\scen
    DATE: 03/11/2024
    USER:
    COMMENTS:
      **********
      ** SIMULATION : Chicago_5yr **
       READ STORM | Filename: C:\Users\nyokich\AppD | ata\Local\Temp\ 8a20bc98-3229-45bd-86a2-c24cba0248c6\f4232b31
     Ptotal= 46.03 mm | Comments: Chicago_5yr
                  TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.00 3.81 | 0.75 8.28 | 1.50 28.53 | 2.25 6.13
0.08 4.04 | 0.83 9.65 | 1.58 20.00 | 2.33 5.67
0.17 4.30 | 0.92 11.63 | 1.67 15.41 2.42 5.28
0.25 4.60 | 1.00 14.69 | 1.75 12.56 | 2.50 4.95
0.33 4.95 | 1.08 20.08 | 1.83 10.62 | 2.58 4.66
file:///V/...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]
```

```
| STANDHYD ( 0105)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                              IMPERVIOUS PERVIOUS (i)

        Max.Eff.Inten.(mm/lr)=
        126.08
        22.44

        over (min)
        5.00
        35.00

        Storage Coeff. (min)=
        1.25 (ii)
        30.51 (ii)

        Unit Hyd. Tpeak (min)=
        5.00
        35.00

        Unit Hyd. peak (cms)=
        0.33
        0.04

        **TOTAL S**
        **TOTAL S**

        PEAK FLOW (cms)=
        0.27
        0.22
        0.308 (iii)

        TIME TO PEAK (hrs)=
        1.42
        2.00
        1.42

        RUNOFF VOLUME (mm)=
        44.03
        15.32
        18.19

        TOTAL RAINFALL (mm)=
        46.03
        46.03
        46.03

        RUNOFF COEFFICIENT =
        0.96
        0.33
        0.40

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
**** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
               YOU SHOULD CONSIDER SPLITTING THE AREA
       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
      CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
     THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
| ADD HYD ( 0006)|
| 1 + 2 = 3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1 = 1 (0105): 7.90 0.308 1.42 18.19 | + ID2 = 2 (0110): 16.60 0.449 2.25 17.39
        ID = 3 ( 0006): 24.50 0.662 2.17 17.65
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
CALIB
Unit Hyd Qpeak (cms)= 1.829
     PEAK FLOW (cms)= 0.779 (i)
```

```
TIME TO PEAK (hrs)= 2.000
RUNOFF VOLUME (mm)= 16.101
TOTAL RAINFALL (mm)= 46.025
RUNOFF COEFFICIENT = 0.350
              (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
       | Junction Command(0007) |
      AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)
INFLOW: ID= 2( 0100) 23.46 0.78 2.00 16.10
OUTFLOW: ID= 2( 0007) 23.46 0.78 2.00 16.10
                V V I SSSSS U U A L (V V V I SS U U AA L V V I SS U U AAAAA L V V I SS U U AAAAA L V V I SS U U A A L LLLL V V I SSSSS UUUUU A A LLLLL
                                                                                                                                  (v 6.2.2015)
                000 TTTTT TTTTT H H Y Y M M 000 TM 0 0 T T H H H YY MM MM 0 0 0 0 0 T T H H H Y M M 0 0 000 T T H H Y M M 000
    Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2022 Smart City Water Inc
All rights reserved.
                                        ***** DETAILED OUTPUT *****
       Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
        Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\59904cb5-
     6f85-4b7c-8b6a-15bdfd3a3bb8\scen
    Summary filename: C:\Users\nyokich\AppData\Loca\Ucivica\VH5\3783a080-e662-4500-89be-
26df3e227620\59904cb5-6f85-4b7e-8b6a-15bdfd3a3bb8\scen
                                                                                    TIME: 11:36:38
     DATE: 03/11/2024
     USER:
\label{eq:control_control_control} \text{file:} /// V. // 4/20 Updated %20 EA/20 Analysis VO Detailed %20 Output Existing %20 VO %20 Detailed %20 Output Existing %20 VO
```

```
** SIMULATION : Regional (HH_48hr) **
    READ STORM | Filename: C:\Users\nyokich\AppD
                              ata\Local\Temp\
8a20bc98-3229-45bd-86a2-c24eba0248e6\36cc42a6
Ptotal=285.00 mm | Comments: Regional HH
                TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                hrs mm/hr | 0.00 | 2.00 | 12.00 | 2.00 | 24.00 | 2.00 | 36.00 | 6.00 | 0.25 | 2.00 | 12.25 | 2.00 | 24.25 | 2.00 | 36.25 | 6.00
               0.25
                         2.00 | 12.50 | 2.00 | 24.50 | 2.00 | 36.50
               4.00
                         2.00 | 13.25 | 2.00 | 25.25 | 2.00 | 37.25 | 2.00 | 13.50 | 2.00 | 25.50 | 2.00 | 37.50
               1.25
1.50
                                                                                          4.00
                1.75
                         2.00 | 13.75 | 2.00 | 25.75 | 2.00 | 14.00 | 2.00 | 26.00
                                                                   2.00 | 37.75
2.00 | 38.00
                                                                                          4.00
                         2.00 | 14.25 | 2.00 | 26.25 | 2.00 | 38.25 | 2.00 | 14.50 | 2.00 | 26.50 | 2.00 | 38.50 | 2.00 | 14.75 | 2.00 | 26.75 | 2.00 | 38.75
               2.25
               2.50
               2.75
                                                                                           6.00
                        2.00 | 15.00 | 2.00 | 27.00 | 2.00 | 39.00 | 13.00 | 2.00 | 15.25 | 2.00 | 27.25 | 2.00 | 39.25 | 13.00
               3.00
               3.25
               3.50 2.00 | 15.50 2.00 | 27.50 2.00 | 39.50 13.00 3.75 2.00 | 15.75 2.00 | 27.75 2.00 | 39.75 13.00 4.00 2.00 | 16.00 2.00 | 28.00 2.00 | 40.00 17.00
                         2.00 | 16.25 | 2.00 | 28.25
2.00 | 16.50 | 2.00 | 28.50
                                                                   2.00 | 40.25 | 17.00
2.00 | 40.50 | 17.00
                         2.00 | 16.75 | 2.00 | 28.75 | 2.00 | 40.75 | 17.00
               4.75
                         2.00 | 17.00
2.00 | 17.25
                                              2.00 | 29.00
2.00 | 29.25
                                                                    2.00 | 41.00 13.00
2.00 | 41.25 13.00
               5.00
5.25
                         2.00 | 17.50 | 2.00 | 29.50 | 2.00 | 41.50 | 13.00 | 2.00 | 17.75 | 2.00 | 29.75 | 2.00 | 41.75 | 13.00
                5.50
                        2.00 | 18.00 | 2.00 | 30.00 | 2.00 | 42.00 | 23.00 | 2.00 | 18.25 | 2.00 | 30.25 | 2.00 | 42.25 | 23.00
               6.00
               6.50
                         2.00 | 18.50 | 2.00 | 30.50 | 2.00 | 42.50 | 23.00
                         2.00 | 18.75 | 2.00 | 30.75 | 2.00 | 42.75 | 23.00 | 2.00 | 19.00 | 2.00 | 31.00 | 2.00 | 43.00 | 13.00
                7.25
                         2.00 | 19.25 | 2.00 | 31.25 | 2.00 | 43.25 | 13.00
                         2.00 | 19.50 | 2.00 | 31.50 | 2.00 | 19.75 | 2.00 | 31.75
                                                                   2.00 | 43.50 | 13.00
2.00 | 43.75 | 13.00
                7.75
                         2.00 | 20.00 | 2.00 | 32.00
2.00 | 20.25 | 2.00 | 32.25
                                                                   2.00 | 44.00 | 13.00
2.00 | 44.25 | 13.00
                8.00
               8.25
                8.50
                         2.00 | 20.50 | 2.00 | 32.50 | 2.00 | 44.50 | 13.00
                         2.00 | 20.75
                                               2.00 | 32.75 | 2.00 | 44.75 | 13.00 | 2.00 | 33.00 | 2.00 | 45.00 | 53.00
                8.75
                         2.00 | 21.00
               9.00
                        2.00 | 21.25 | 2.00 | 33.25 | 2.00 | 45.25 | 53.00
```

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9.50 2.00 | 21.50 2.00 | 33.50 2.00 | 45.50 53.00

9.75 2.00 | 21.75 2.00 | 33.75 2.00 | 45.75 53.00
                                                                         2.00 | 34.00
2.00 | 34.25
                                                                                                          2.00 | 46.00 38.00
2.00 | 46.25 38.00
                       10.00
                                       2.00 | 22.00
                                         2.00 | 22.25
                       10.25
                       10.50
                                       2.00 | 22.50
                                                                         2.00 | 34.50
                                                                                                           2.00 | 46.50 38.00
                                                                         2.00 | 34.75
                                                                                                           2.00 | 46.75 38.00
                       11.00
                                       2.00 | 23.00 | 2.00 | 35.00
                                                                                                           3.00 | 47.00 | 13.00
                                      2.00 | 23.25 | 2.00 | 35.25
2.00 | 23.50 | 2.00 | 35.50
                                                                                                         3.00 | 47.25 | 13.00
3.00 | 47.50 | 13.00
                       11.25
                       11.50
                       11.75 2.00 23.75 2.00 35.75 3.00 47.75 13.00
 CALIB | NASHYD ( 0115)| Area (ha)= 23.79 Curve Number (CN)= 83.0 | ID= 1 DT= 5.00 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
ID= 1 DT= 5.0 min | Ia
                                  --- U.H. Tp(hrs)= 0.93
            NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                 -- TRANSFORMED HYETOGRAPH -
                     TIME RAIN | TIME R
                      0.417 2.00 | 12.417 2.00 | 24.417 2.00 | 36.42 
0.500 2.00 | 12.500 2.00 | 24.500 2.00 | 36.50
                                                                                                                                               6.00
                                                                                                                                               6.00
                       0.583
                                       2.00 | 12.583
                                                                          2.00 24.583 2.00 36.58
                                                                                                                                               6.00
                                       2.00 |12.667
2.00 |12.750
                                                                          2.00 |24.667
2.00 |24.750
                                                                                                               2.00 | 36.67
                       0.750
                                                                                                              2.00 | 36.75
                                                                                                                                               6.00
                       0.833
                                       2.00 |12.833
2.00 |12.917
                                                                          2.00 |24.833
2.00 |24.917
                                                                                                            2.00 | 36.83
2.00 | 36.92
                       0.917
                       1.000
                                       2.00 | 13.000
                                                                          2.00 | 25.000 | 2.00 | 37.00
                                                                                                                                              6.00
                                         2.00 |13.083
                                                                           2.00 |25.083
                       1.167
                                         2 00 113 167
                                                                           2 00 25 167
                                                                                                              2 00 | 37 17
                                                                                                                                               4.00
                                         2.00 |13.250
                                                                           2.00 |25.250
                                                                                                             2.00 | 37.25
                       1.333
                                                                           2.00 |25.333 | 2.00 |25.417
                                                                                                             2.00 | 37.33 | 2.00 | 37.42
                                       2.00 | 13.333 | 2.00 | 13.417
                                                                                                                                               4.00
                       1.417
                                                                                                                                               4.00
                                                                          2.00 |25.500
2.00 |25.583
                                         2.00 |13.500
                                                                                                               2.00 | 37.50
                       1.583
                                       2.00 |13.583
                                                                                                             2.00 | 37.58
                                                                                                                                               4.00
                       1.667
                                       2.00 | 13.667
                                                                          2.00 |25.667
2.00 |25.750
                                                                                                            2.00 | 37.67
2.00 | 37.75
                                        2.00 |13.750
                       1.750
                                                                                                                                               4.00
                       1.833
                                         2.00 113.833
                                                                           2.00 |25.833
                                                                                                             2.00 | 37.83
                                                                                                                                               4.00
                       1.917
                                         2.00 |13.917
                                                                            2.00 |25.917
                                                                                                               2.00 | 37.92
                       2.000
                                         2.00 | 14.000
                                                                           2.00 |26,000
                                                                                                             2.00 | 38.00
                                                                                                                                               4.00
                       2.083
                                         2.00 |14.083
2.00 |14.167
                                                                          2.00 |26.083
2.00 |26.167
                                                                                                            2.00 | 38.08
                                                                                                                                                6.00
                       2.167
                                                                                                                                               6.00
                                        2.00 |14.250 | 2.00 |26.250 | 2.00 | 38.25 | 2.00 |14.333 | 2.00 |26.333 | 2.00 |38.33
                       2.250
                                       2.00 114.250
                                                                                                                                              6.00
                       2.417 2.00 | 14.417 2.00 | 26.417 2.00 | 38.42
                                                                                                                                              6.00
```

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2.500 2.00 | 14.500 2.00 | 26.500 2.00 | 38.50 6.00 2.583 2.00 | 14.583 2.00 | 26.583 2.00 | 38.58 6.00
2.667
          2.00 14.667 2.00 26.667
                                                        2.00 | 38.67
                                                                               6.00
                                  2.00 |26.750
2.833
           2.00 | 14.833
                                  2.00 | 26.833
                                                        2.00 | 38.83
                                                                               6.00
          2.00 |14.917 | 2.00 |26.917 | 2.00 | 38.92 | 2.00 |15.000 | 2.00 |27.000 | 2.00 | 39.00
3.000
                                                                              6.00
          2.00 |15.083
2.00 |15.167
                                  2.00 |27.083
2.00 |27.167
                                                        2.00 | 39.08
2.00 | 39.17
3 083
                                                                              13.00
3.250
           2.00 | 15.250
                                  2.00 | 27.250
                                                        2.00 | 39.25
                                                                              13.00
                                  2.00 |27.333
3.333
           2.00 |15.333
                                                        2.00 | 39.33
3.417
           2.00 | 15.417
                                                        2.00 | 39.42 | 13.00
3.500
           2.00 |15.500
2.00 |15.583
                                 2.00 |27.500
2.00 |27.583
                                                        2.00 | 39.50
2.00 | 39.58
                                                                              13.00
3.583
                                                                              13.00
                                 2.00 |27.667
2.00 |27.750
2.00 |27.833
                                                       2.00 | 39.67 | 13.00
2.00 | 39.75 | 13.00
2.00 | 39.83 | 13.00
3 667
           2.00 115 667
          2.00 | 15.750
2.00 | 15.833
3.833
          2.00 |15.917
2.00 |16.000
                                 2.00 | 27.917 | 2.00 | 39.92 | 13.00 | 2.00 | 28.000 | 2.00 | 40.00 | 13.00
3.917
4.000
4 083
          2 00 116 083 2 00 128 083
                                                        2.00 | 40.08
                                                                              17.00
          2.00 | 16.167 | 2.00 | 28.167 | 2.00 | 40.17 | 17.00 | 2.00 | 16.250 | 2.00 | 28.250 | 2.00 | 40.25 | 17.00
4.250
           2.00 |16.333
2.00 |16.417
                                 2.00 |28.333
2.00 |28.417
                                                        2.00 | 40.33 | 17.00
2.00 | 40.42 | 17.00
4.333
4.417
          2.00 |16.500
2.00 |16.583
                                 2.00 |28.500
2.00 |28.583
                                                        2.00 | 40.50
2.00 | 40.58
2.00 | 40.67
                                                                              17.00
17.00
4.500
                                  2.00 |28.667
4.667
           2.00 | 16.667
                                                                              17.00
          2.00 | 16.837
2.00 | 16.833
2.00 | 16.917
4 750
                                 2.00 | 28.750 | 2.00 | 40.75
2.00 | 28.833 | 2.00 | 40.83
                                                                             17.00
4.833
          2.00 | 16.917 | 2.00 | 28.917 | 2.00 | 40.92 | 17.00 | 2.00 | 17.000 | 2.00 | 29.000 | 2.00 | 41.00 | 17.00
4.917
5.083
          2.00 | 17.083
                                 2.00 | 29.083 | 2.00 | 41.08 | 13.00 | 2.00 | 29.167 | 2.00 | 41.17 | 13.00 | 2.00 | 29.250 | 2.00 | 41.25 | 13.00
5.167
           2.00 17.167
           2.00 |17.250
5.250
5.333 2.00 | 17.333 2.00 | 29.333 2.00 | 41.33 13.00
5.417 2.00 | 17.417 2.00 | 29.417 2.00 | 41.42 13.00
5.500 2.00 | 17.500 2.00 | 29.500 2.00 | 41.50 13.00
5.583
           2.00 | 17.583
                                  2.00 | 29.583 | 2.00 | 41.58
5.667
           2.00 17.667
                                  2.00 | 29.667
                                                        2.00 | 41.67
                                                                              13.00
                                  2.00 | 29.750 | 2.00 | 41.75 | 13.00 | 2.00 | 29.833 | 2.00 | 41.83 | 13.00 | 2.00 | 29.917 | 2.00 | 41.92 | 13.00
           2.00 | 17.750
2.00 | 17.833
5.750
5.833
5.917
           2.00 17.917
           2.00 |18.000
2.00 |18.083
                                  2.00 |30.000
2.00 |30.083
                                                        2.00 | 42.00 | 13.00
2.00 | 42.08 | 22.99
6.000
6.083
6.167
           2.00 | 18.167
                                  2.00 | 30.167 | 2.00 | 42.17 | 23.00 | 2.00 | 30.250 | 2.00 | 42.25 | 23.00
            2.00 |18.250
                                  2.00 |30.333 | 2.00 | 42.33 | 23.00 | 2.00 |30.417 | 2.00 | 42.42 | 23.00
6.333
           2.00 | 18.333
6.417
            2.00 |18.417
6.500
           2.00 | 18.500
                                  2.00 | 30.500 | 2.00 | 42.50 | 23.00
          2.00 | 18.583 | 2.00 | 30.583 | 2.00 | 42.58 | 23.00 | 2.00 | 18.667 | 2.00 | 30.667 | 2.00 | 42.67 | 23.00
6.583
6.667
          2.00 | 18.750 | 2.00 | 30.750 | 2.00 | 42.75 | 23.00 | 2.00 | 18.833 | 2.00 | 30.833 | 2.00 | 42.83 | 23.00
6.750
6.917 2.00 | 18.917 2.00 | 30.917 2.00 | 42.92 23.00
                                                                                                                                            txt[3/11/2024 11:41:21 AM
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7,000 2.00 | 19.000 2.00 | 31.000 2.00 | 43.00 23.00
                                                                             2.00 |31.083
                                                                                                              2.00 | 43.08 | 13.01
                           7.083
                                            2.00 |19.083
                            7.167
                                            2.00 119.167
                                                                             2.00 31.167
                                                                                                               2.00 | 43.17
                                                                                                                                            13.00
                                            2.00 |19.250 | 2.00 |19.333
                                                                             2.00 |31.250
2.00 |31.333
                                                                                                              2.00 | 43.25 | 13.00
2.00 | 43.33 | 13.00
                            7.333
                           7.417
                                            2 00 119 417
                                                                             2 00 31 417
                                                                                                             2.00 | 43.42 | 13.00
                                            2.00 |19.500
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                                                                                                               2.00 | 43.50
                           7.583
                                            2.00 19.583
                                                                             2.00 31.583
                                                                                                               2.00 | 43.58
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                                                                                                             2.00 | 43.67 | 13.00
2.00 | 43.75 | 13.00
                                             2.00 | 19.667
                                                                             2.00 |31.667
                            7.750
                                            2.00 19.750
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                            7.833
                                            2.00 19.833
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                                                                                                             2.00 | 43.83 | 13.00
2.00 | 43.92 | 13.00
                                             2.00 19.917
                                                                             2.00 31.917
                           8.000
                                            2.00 |20.000
                                                                             2.00 | 32.000
                                                                                                               2.00 | 44.00 | 13.00
                                            2.00 |20.083
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                                                                                                             2.00 | 44.08
                                            2.00 |20.167
                           8.167
                                                                             2.00 | 32.167
                                                                                                                                            13.00
                                            2.00 |20.250
2.00 |20.333
                                                                             2.00 |32.250
2.00 |32.333
                                                                                                             2.00 | 44.25 | 13.00
2.00 | 44.33 | 13.00
                           8,250
                           8.333
                                                                             2.00 |32.417
2.00 |32.500
2.00 |32.583
                                                                                                             2.00 | 44.42 | 13.00
2.00 | 44.50 | 13.00
2.00 | 44.58 | 13.00
                           8 417
                                            2.00 | 20.417
                                           2.00 |20.500
                           8.583
                           8 667
                                            2.00 |20.667
                                                                             2.00 32 667
                                                                                                             2.00 | 44.67 | 13.00
                                            2.00 |20.750
                                                                             2.00 |32.750
                                                                                                               2.00 | 44.75
                           8.833
                                            2.00 | 20.833
                                                                             2.00 | 32.833
                                                                                                             2.00 | 44.83 | 13.00
                                             2.00 |20.917
                                                                                                            2.00 | 44.92 | 13.00
2.00 | 45.00 | 13.00
                           9.000
                                           2.00 |21.000
                                                                             2.00 |33.000
                                                                                                                                           52.95
53.00
                                            2.00 |21.083
                                                                             2.00 |33.083
2.00 |33.167
                                                                                                             2.00 | 45.08
                           9.083
                           9.167
                                                                                                            2.00 | 45.25 | 53.00
2.00 | 45.33 | 53.00
2.00 | 45.42 | 53.00
                           9.250
                                            2.00 |21.250
                                                                             2.00 |33.250
                                             2.00 21.333
                                                                             2.00 |33.333
                           9.417
                                            2.00 21.417
                                                                             2.00 |33.417
                           9.500
                                            2.00 |21.500
2.00 |21.583
                                                                             2.00 |33.500
2.00 |33.583
                                                                                                             2.00 | 45.50 53.00
2.00 | 45.58 53.00
                           9.583
                                                                                                            2.00 | 45.67 53.00
2.00 | 45.75 53.00
2.00 | 45.83 53.00
                                            2.00 |21.667
2.00 |21.750
                                                                             2.00 |33.667
2.00 |33.750
                           9 667
                           9.833
                                           2.00 |21.833
                                                                             2.00 |33.833
                                           2.00 |21.917
                                                                            2.00 |33.917
                                                                                                             2.00 | 45.92 53.00
                           9 917
                           10.000
                           10.083
                                            2.00 |22 083
                                                                             2 00 134 083
                                                                                                               2.00 | 46.08 38.02
                                                                             2.00 |34.167
2.00 |34.250
                                                                                                               2.00 | 46.17
                          10.250
                                            2.00 |22.250
                                                                                                               2.00 | 46.25 38.00
                           10.333
                                                                              2.00 |34.333
2.00 |34.417
                                             2.00 |22.333
                                                                                                               2.00 | 46.33 38.00
                           10.417
                                              2.00 |22.417
                                                                                                               2.00 | 46.42
                                                                                                                                             38.00
                                                                                                               2.00 | 46.50 38.00
2.00 | 46.58 38.00
                           10.500
                                            2.00 |22.500
                                                                              2.00 |34.500
                           10.583
                                            2.00 |22.583
                                                                              2.00 |34.583
                           10.667
                                             2.00 |22.667
                                                                               2.00 |34.667
                                                                                                               2.00 | 46.67
                                                                                                                                             38.00
                                                                              2.00 |34.750
2.00 |34.833
                                                                                                               2.00 | 46.75 38.00
2.00 | 46.83 38.00
                           10.750
                                             2.00 | 22.750
                                             2.00 22.833
                           10.833
                           10.917
                                             2.00 |22 917
                                                                               2.00 | 34.917
                                                                                                               2.00 | 46.92 38.00
                                                                               2.00 |35.000
                                                                                                               2.00 | 47.00 38.00
                                             2.00 |23.000
                          11.083
                                            2 00 23 083
                                                                             2.00 | 35.083 | 3.00 | 47.08 | 13.04
                                            2.00 |23.167
                                                                               2.00 |35.167
                                                                                                               3.00 | 47.17
                                                                               2.00 | 35,250
                          11.250
                                             2.00 | 23.250
                                                                                                               3.00 | 47.25
                                                                                                                                             13.00
                           11 333
                                             2 00 23 333
                                                                              2.00 |35.333
                                                                                                               3 00 | 47 33
                                                                                                                                             13.00
                           11.417 2.00 |23.417 2.00 |35.417 3.00 | 47.42 13.00
\label{eq:control_control} \text{file}.\\ \text{ile}.\\ 
                           1.083
                                           2.00 | 13.083 | 2.00 | 25.083 | 2.00 | 37.08 | 4.00
                                            2.00 | 13.167 | 2.00 | 25.167
                           1.167
                                                                                                             2.00 | 37.17
                                                                                                                                             4.00
                           1.250
                                            2.00 [13.250
                                                                             2.00 |25.250
                                                                                                              2.00 | 37.25
                                                                                                                                             4 00
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11.500 2.00 |23.500 2.00 |35.500 3.00 | 47.50 13.00 | 11.583 2.00 |23.583 2.00 |35.583 3.00 | 47.58 13.00
                       11,667
                                             2.00 |23.667
                                                                                  2.00 | 35,667
                                                                                                                        3.00 | 47.67
                                                                                                                                                          13.00
                                             2.00 |23.750
                                                                                  2.00 | 35.750
                                                                                                                        3.00 | 47.75
                                             2.00 |23.833
                                                                                 2.00 |35.833
                                                                                                                       3.00 | 47.83
                        11.917
                                            2.00 23.917 2.00 35.917 3.00 47.92 13.00
                        12.000 2.00 |24.000 2.00 |36.000 3.00 | 48.00
       Unit Hyd Qpeak (cms)= 0.977
       PEAK FLOW (cms)= 2.533 (i)
TIME TO PEAK (hrs)= 47.083
RUNOFF VOLUME (mm)= 236.126
TOTAL RAINFALL (mm)= 285.000
       RUNOFF COEFFICIENT = 0.829
       (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   | Junction Command(0005) |
                                          AREA OPEAK TPEAK R.V.
  (ha) (cms) (hrs) (mm)
INFLOW: ID=2( 0115) 23.79 2.53 47.08 236.13
OUTFLOW: ID=2( 0005) 23.79 2.53 47.08 236.13
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP
                                                       - TRANSFORMED HYETOGRAPH --
                        TIME RAIN | TIME R
                        0.250
                                          2.00 | 12.250 | 2.00 | 24.250
                                                                                                                    2.00 | 36.25
                                                                                                                                                          6.00
                        0.333
                                          2.00 | 12.333 | 2.00 | 24.333
                                                                                                                    2.00 | 36.33
                                                                                                                                                          6.00
                                            2.00 |12.417
                                                                                 2.00 |24.417
                                                                                                                       2.00 | 36.42
                                                                                                                                                          6.00
                        0.500
                                           2.00 112.500
                                                                                 2.00 |24,500
                                                                                                                      2.00 | 36.50
                                                                                                                                                          6.00
                        0.583
                                            2.00 |12.583
                                                                                 2.00 |24.583
                        0.667
                                           2.00 | 12.667
                                                                                 2.00 |24.667
                                                                                                                      2.00 | 36.67
                                                                                                                                                          6.00
                        0.750
                                           2.00 |12.750
2.00 |12.833
                                                                                2.00 |24.750
2.00 |24.833
                                                                                                                     2.00 | 36.75
2.00 | 36.83
                                                                                                                                                          6.00
                        0.833
                                                                                                                                                          6.00
                        0.917
                                           2.00 112.917
                                                                                 2.00 | 24.917
                                                                                                                     2.00 | 36.92
                                                                                                                                                          6.00
                                          2.00 | 13.000 | 2.00 | 25.000 | 2.00 | 37.00
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2.00 |25.333 2.00 | 37.33 1.333 2.00 | 13.333 4.00 1.417 2.00 113.417 2.00 |25.417 2.00 | 37.42 4.00 2.00 |13.500 1.583 2.00 | 13.583 2.00 | 25.583 2.00 | 37.58 4.00 2.00 |13.667 2.00 |13.750 2.00 |25.667 2.00 | 37.67 1.667 1.750 4.00 1.833 2.00 | 13.833 2.00 |25.833 2.00 | 37.83 4.00 2.00 |13.917 2.00 |25.917 2.00 | 37.92 2.000 2.00 14.000 2.00 | 26.000 2.00 | 38.00 4.00 2.00 |14.083 2.00 |26.083 2.00 | 38.08 2.00 |14.167 2.00 | 26.167 2.00 | 38.17 2.167 6.00 2.00 |14.250 2.00 |14.333 2.00 |26.250 2.00 |26.333 2.00 | 38.25 2.00 | 38.33 2.417 2.00 | 14.417 2.00 |26.417 2.00 | 38.42 6.00 2.00 | 14.500 2.00 | 14.583 2.00 |26.500 2.00 |26.583 2.00 | 38.50 6.00 2.583 2.00 | 38.58 6.00 2.00 |14.667 2.00 |14.750 2.00 | 38.67 2.00 | 38.75 2 667 2.00 |26.667 6.00 2.00 |26.750 6.00 2.833 2.00 114.833 2.00 | 26.833 2.00 | 38.83 6.00 2.00 14.917 2.00 |26.917 2.00 | 38.92 3,000 2.00 | 15.000 2.00 |27.000 2.00 | 39.00 6.00 2.00 |15.083 2.00 |15.167 2.00 |27.083 2.00 |27.167 2.00 | 39.08 2.00 | 39.17 13.00 3.083 3.250 2.00 15.250 2.00 27.250 2.00 | 39.25 13.00 3.333 2.00 |15.333 2.00 |27.333 2.00 | 39.33 2.00 | 15.417 2.00 | 39.42 13.00 3.417 2.00 |15.500 2.00 |15.583 2.00 |27.500 2.00 |27.583 2.00 | 39.50 | 13.00 2.00 | 39.58 | 13.00 3 500 3.583 3,667 2.00 [15.667 2.00 | 27.667 2.00 | 39.67 13.00 2.00 |27.750 2.00 |27.833 13.00 3.833 2.00 | 15.833 2.00 | 39.83 3.917 2.00 |15.917 2.00 |16.000 2.00 |27.917 2.00 |28.000 2.00 | 39.92 | 13.00 2.00 | 40.00 | 13.00 4.000 4.083 2.00 | 16.083 2.00 |28.083 2.00 | 40.08 | 17.00 2.00 | 16.167 2.00 |28.167 4 250 2 00 116 250 2 00 28 250 2 00 | 40 25 17.00 4.333 2.00 |16.333 2.00 |28.333 2.00 | 40.33 4.417 2.00 | 16.417 2.00 | 28.417 2.00 | 40.42 2.00 | 40.50 4.500 2.00 | 16.500 2.00 |28.500 17.00 2.00 |16.583 4.583 2.00 |28.583 2.00 | 40.58 4.667 2.00 | 16.667 2.00 |28.667 2.00 | 40.67 17.00 4.750 2.00 16.750 2.00 |28.750 2.00 | 40.75 | 17.00 2.00 | 40.83 | 17.00 2.00 |28.833 4.833 2.00 | 16.833 4 917 2 00 116 917 2.00 |28.917 2 00 | 40 92 17 00 2.00 |17.000 2.00 |29.000 2.00 | 41.00 5.083 2.00 | 17.083 2.00 |29.083 2.00 | 41.08 13.00 2.00 |29.167 2.00 |29.250 2.00 | 41.17 | 13.00 2.00 | 41.25 | 13.00 2.00 |17.167 5.167 2.00 | 17.250 5.250 2.00 |29.333 2.00 |29.417 5 333 2.00 17.333 2.00 | 41.33 | 13.00 2.00 41.42 13.00 5.500 2.00 | 17.500 2.00 | 29.500 2.00 | 41.50 13.00 d%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output%20-%20All%20Storms.txtf3/11/2024 11:41:21 AMI

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5.583 2.00 | 17.583
5.667 2.00 | 17.667
                           2.00 | 29.583 | 2.00 | 41.58 | 13.00 | 2.00 | 29.667 | 2.00 | 41.67 | 13.00
5.750 2.00 17.750
                            2.00 29.750 2.00 41.75 13.00
                            2.00 |29.833
5.917
          2.00 | 17.917
                            2.00 | 29.917
                                               2.00 | 41.92 | 13.00
                            2.00 |30.000
2.00 |30.083
                                              2.00 | 42.00 | 13.00
2.00 | 42.08 | 22.99
          2.00 | 18.000
         2.00 18.083
6.083
                            2.00 |30.167
2.00 |30.250
                                              2.00 | 42.17 23.00
2.00 | 42.25 23.00
          2.00 | 18.167
6 167
          2.00 |18.250
6.333
         2.00 [18.333
                            2.00 (30.333
                                              2.00 | 42.33 23.00
 6.417
          2.00 | 18.417
                            2.00 |30.417
                                              2.00 42.42 23.00
6.500
         2.00 | 18.500
                            2.00 | 30.500 | 2.00 | 42.50 | 23.00
6 583
         2.00 |18.583
2.00 |18.667
                            2.00 |30.583
2.00 |30.667
                                              2.00 | 42.58 23.00
2.00 | 42.67 23.00
6.667
                                              2.00 | 42.75 23.00
2.00 | 42.83 23.00
2.00 | 42.92 23.00
6.750
          2.00 | 18.750
                            2.00 | 30.750
                            2.00 |30.833 | 2.00 |30.917
 6.833
          2.00 |18.833
          2.00 | 18.917
6.917
                            2.00 |31.000 | 2.00 | 43.00 | 23.00 | 2.00 | 31.083 | 2.00 | 43.08 | 13.01
 7.000
         2.00 19.000
          2.00 19.083
 7.083
 7 167
          2 00 119 167
                            2 00 31 167
                                              2.00 | 43 17
                                                                13.00
                           2.00 | 31.250 | 2.00 | 43.25 | 13.00 | 2.00 | 31.333 | 2.00 | 43.33 | 13.00
 7.333
         2.00 119.333
                            2.00 |31.417
2.00 |31.500
                                              2.00 | 43.42 | 13.00
2.00 | 43.50 | 13.00
          2.00 19.417
 7.417
          2.00 19.500
 7.500
         2.00 | 19.583 | 2.00 | 19.667
                            2.00 |31.583
2.00 |31.667
                                              2.00 | 43.58
2.00 | 43.67
2.00 | 43.75
                                                                13.00
 7 583
         2.00 119.750
                            2.00 31.750
 7.750
                                                                13.00
 7 833
         2.00 |19.833
                            2.00 |31.833
2.00 |31.917
                                              2.00 | 43.83 | 13.00
2.00 | 43.92 | 13.00
 7.917
                                              2.00 | 44.00
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          2.00 |20.000
                            2.00 | 32.000
                                                                13.00
          2.00 |20.083
                            2.00 |32.083
8.167
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                            2.00 |32.167
                                              2.00 | 44.17
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         2.00 |20.250
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2.00 |20.417
 8 250
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          2.00 |20.500
                            2.00 |32.500
                                              2.00 | 44.58
8.583
         2.00 | 20.583
                            2.00 | 32.583
                                                                13.00
          2.00 |20.667
                            2.00 |32.667
                                               2.00 | 44.67
8.750
          2.00 | 20.750
                            2.00 | 32,750
                                               2.00 | 44.75
                                                                13.00
                                              2.00 | 44.83 | 13.00
2.00 | 44.92 | 13.00
2.00 | 45.00 | 13.00
         2.00 |20.833 | 2.00 |20.917
                            2.00 |32.833
2.00 |32.917
 8 833
 8.917
9.000
         2.00 21.000
                            2.00 |33.000
          2.00 |21.083
2.00 |21.167
                            2.00 |33.083
2.00 |33.167
                                               2.00 | 45.08
2.00 | 45.17
                                                                52.95
53.00
9.083
9.167
9.250
         2.00 |21.250
                            2.00 |33,250
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          2.00 |21.333
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                                              2.00 | 45.33
9.417
          2.00 |21.417
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                                              2.00 | 45.42 | 53.00
          2.00 |21.500
                            2.00 |33.500
                                               2.00 | 45.50
9.583
          2.00 |21.583
                            2.00 | 33.583
                                               2.00 | 45.58
                                                                53.00
                            2.00 | 33.667 | 2.00 | 45.67 | 2.00 | 33.750 | 2.00 | 45.75
9 667
          2.00 |21.667
                                                                53.00
          2.00 21.750
                                                                53.00
9.833
         2.00 21.833 2.00 33.833 2.00 45.83 53.00
                            2.00 |33.917 | 2.00 | 45.92 | 53.00
10.000 2.00 | 22.000 2.00 | 34.000 2.00 | 46.00 53.00
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2.00 |22.083 | 2.00 |34.083 | 2.00 | 46.08 | 38.02 | 2.00 |22.167 | 2.00 |34.167 | 2.00 | 46.17 | 38.00
                10.083
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                 10.333
                             2.00 |22.333 2.00 |22.417
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38.00
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                                                   2.00 |34.583
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                                                  2.00 |34.750
2.00 |34.833
                                                                                                                                                                                                                                               2.00 |24.750
2.00 |24.833
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2.00 | 36.83
                             2.00 |22.750
                                                                         2.00 | 46.75
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                10.833
                            2.00 |22.833
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                                                                                                                                                                                                                                               2.00 |25.000
2.00 |25.083
                 11.000
                              2.00 |23.000
                                                   2.00 |35.000
                                                                         2.00 47.00
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                                                                                                                                                                                                                                                                    2.00 | 37.08
                11.083
                             2.00 |23.083
                                                   2.00 | 35.083
                                                                        3.00 | 47.08 | 13.04
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                                                                                                                                                                                                                         2.00 | 13.083
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                                                  2.00 |35.167
2.00 |35.250
                                                                         3.00 | 47.17
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2.00 |25.250
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2.00 | 37.25
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                 11.333
                            2.00 |23.333
2.00 |23.417
                                                   2.00 |35.333
2.00 |35.417
                                                                        3.00 | 47.33
3.00 | 47.42
                                                                                            13.00
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                 11.417
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3.00 | 47.58 | 13.00
3.00 | 47.67 | 13.00
                 11 500
                             2 00 123 500
                                                   2.00 | 35,500
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                                                   2.00 |35.583
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                                                                                                                                                                                                                                                                    2.00 | 37.58
                              2.00 |23.583
                                                                                                                                                                                                               1.667
                             2.00 |23.667
                 11.667
                11.750
                            2.00 |23.750 | 2.00 |35.750
                                                                        3.00 47.75 13.00
                                                                                                                                                                                                              1.750
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                                                                                                                                                                                                                                                                    2.00 | 37.75
                                                                                                                                                                                                                                                                                         4.00
                                                                                                                                                                                                                                              2.00 |25.833 | 2.00 |25.917
                                                   2.00 |35.833 | 3.00 | 47.83
                                                                                                                                                                                                                          2.00 |13.833
                                                                                                                                                                                                                                                                    2.00 | 37.83
                             2.00 |23.833
                                                                                            13.00
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                11.917
                             2.00 | 23.917
                                                   2.00 | 35.917 | 3.00 | 47.92 | 13.00
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                 12.000 2.00 24.000 2.00 36.000 3.00 48.00 13.00
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2.00 | 26.083
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2.00 | 38.08
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       Unit Hyd Qpeak (cms)= 0.869
                                                                                                                                                                                                              2 167
                                                                                                                                                                                                                          2.00 |14.250
                                                                                                                                                                                                                                               2.00 |26.250
                                                                                                                                                                                                                                                                     2.00 | 38.25
       PEAK FLOW (cms)= 1.863 (i)
TIME TO PEAK (hrs)= 46.667
RUNOFF VOLUME (mm)= 233.500
TOTAL RAINFALL (mm)= 285.000
RUNOFF COEFFICIENT = 0.819
                                                                                                                                                                                                              2.333
                                                                                                                                                                                                                         2.00 114.333
                                                                                                                                                                                                                                               2.00 |26.333
                                                                                                                                                                                                                                                                    2.00 | 38.33
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                                                                                                                                                                                                                                              2.00 |26.417
2.00 |26.500
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                                                                                                                                                                                                                                              2.00 |26.833 | 2.00 |26.917
                                                                                                                                                                                                                                                                   2.00 | 38.83 | 2.00 | 38.92
       (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
                                                                                                                                                                                                               2.833
                                                                                                                                                                                                                          2.00 |14.833
                                                                                                                                                                                                              2.917
                                                                                                                                                                                                                          2.00 |14.917
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                                                                                                                                                                                                                                               2.00 |27.083
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   CALIB
                                                                                                                                                                                                              3.167
                                                                                                                                                                                                                          2.00 | 15.167
                                                                                                                                                                                                                                               2.00 | 27.167
                                                                                                                                                                                                                                                                    2.00 | 39.17
                                                                                                                                                                                                                                                                                         13.00
                                                                                                                                                                                                                                              2.00 |27.250 | 27.333
   | STANDHYD ( 0105)| Area (ha)= 7.90
|ID=1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                                                                                                                                                                                                              3 250
                                                                                                                                                                                                                          2.00 |15.250
                                                                                                                                                                                                                                                                    2.00 | 39.25
                                                                                                                                                                                                                                                                                         13.00
                                                                                                                                                                                                              3.333
                                                                                                                                                                                                                         2.00 |15.333
                                                                                                                                                                                                                                                                    2.00 | 39.33
                                                                                                                                                                                                                                                                                         13.00
                                                                                                                                                                                                              3 417
                                                                                                                                                                                                                         2.00 | 15.417
                                                                                                                                                                                                                                               2.00 |27.417
                                                                                                                                                                                                                                                                   2.00 | 39.42 | 13.00
                                                                                                                                                                                                                                               2.00 |27.500
                                                                                                                                                                                                                          2.00 |15.500
                                                                                                                                                                                                                                                                    2.00 | 39.50
                             IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                                                              3.500
                                                                                                                                                                                                                                                                                         13.00
        Surface Area (ha)=
       Surface Area (ha)= 1.58
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
                                                          6.32
5.00
                                                                                                                                                                                                              3.583
                                                                                                                                                                                                                         2.00 15.583
                                                                                                                                                                                                                                               2.00 |27.583
                                                                                                                                                                                                                                                                    2.00 | 39.58
                                                                                                                                                                                                                                                                                         13.00
                                                                                                                                                                                                                          2.00 |15.667
                                                                                                                                                                                                                                               2.00 |27.667
                           (%)= 2.00 5.00
(m)= 50.00 250.00
= 0.013 0.250
                                                                                                                                                                                                                                               2.00 |27,750
        Average Slope
                                                              5.00
                                                                                                                                                                                                              3,750
                                                                                                                                                                                                                         2.00 | 15.750
                                                                                                                                                                                                                                                                    2.00 | 39.75
                                                                                                                                                                                                                                                                                         13.00
                                                                                                                                                                                                              3 833
                                                                                                                                                                                                                          2 00 115 833
                                                                                                                                                                                                                                               2.00 |27.833
                                                                                                                                                                                                                                                                    2.00 | 39.83
                                                                                                                                                                                                                                                                                         13.00
                                                                                                                                                                                                                                               2.00 |27.917
                                                                                                                                                                                                              3.917
                                                                                                                                                                                                                          2.00 |15.917
                                                                                                                                                                                                                                                                     2.00 | 39.92
       Mannings n
                                                                                                                                                                                                              4.000
                                                                                                                                                                                                                          2.00 | 16.000
                                                                                                                                                                                                                                               2.00 |28.000
                                                                                                                                                                                                                                                                    2.00 | 40.00
                                                                                                                                                                                                                                                                                         13.00
                                                                                                                                                                                                                          2.00 | 16.083
                                                                                                                                                                                                                                               2.00 |28.083
                                                                                                                                                                                                                                                                    2.00 | 40.08
           NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                              4.083
                                                                                                                                                                                                              4.167
                                                                                                                                                                                                                          2.00 116.167
                                                                                                                                                                                                                                               2.00 |28.167
                                                                                                                                                                                                                                                                    2.00 | 40.17
                                                                                                                                                                                                                                                                                         17.00
                                                                                                                                                                                                                         2.00 |16.250
2.00 |16.333
                                                                                                                                                                                                                                              2.00 |28.250
2.00 |28.333
                                                                                                                                                                                                                                                                    2.00 | 40.25
2.00 | 40.33
                                                                                                                                                                                                              4.250
                                                                                                                                                                                                                                                                                         17.00
                                                                                                                                                                                                              4.333
                                   - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                                                                                                                                         17.00
                  TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
                                                                                                                                                                                                              4.417
                                                                                                                                                                                                                          2.00 | 16.417
                                                                                                                                                                                                                                               2.00 | 28.417
                                                                                                                                                                                                                                                                    2.00 | 40.42
                                                                                                                                                                                                                                                                                         17.00
                                                                                                                                                                                                                         2.00 | 16.500 | 2.00 | 28.500 | 2.00 | 40.50
file:///V...49/20Updated9/20EA9/20Analysis/VO/Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20
                                                                                                                                                                                                                        2.00 |21.083
2.00 |21.167
                                                                                                                                                                                                                                              2.00 |33.083 | 2.00 | 45.08 | 52.95 | 2.00 |33.167 | 2.00 | 45.17 | 53.00
                 4.583
                           2.00 | 16.583 | 2.00 | 28.583 | 2.00 | 40.58 | 17.00
                                                                                                                                                                                                              9.083
                                                                                                                                                                                                              9.167
                 4.667
                            2.00 | 16.667
                                                 2.00 |28.667
                                                                       2.00 | 40.67 17.00
                 4.750
                            2.00 [16.750]
                                                  2.00 |28.750
                                                                       2.00 | 40.75 | 17.00
                                                                                                                                                                                                              9.250
                                                                                                                                                                                                                        2.00 |21 250
                                                                                                                                                                                                                                               2.00 33.250 2.00 145.25 53.00
                                                                                                                                                                                                                                               2.00 |33.333
                                                  2.00 |28.833
                                                                        2.00 | 40.83
                                                                                            17.00
                                                                                                                                                                                                                          2.00 21.333
                             2.00 | 16.833
                 4.833
                 4.917
                            2.00 | 16.917
                                                  2.00 |28.917
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                                                                                                                                                                                                              9.417
                                                                                                                                                                                                                          2.00 |21.417
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                 5.083
                            2.00 117.083
                                                  2.00 | 29.083
                                                                       2.00 | 41.08 | 13.00
                                                  2.00 |29.167
2.00 |29.250
                                                                       2.00 | 41.17
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2.00 |21.750
                                                                                                                                                                                                                                               2.00 |33.667
2.00 |33.750
                                                                                                                                                                                                                                                                   2.00 | 45.67 53.00
2.00 | 45.75 53.00
                 5.167
                             2.00 | 17.167
                                                                                           13.00
                                                                                                                                                                                                              9 667
                            2.00 | 17.250
                                                                                            13.00
                  5.250
                 5.333
                            2.00 117.333
                                                  2.00 |29.333
                                                                       2.00 | 41.33 | 13.00
                                                                                                                                                                                                              9.833
                                                                                                                                                                                                                         2.00 | 21.833
                                                                                                                                                                                                                                               2.00 | 33.833
                                                                                                                                                                                                                                                                    2.00 | 45.83
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                                            2.00 | 41.42 | 13.00
         2.00 | 17.417
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        2.00 17.500
                          2.00 |29.500
                                           2.00 41.50 13.00
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         2.00 |17.583
                          2.00 |29.583 | 2.00 |29.667
                                            2.00 | 41.67
5.667
         2.00 | 17.667
                                                            13.00
        2.00 |17.750
2.00 |17.833
                          2.00 |29.750
2.00 |29.833
                                            2.00 | 41.75
2.00 | 41.83
5 750
                                           2.00 | 41.92 | 13.00
5.917
        2.00 | 17.917
                          2.00 |29.917
                         2.00 |30.000
2.00 |30.083
                                           2.00 | 42.00 | 13.00
2.00 | 42.08 | 22.99
         2.00 18.000
6.000
6.083
        2.00 | 18.083
        2.00 |18.167
2.00 |18.250
                          2.00 |30.167
2.00 |30.250
                                           2.00 | 42.17 | 23.00
2.00 | 42.25 | 23.00
6 167
6.333
        2.00 | 18.333
                          2.00 | 30.333
                                           2.00 | 42.33 23.00
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                          2.00 |30.417
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        2.00 | 18.583
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2.00 |30.667
                                           2.00 | 42.58 | 23.00
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        2.00 118.750
                          2.00 30.750
6.833
        2.00 |18.833
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                                           2.00 | 42.83 | 23.00
2.00 | 42.92 | 23.00
6.917
         2.00 | 18.917
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                                          2.00 | 43.00 23.00
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        2.00 19.083
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7.167
        2.00 119.167
                          2.00 | 31.167
                                           2.00 | 43.17 | 13.00
                          2.00 |31.250
7.333
        2.00 | 19.333
                          2.00 |31.333
                                           2.00 | 43.33
                                                            13.00
7.417
        2.00 |19.417
2.00 |19.500
                         2.00 |31.417
2.00 |31.500
                                           2.00 | 43.42 | 13.00
2.00 | 43.50 | 13.00
7,500
7.583
        2.00 | 19.583
                          2.00 | 31.583
                                           2.00 | 43.58 13.00
                          2.00 |31.667
                                            2.00 | 43.67
         2.00 | 19.667
7.750
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                          2 00 31.750
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                                                           13.00
7.833
         2.00 |19.833
                          2.00 |31.833
                                           2.00 | 43.83
                                           2.00 | 43.92 | 13.00 | 2.00 | 44.00 | 13.00
7.917
         2.00 | 19.917
                          2.00 | 31.917
8.000
        2.00 | 20.000
                          2.00 32.000
         2.00 |20.083
                          2.00 |32.083
                                            2.00 | 44.08
                                                            13.00
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8.167
         2.00 |20.167
                          2.00 |32.167
                                            2.00 | 44.17
                                                            13.00
8.250
        2.00 20.250
                          2.00 | 32.250
                                          2.00 | 44.25 | 13.00
2.00 | 44.33 | 13.00
                          2.00 |32,333
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                          2.00 32.417
                                           2 00 | 44 42 13 00
         2.00 |20.500
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                                            2.00 | 44.50
8.583
        2.00 |20.583
                          2.00 | 32.583
                                            2.00 | 44.58
                                                            13.00
         2.00 |20.667
                                           2.00 | 44.67
2.00 | 44.75
                          2.00 |32.667
8.667
        2.00 |20.750
                          2.00 |32.750
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                                                           13.00
                         2.00 |32.833
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        2.00 |20.833
                                           2.00 | 44.83 | 13.00
         2.00 20.917
                                            2.00 | 44.92
8.917
9.000
        2.00 | 21.000 | 2.00 | 33.000 | 2.00 | 45.00 | 13.00
                                                                        iled%20Output%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]
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2.00 21.917
                                      2.00 |33.917
                                                        2.00 | 45.92
           10.000
                     2.00 | 22.000 | 2.00 | 34.000
                                                        2.00 | 46.00 53.00
           10.083
                    2.00 |22.083
2.00 |22.167
                                       2.00 |34.083
2.00 |34.167
                                                        2.00 | 46.08
2.00 | 46.17
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38.00
           10.167
           10.250
                     2.00 |22.250
                                       2.00 |34.250
                                                        2 00 | 46 25
                                                                         38.00
                     2.00 |22.333 | 2.00 |22.417
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                                                        2.00 | 46.33 38.00
2.00 | 46.42 38.00
           10.333
           10.417
                    2.00 |22.500 | 2.00 |34.500 | 2.00 |22.583 | 2.00 |34.583
           10.500
                                                        2.00 | 46.50 38.00
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                     2.00 |22.750
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           10.833
                     2.00 |22.833
                                      2.00 | 34.833 | 2.00 | 46.83 | 38.00
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                     2.00 |23.083
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           11.083
                                      2.00 |35,250
           11.250
                     2.00 |23.250
                                                        3.00 | 47.25
                                                                         13.00
           11 333
                     2.00 |23.333 | 2.00 |23.417
                                      2.00 |35.333
                                                        3.00 | 47.33
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           11.417
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           11.500
                     2.00 | 23.500
                                       2.00 | 35.500
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                     2.00 |23.583
                                       2.00 |35.583
           11.667
                     2.00 |23.667
                                       2.00 |35.667
                                                         3.00 | 47.67
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           11.750
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                                       2.00 |35.750
                                                         3.00 47.75
           11.833
                     2.00 |23.833
                                      2.00 | 35.833 | 3.00 | 47.83
                                                                          13.00
           11.917
                     2 00 23 917
                                      2.00 35.917 3.00 47.92
                                                                         13 00
           12.000 2.00 |24.000 2.00 |36.000 3.00 | 48.00 13.00
   Max.Eff.Inten.(mm/hr)=
                                   53.00
          over (min) 5.00
                                        25.00
   Storage Coeff. (min)= 1.76 (ii) 22.07 (ii)
Unit Hyd. Tpeak (min)= 5.00 25.00
Unit Hyd. peak (cma)= 0.32 0.05
   Unit Hyd, peak (cms)= 0.32
                                                0.05
                                           *TOTALS*
   PEAK FLOW (cms)= 0.12 0.90 1.007 (iii)
TIME TO PEAK (hrs)= 45.50 46.08 46.00
RUNOFF VOLUME (mm)= 283.00 223.70 229.63
TOTAL RAINFALL (mm)= 285.00 285.00 285.00
RUNOFF COEFFICIENT = 0.99 0.78 0.81
***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
          YOU SHOULD CONSIDER SPLITTING THE AREA.
    (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
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CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
          THAN THE STORAGE COEFFICIENT.
      (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
   1+2=3 | AREA QPEAK TPEAK R.V.
        (ha) (cms) (hrs) (mm)
ID1=1 ( 0105): 7.90 1.007 46.00 229.63
      + ID2= 2 ( 0110): 16.60 1.863 46.67 233.50
       ID = 3 ( 0006): 24.50 2.744 46.42 232.25
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   CALIB
   | NASHYD ( 0100) | Area (ha)= 23.46 Curve Number (CN)= 80.0 | ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
  ID= 1 DT= 5.0 min
                 --- U.H. Tp(hrs)= 0.49
        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
             ---- TRANSFORMED HYETOGRAPH ---- TIME RAIN | hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                     2.00 | 12.083 | 2.00 | 24.083 | 2.00 | 36.08 | 6.00 | 2.00 | 12.167 | 2.00 | 24.167 | 2.00 | 36.17 | 6.00
             0.167
                    2.00 |12.250 | 2.00 |24.250 | 2.00 | 36.25
2.00 |12.333 | 2.00 |24.333 | 2.00 | 36.33
2.00 |12.417 | 2.00 |24.417 | 2.00 |36.42
             0.250
                                                                    6.00
             0.417
                                                                    6.00
                     2.00 | 12.500 | 2.00 | 24.500 | 2.00 | 12.583 | 2.00 | 24.583
                                                    2.00 | 36.50
             0.500
                                                                    6.00
             0.583
                                                                    6.00
             0.667
                     2.00 12.667
                                     2.00 24.667
                                                     2.00 | 36.67
                                                                    6.00
                                     2.00 |24.750
                     2.00 | 12.833 | 2.00 | 24.833
             0.833
                                                     2.00 | 36.83
                                                                    6.00
                                     2.00 |24.917
2.00 |25.000
             0.917
                     2.00 12.917
                                                     2.00 | 36.92
             1.000
                     2.00 | 13.000
                                                     2.00 | 37.00
                                                                     6.00
                     2.00 |13.083
2.00 |13.167
                                     2.00 |25.083
2.00 |25.167
                                                    2.00 | 37.08
2.00 | 37.17
             1.083
                     2.00 113.250
                                     2.00 |25.250
                                                     2.00 | 37.25
                     2.00 |13.333
                                     2.00 |25.333 | 2.00 |25.417
                                                     2.00 | 37.33
2.00 | 37.42
             1.333
             1.417
             1.500
                     2.00 [13.500
                                     2.00 |25.500
                                                     2.00 | 37.50
                                                                    4.00
                     2.00 |13.583
                                     2.00 |25.583
                                                     2.00 | 37.58
             1.667
                     2.00 | 13.667
                                     2.00 |25.667
                                                     2.00 | 37.67
                                                                    4.00
                     2.00 |13.750
                                     2.00 |25.750
                                                     2.00 | 37.75
                                     2.00 |25.833
             1.833
                     2.00 | 13.833
                                                     2.00 | 37.83
                                                                    4.00
                     2.00 13.917
                                     2.00 |25.917
                                                     2.00 | 37.92
                     2.00 | 14.000 | 2.00 | 26.000 | 2.00 | 38.00 | 4.00
2.00 | 18.583 | 2.00 | 30.583 | 2.00 | 42.58 | 23.00 | 2.00 | 18.667 | 2.00 | 30.667 | 2.00 | 42.67 | 23.00
             6.583
             6.667
                     2.00 | 18.750 | 2.00 | 30.750 | 2.00 | 42.75 | 23.00 | 2.00 | 18.833 | 2.00 | 30.833 | 2.00 | 42.83 | 23.00
             6.750
             6.833
                                                     2.00 | 42.92 23.00
2.00 | 43.00 23.00
             6.917
                     2.00 | 18.917
                                     2.00 30.917
                     2.00 |19.000
                                     2.00 |31.000
                                     2.00 |31.083 | 2.00 | 43.08 | 13.01 | 2.00 |31.167 | 2.00 | 43.17 | 13.00 | 2.00 |31.250 | 2.00 | 43.25 | 13.00
             7.083
                     2.00 | 19.083
                     2.00 |19.167
             7.250
             7.333
                     2.00 119 333
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2.083 2.00 | 14.083 2.00 | 26.083 2.00 | 38.08
2.167 2.00 | 14.167 2.00 | 26.167 2.00 | 38.17
                                                                                                                           6.00
2.250
                  2.00 | 14.250
                                                     2.00 | 26,250
                                                                                         2.00 | 38.25
                                                                                                                            6.00
2.333
                  2.00 114.333
                                                     2.00 | 26.333
                                                     2.00 |26.417
                                                                                         2.00 | 38.42
2.500
                2.00 114.500
                                                    2.00 | 26.500
                                                                                       2.00 | 38.50
                                                                                                                           6.00
2.583
                  2.00 |14.583
                                                     2.00 |26.583
                                                     2.00 | 26.667
2.667
                  2.00 114.667
                                                                                         2.00 | 38,67
                                                                                                                            6.00
                2.00 |14.750
2.00 |14.833
                                                    2.00 |26.750
2.00 |26.833
                                                                                       2.00 | 38.75
2.00 | 38.83
2.750
2.833
2.917
                  2.00 114.917
                                                     2.00 | 26.917
                                                                                        2.00 | 38.92
                                                                                                                          6.00
                                                    2.00 |27.000
2.00 |27.083
                  2.00 | 15.000
                 2.00 | 15.083
                                                                                        2.00 | 39.08
3.083
                2.00 |15.167
2.00 |15.250
                                                    2.00 |27.167
2.00 |27.250
                                                                                       2.00 | 39.17
                2.00 |15.333
2.00 |15.417
                                                    2.00 |27.333
2.00 |27.417
                                                                                       2.00 | 39.33 | 13.00
2.00 | 39.42 | 13.00
3 333
3.500
                  2.00 [15.500
                                                     2.00 | 27.500
                                                                                        2.00 | 39.50
                2.00 |15.583
                                                    2.00 |27.583 | 2.00 |27.667
                                                                                        2.00 | 39.58
 3.583
                                                    2.00 |27.750
2.00 |27.833
2.00 |27.917
3.750
                 2.00 | 15.750
                                                                                       2.00 | 39.75 | 13.00
                 2.00 |15.833
3.833
                                                                                        2.00 | 39.83
3.917
                                                                                        2.00 | 39.92 | 13.00
                                                    2.00 |28.000
2.00 |28.083
2.00 |28.167
                 2.00 |16.000
                                                                                       2.00 | 40.00 13.00
2.00 | 40.08 17.00
4.083
                2.00 | 16.083
4 167
                  2.00 | 16.167
                                                                                       2.00 | 40.17
                                                                                                                          17.00
                                                     2.00 |28.250
4.333
                 2.00 16.333
                                                     2.00 |28.333
                                                                                       2.00 | 40.33 | 17.00
                2.00 | 16.417 | 2.00 | 28.417 | 2.00 | 40.42 | 17.00 | 2.00 | 16.500 | 2.00 | 28.500 | 2.00 | 40.50 | 17.00
4.417
4.500
4.583
                2.00 116.583
                                                    2.00 | 28.583 | 2.00 | 40.58 | 17.00 | 2.00 | 28.667 | 2.00 | 40.67 | 17.00
                  2.00 |16.667
4.667
4.750
                 2.00 | 16.750
                                                    2.00 | 28.750 | 2.00 | 40.75
                                                                                                                         17.00
4.833
4.917
                 2.00 |16.833 | 2.00 |16.917
                                                    2.00 |28.833
2.00 |28.917
                                                                                       2.00 | 40.83 | 17.00
2.00 | 40.92 | 17.00
                2.00 | 17.000 | 2.00 | 29.000 | 2.00 | 41.00 | 17.00 | 2.00 | 17.083 | 2.00 | 29.083 | 2.00 | 41.08 | 13.00
5.000
                  2.00 117.167
                                                     2.00 | 29.167
                                                                                        2.00 | 41.17
5.167
                                                                                                                          13.00
                2.00 | 17.250 | 2.00 | 29.250 | 2.00 | 41.25 | 13.00 | 2.00 | 17.250 | 2.00 | 29.250 | 2.00 | 41.33 | 13.00 | 2.00 | 17.417 | 2.00 | 29.417 | 2.00 | 41.42 | 13.00 | 2.00 | 17.500 | 2.00 | 29.500 | 2.00 | 41.50 | 13.00 | 2.00 | 29.500 | 2.00 | 41.50 | 13.00 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 41.50 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.500 | 2.00 | 29.50
 5.250
5.333
5.417
5.500

    5.583
    2.00 | 17.583
    2.00 | 29.583
    2.00 | 41.58
    13.00

    5.667
    2.00 | 17.667
    2.00 | 29.667
    2.00 | 41.67
    13.00

    5.750
    2.00 | 17.750
    2.00 | 29.750
    2.00 | 41.75
    13.00

                                                    2.00 |29.833
2.00 |29.917
                                                                                       2.00 | 41.83 | 13.00
2.00 | 41.92 | 13.00
5 833
                 2 00 117 833
                  2.00 |17.917
5.917
6.000
                  2.00 18.000
                                                     2.00 | 30.000
                                                                                        2.00 | 42.00
                                                                                                                          13.00
                  2.00 |18.083
                                                     2.00 |30.083
                                                                                        2.00 | 42.08
                                                                                        2.00 | 42.17 23.00
6.167
                  2.00 | 18.167
                                                     2.00 | 30.167
                 2.00 |18.250 | 2.00 |18.333
6.250
                                                    2.00 |30.250
2.00 |30.333
                                                                                       2.00 | 42.25 23.00
2.00 | 42.33 23.00
6.333
6.417
                  2.00 | 18.417
                                                     2.00 | 30.417 | 2.00 | 42.42 | 23.00
                2.00 | 18.500 | 2.00 | 30.500 | 2.00 | 42.50 | 23.00
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2.00 |31.333 | 2.00 | 43.33 | 13.00 | 2.00 |31.417 | 2.00 | 43.42 | 13.00
           2.00 | 19.417
7.500
          2.00 19.500
                               2.00 31.500 2.00 43.50 13.00
 7.583
           2.00 |19.583
                                2.00 |31.583
                                                    2.00 | 43.58 | 13.00
2.00 | 43.67 | 13.00
           2.00 | 19.667
                                2.00 31.667
 7.667
           2.00 |19.750
2.00 |19.833
                               2.00 |31.750
2.00 |31.833
                                                    2.00 | 43.75
2.00 | 43.83
  7.750
                               2.00 |31.917
                                                    2.00 | 43.92 | 13.00
7.917
           2.00 | 19.917
          2.00 |20.000
2.00 |20.083
                               2.00 |32.000
2.00 |32.083
                                                    2.00 | 44.00 | 13.00
2.00 | 44.08 | 13.00
8.083
           2.00 |20.167
2.00 |20.250
                               2.00 |32.167
2.00 |32.250
                                                    2.00 | 44.17 | 13.00
2.00 | 44.25 | 13.00
8 167
                                                   2.00 | 44.33 | 13.00
2.00 | 44.42 | 13.00
8.333
          2.00 | 20.333
                               2.00 |32.333
           2.00 |20.417
                               2.00 |32.417
8.500
           2.00 |20.500
                               2.00 | 32,500
                                                    2.00 | 44.50 | 13.00
          2.00 |20.583
2.00 |20.667
2.00 |20.750
                               2.00 |32.583
2.00 |32.667
                                                   2.00 | 44.58 | 13.00
2.00 | 44.67 | 13.00
2.00 | 44.75 | 13.00
8.583
8.750
                               2.00 32.750
8.833
          2.00 |20.833 | 2.00 |20.917
                               2.00 |32.833 | 2.00 |32.917
                                                    2.00 | 44.83 | 13.00
2.00 | 44.92 | 13.00
8.917
9.000 2.00 21.000
9.083 2.00 21.083
                               2.00 |33.000 | 2.00 | 45.00 | 13.00 | 2.00 |33.083 | 2.00 | 45.08 | 52.95
9.167
          2.00 |21.167
                               2.00 | 33.167 | 2.00 | 45.17 | 53.00
                               2.00 |33.250
2.00 |33.333
                                                    2.00 | 45.25 53.00
2.00 | 45.33 53.00
9.333
           2.00 |21.333
9.417
          2.00 |21.417
2.00 |21.500
                               2.00 |33.417
2.00 |33.500
                                                   2.00 | 45.42 53.00
2.00 | 45.50 53.00
                               2.00 |33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.667 | 2.00 | 45.67 | 53.00
9.583
          2.00 |21.583
           2.00 |21.667
9 750
          2.00 |21.750
                               2 00 33 750
                                                    2 00 | 45 75
                                                                        53.00
                               2.00 |33.833 | 2.00 | 45.83
2.00 |33.917 | 2.00 | 45.92
9.833
           2.00 |21.833
                                                   2.00 | 45.92 53.00
2.00 | 46.00 53.00
9.917
           2.00 |21.917
                               2.00 |34.000
2.00 |34.083
2.00 |34.167
10.000
           2.00 | 22.000
                                                     2.00 | 46.08 38.02
2.00 | 46.17 38.00
10.083
            2.00 |22.083
10.167
            2.00 |22.167
10.250
           2.00 | 22.250 | 2.00 | 34.250 | 2.00 | 46.25 | 38.00 | 2.00 | 22.333 | 2.00 | 34.333 | 2.00 | 46.33 | 38.00
10.333
10.417
           2.00 22 417
                                2.00 |34.417 | 2.00 | 46.42 | 38.00
            2.00 |22.500
                                 2.00 |34.500
                                                     2.00 | 46.50
                                                                        38.00
10.583
            2.00 |22.583
                                 2.00 | 34.583
                                                     2.00 | 46.58 38.00
           2.00 |22.667
2.00 |22.750
                               2.00 |34.667
2.00 |34.750
                                                    2.00 | 46.67
2.00 | 46.75
10.750
                                                                        38.00
           2.00 |22.833 | 2.00 |34.833 | 2.00 | 46.83 | 38.00 | 2.00 |22.917 | 2.00 |34.917 | 2.00 | 46.92 | 38.00
10.833
11.000 2.00 23.000 2.00 35.000 2.00 47.00 38.00
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11.083 2.00 |23.083 2.00 |35.083 3.00 | 47.08 13.04 11.167 2.00 |23.167 2.00 |35.167 3.00 | 47.17 13.00
              11.250 2.00 | 23.250 2.00 | 35.250
                                                                         3.00 | 47.25 | 13.00
                           2.00 |23.333
                                                  2.00 |35.333
              11.417
                           2.00 23.417
                                                  2.00 | 35.417
                                                                         3.00 | 47.42 | 13.00
              11.500 2.00 23.500 2.00 35.500 3.00 47.50 13.00
11.583 2.00 23.583 2.00 35.583 3.00 47.58 13.00
              11.667 2.00 23,667
11.750 2.00 23.750
                                                 2.00 |35.667
2.00 |35.750
                                                                         3.00 | 47.67 | 13.00
3.00 | 47.75 | 13.00

    11.833
    2.00 | 23.833
    2.00 | 35.833
    3.00 | 47.83
    13.00

    11.917
    2.00 | 23.917
    2.00 | 35.917
    3.00 | 47.92
    13.00

    12.000
    2.00 | 24.000
    2.00 | 36.000
    3.00 | 48.00
    13.00

    Unit Hyd Qpeak (cms)= 1.829
    PEAK FLOW (cms)= 2.901 (i)
TIME TO PEAK (hrs)= 46.250
RUNOFF VOLUME (mm)= 228.226
TOTAL RAINFALL (mm)= 285.000
RUNOFF COEFFICIENT = 0.801
    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
  Junction Command(0007)
 AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm)
INFLOW: ID=2( 0100) 23.46 2.90 46.25 228.23
OUTFLOW: ID=2( 0007) 23.46 2.90 46.25 228.23
 FINISH
       V V I SSSSS U U A L
                                                                      (v 6.2.2015)
      V V I SS U U AA L
V V I SS U U AAAAA L
        V V I SS U U A A L
VV I SSSSS UUUUU A A LLLLL
      000 TITIT TITIT H H Y Y M M 000 TM 0 0 T T H H H YY MM MM 0 0 0 0 0 T T H H H Y M M 0 0 000 T T H H Y M M 000
Developed and Distributed by Smart City Water Inc
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Copyright 2007 - 2022 Smart City Water Inc All rights reserved. \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\*  $\label{lem:condition} Input filename: C: \begin{tabular}{ll} Program Files (x86) \label{lem:condition} VIFS 18-800-89be-26dIS-227620 \label{lem:condition} VIFS 18-800-89be-$ 47a6-40e1-a4eb-093c82133071\scen Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\af54bdb4-47a6-40e1-a4eb-093c82133071\scen DATE: 03/11/2024 TIME: 11:36:38 USER: COMMENTS: \*\* SIMULATION : SCS\_100yr \*\* TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | hrs mm/hr | 0.00 | 1.40 | 6.00 | 2.54 | 12.00 | 18.32 | 18.00 | 2.29 1.40 | 6.75 | 2.54 | 12.75 | 9.41 | 18.75 | 2.29 | 1.40 | 7.00 | 2.54 | 13.00 | 6.87 | 19.00 | 2.29 1.00 1.40 | 7.25 | 2.54 | 13.25 | 6.87 | 19.25 | 1.40 | 7.50 | 2.54 | 13.50 | 5.34 | 19.50 | 1.40 | 7.75 | 2.54 | 13.75 | 5.34 | 19.75 1.25 1.50 2.00 2.25 1.65 | 8.00 | 3.43 | 14.00 | 3.82 | 20.00 | 1.65 | 8.25 | 3.43 | 14.25 | 3.82 | 20.25 1.65 | 8.50 | 3.43 | 14.50 | 3.82 | 20.50 | 1.65 | 8.75 | 3.43 | 14.75 | 3.82 | 20.75 2.50 1.53 1.65 | 9.00 | 4.07 | 15.00 | 3.82 | 21.00 | 1.65 | 9.25 | 4.07 | 15.25 | 3.82 | 21.25 3.00 1.53 1.65 | 9.50 | 4.58 | 15.50 | 3.82 | 21.50 3.50 1.53 

 
 4.25
 2.04 | 10.25
 5.85 | 16.25
 2.29 | 22.25

 4.50
 2.04 | 10.50
 7.89 | 16.50
 2.29 | 22.50

 4.75
 2.04 | 10.75
 7.89 | 16.75
 2.29 | 22.75
 1.53 2.04 | 11.00 | 12.21 | 17.00 | 2.29 | 23.00 | 2.04 | 11.25 | 12.21 | 17.25 | 2.29 | 23.25 5.00 5.50 2.04 | 11.50 52.91 | 17.50 2.29 | 23.50 2.04 | 11.75 | 140.43 | 17.75 | 2.29 | 23.75 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. TRANSFORMED HYETOGRAPH -TIME RAIN | TIME R 1.40 | 6.333 1.40 | 6.417 2.54 | 12.333 | 18.32 | 18.33 2.54 | 12.417 | 18.32 | 18.42 0.333 0.500 1.40 | 6.500 2.54 | 12.500 | 18.32 | 18.50 2.29 1.40 | 6.583 1.40 | 6.667 2.54 | 12.583 | 9.41 | 18.58 2.54 | 12.667 | 9.41 | 18.67 0.583 0.667 1.40 | 6.667 1.40 | 6.750 1.40 | 6.833 1.40 | 6.917 1.40 | 7.000 1.40 | 7.083 1.40 | 7.167 1.40 | 7.250 1.40 | 7.333 0.750 2.54 | 12.750 | 9.41 | 18.75 2.54 | 12.833 | 9.41 | 18.83 0.833 2.54 12.917 0.917 9.41 | 18.92 1.000 1.083 2.54 | 13.000 | 9.41 | 19.00 2.54 | 13.083 | 6.87 | 19.08 1.167 2.54 13.167 6.87 19.17 2.29 2.54 13.250 1.333 2.54 | 13.333 | 6.87 | 19.33 1.40 | 7.417 1.40 | 7.500 1.40 | 7.583 2.54 | 13.417 | 6.87 | 19.42 2.54 | 13.500 | 6.87 | 19.50 1.417 1.500 2.54 | 13.583 | 5.34 | 19.58 | 2.54 | 13.667 | 5.34 | 19.67 1.583 2.29 1.40 | 7.667 1.667 2.29 1.40 | 7.750 1.40 | 7.833 1.40 | 7.917 2.54 | 13.750 | 5.34 | 19.75 2.54 | 13.833 | 5.34 | 19.83 2.54 | 13.917 | 5.34 | 19.92 1.750 1.917 2.54 | 14.000 3.43 | 14.083 5.34 | 20.00 3.82 | 20.08 2 000 1.40 8.000 2.29 2.083 1.65 | 8.083 2.167 1.65 | 8.167 3.43 14.167 3.82 | 20.17 1.53 1.65 | 8.250 3.43 | 14.250 1.65 | 8.333 2.333 3.43 14.333 3.82 | 20.33 1.53 2.417 1.65 | 8.417 1.65 | 8.500 3.43 | 14.417 3.43 | 14.500 3.82 | 20.42 3.82 | 20.50 2.500 1.53 2.583 1.65 | 8.583 3.43 114.583 3.82 | 20.58 1.65 | 8.667 3.43 | 14.667 | 3.82 | 20.67

2.750 1.65 | 8.750 | 3.43 | 14.750 | 3.82 | 20.75 1.65 | 8.833 | 3.43 | 14.833 | 3.82 | 20.83 | 1.53 2.833 3.43 |14.917 3.43 |15.000 3.82 | 20.92 3.82 | 21.00 2 917 1.65 | 8.917 1 53 1.65 | 9.000 3.000 1.53 1.65 | 9.083 1.65 | 9.167 4.07 | 15.083 4.07 | 15.167 3.083 3.82 | 21.08 3.250 1.65 | 9.250 4.07 [15.250] 3.82 | 21.25 1.65 | 9.333 4.07 |15.230 4.07 |15.333 4.07 |15.417 3.82 | 21.33 3.82 | 21.42 3.333 3.417 3.500 1.65 | 9.500 4.07 [15.500] 3.82 21.50 1.65 | 9.583 4.58 |15.583 3,667 1.65 | 9.667 4.58 15.667 3.82 21.67 1.53 1.65 | 9.750 1.65 | 9.833 4.58 | 15.750 4.58 | 15.833 3.833 3.82 21.83 4.58 | 15.835 | 3.82 | 21.83 4.58 | 15.917 | 3.82 | 21.92 4.58 | 16.000 | 3.82 | 22.00 5.85 | 16.083 | 2.29 | 22.08 5.85 | 16.167 | 2.29 | 22.17 5.85 | 16.250 | 2.29 | 22.25 3.917 4.000 1.65 | 9.917 1.65 |10.000 4.083 2.03 |10.083 2.04 10.167 4.167 2.04 10.250 4.250 5.85 | 16.333 | 2.29 | 22.33 5.85 | 16.417 | 2.29 | 22.42 4.333 2.04 10.333 2.04 10.417 4.417 5.85 | 16.500 | 2.29 | 22.50 | 7.89 | 16.583 | 2.29 | 22.58 4.500 2.04 110.500 4.583 2.04 |10.583 4.667 2.04 10.667 7.89 16.667 2.29 | 22.67 1.53 4.750 4.833 4.917 5.083 1.53 2.04 | 11.167 | 12.21 | 17.167 | 2.29 | 23.17 | 2.04 | 11.250 | 12.21 | 17.250 | 2.29 | 23.25 5.167 5.333 2.04 | 11.333 | 12.21 | 17.333 2.29 | 23.33 1.53 2.04 |11.417 | 12.21 |17.417 2.04 |11.500 | 12.21 |17.500 2.29 | 23.42 | 23.50 5.500 1.53 5.583 2.04 | 11.583 | 52.91 | 17.583 | 2.29 | 23.58 | 2.04 | 11.667 | 52.91 | 17.667 | 2.29 | 23.67 5.667 5.750 2.04 | 11.750 | 52.91 | 17.750 | 2.29 | 23.75 1.53 2.04 |11.833 | 140.42 | 17.833 | 2.29 | 23.83 5.917 2 04 111 917 140 43 117 917 2 29 23 92 6.000 2.04 | 12.000 140.43 | 18.000 2.29 | 24.00 Unit Hyd Qpeak (cms)= 0.977 PEAK FLOW (cms)= 1.776 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 85.710
TOTAL RAINFALL (mm)= 127.199
RUNOFF COEFFICIENT = 0.674 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

| Junction Command(0005) | AREA QPEAK TPEAK R.V.  $\begin{array}{cccc} \text{(ha)} & \text{(cms)} & \text{(hrs)} & \text{(mm)} \\ \text{INFLOW}: \text{ID=2}( \ 0115) & 23.79 & 1.78 & 12.83 & 85.71 \\ \text{OUTFLOW}: \text{ID=2}( \ 0005) & 23.79 & 1.78 & 12.83 & 85.71 \\ \end{array}$ NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. - TRANSFORMED HYETOGRAPH --TIME RAIN | TIME R 0.333 1.40 6.333 2.54 12.333 18.32 18.33 0.417 1.40 6.417 2.54 12.417 18.32 18.42 0.500 1.40 6.500 2.54 12.500 18.32 18.50 2.29 0.583 1.40 | 6.583 2.54 | 12.583 | 9.41 | 18.58 2.54 | 12.667 | 9.41 | 18.67 0.667 0.750 1.40 | 6.750 2.54 12.750 9.41 18.75 0.833 1.40 | 6.833 2.54 | 12.833 0.917 1.40 | 6.917 2.54 112.917 9.41 | 18.92 1.40 | 6.917 1.40 | 7.000 1.40 | 7.083 1.40 | 7.167 1.40 | 7.250 1.40 | 7.333 1.000 2.54 | 13.000 | 9.41 | 19.00 | 2.54 | 13.083 | 6.87 | 19.08 1.083 1.167 2 54 113 167 6.87 | 19.17 2.54 | 13.250 | 6.87 | 19.25 2.54 | 13.333 | 6.87 | 19.33 1.333 1.417 1.40 | 7.417 1.40 | 7.500 2.54 | 13.417 6.87 | 19.42 6.87 | 19.50 1.500 2.54 113.500 2.29 1.40 | 7.583 1.40 | 7.667 1.40 | 7.750 5.34 | 19.58 5.34 | 19.67 5.34 | 19.75 5.34 | 19.83 5.34 | 19.92 1.583 2.54 | 13.583 2.54 | 13.667 1.750 2.54 113.750 1.40 | 7.833 1.40 | 7.917 2.54 |13.833 2.54 |13.917 1.833 1.917 2.000 1.40 | 8.000 2.54 14.000 5.34 | 20.00 2.083 1.65 | 8.083 3.43 14.083 3.82 | 20.08 3.82 | 20.17 3.82 | 20.25 2.167 1.65 | 8.167 3.43 | 14.167 2.250 1.65 | 8.250 3.43 14.250 2.333 1.65 | 8.333 3.43 [14.333 3.82 | 20.33 1.53 1.65 | 8.417 1.65 | 8.500 3.43 | 14.417 3.43 | 14.500 2 417 3.82 | 20.42 1.65 | 8.580 | 3.43 | 14.500 | 3.82 | 20.50 | 1.65 | 8.583 | 3.43 | 14.583 | 3.82 | 20.58 | 1.65 | 8.667 | 3.43 | 14.667 | 3.82 | 20.67 2.500 2.583 1.53 2.750 1.65 | 8.750 | 3.43 | 14.750 | 3.82 | 20.75

.txt[3/11/2024 11:41:21 AM

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2.833 | 1.65 | 8.833 | 3.43 | 14.833 | 3.82 | 20.83 | 2.917 | 1.65 | 8.917 | 3.43 | 14.917 | 3.82 | 20.92
                                                                                                                                                             1.53
                             3.000
                                                 1.65 | 9.000
                                                                                   3.43 | 15.000
                                                                                                                         3.82 21.00
                                                                                                                                                             1.53
                                                1.65 | 9.083
                                                                                    4.07 |15.083
4.07 |15.167
                                                                                                                         3.82 | 21.17
                             3.250
                                                1.65 19.250
                                                                                   4.07 [15.250]
                                                                                                                         3 82 | 21 25
                             3.333
                                                 1.65 | 9.333
                                                                                   4.07 |15.333
                             3.417
                                                 1.65 | 9.417
                                                                                   4.07 15.417
                                                                                                                         3.82 | 21.42
                                                1.65 | 9.500
1.65 | 9.583
                                                                                  4.07 | 15.500
4.58 | 15.583
                             3.583
                                                                                                                        3.82 21.58
                             3.667
                                                1.65 | 9.667
1.65 | 9.750
                                                                                  4.58 | 15.667
4.58 | 15.750
                                                                                                                         3.82 21.67
                             3.833
                                                1.65 | 9.833
                                                                                   4.58 | 15.833 | 3.82 | 21.83
                                                 1.65 | 9.917
                                                                                   4.58 | 15.917
                                                1.65 | 10.000 | 4.58 | 16.000 | 3.82 | 22.00
                             4.000
                                                2.03 |10.083
2.04 |10.167
                                                                                    5.85 |16.083 | 2.29 | 22.08
5.85 |16.167 | 2.29 | 22.17
                             4.083
                             4.167
                                                                                    5.85 | 16.250
5.85 | 16.333
5.85 | 16.417
                                                                                                                        2.29 | 22.25
2.29 | 22.33
2.29 | 22.42
                             4 250
                                                2 04 110 250
                              4.333
                                                 2.04 |10.333
                                                2.04 | 10.417
                             4.417
                             4 500
                                                2.04 110 500
                                                                                    5.85 | 16.500 | 2.29 | 22.50 | 7.89 | 16.583 | 2.29 | 22.58
                                                                                                                                                              1.53
                                                2.04 |10.583
                             4.667
                                                2.04 10.667
                                                                                     7.89 16.667
                                                                                                                         2.29 | 22.67
                                                                                    7.89 | 16.750 | 2.29 | 22.75
7.89 | 16.833 | 2.29 | 22.83
                             4.833
                                               2.04 | 10.833
                                                2.04 |10.917
2.04 |11.000
                                                                                    7.89 |16.917
7.89 |17.000
                                                                                                                        2.29 | 22.92 | 23.00
                             4.917
5.000
                             5.083
                                               2.04 | 11.083 | 12.21 | 17.083
                                                                                                                           2.29 | 23.08
                                                                                                                          2.29 | 23.17
                                                2.04 |11.167 | 12.21 |17.167
                             5.250
                                               2.04 |11.250 | 12.21 |17.250
                                                                                                                                                               1.53
                             5.333
                                                2.04 |11.333 | 12.21 |17.333 | 2.04 |11.417 | 12.21 |17.417
                                                                                                                           2.29 | 23.33
2.29 | 23.42
                             5.417
                                             2.04 | 11.50 | 12.21 | 17.41 | 2.29 | 23.50 | 1.53 | 2.04 | 11.50 | 12.21 | 17.500 | 2.29 | 23.50 | 1.53 | 2.04 | 11.583 | 52.91 | 17.583 | 2.29 | 23.58 | 1.53 | 2.04 | 11.750 | 52.91 | 17.667 | 2.29 | 23.67 | 1.53 | 2.04 | 11.833 | 140.42 | 17.833 | 2.29 | 23.83 | 1.53 | 2.04 | 11.831 | 140.42 | 17.833 | 2.29 | 23.92 | 1.53 | 2.04 | 11.917 | 140.43 | 17.917 | 2.29 | 23.92 | 1.53 |
                             5.500
                             5.667
                             5 750
                              5.833
                             5.917
                             6.000 2.04 | 12.000 140.43 | 18.000 2.29 | 24.00
            Unit Hyd Qpeak (cms)= 0.869
           PEAK FLOW (cms)= 1.447 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 83.911
TOTAL RAINFALL (mm)= 127.199
RUNOFF COEFFICIENT = 0.660
            (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
      CALIR
    | STANDHYD ( 0105)| Area (ha)= 7.90
[ile:///V...4%20Updated%20EA%20Analyxis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file:///V...4%20Updated%20EA%20Analyxis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file:///V...4%20Updated%20EA%20Analyxis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file:///V...4%20Updated%20EA%20Analyxis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file:///V...4%20Updated%20EA%20Analyxis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file:///V...4%20Updated%20EA%20Analyxis/VO/Detailed%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file:///V...4%20Updated%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file://V...4%20Updated%20Output/620-%20All%20Storms.txt[3/11/204 11:41:21 AM] | file://
                             3.333 1.65 | 9.333 4.07 | 15.333
3.417 1.65 | 9.417 4.07 | 15.417
                                                                                                                       3.82 | 21.42 1.53
                                                                                                                                                            1 53
```

```
|ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                          IMPERVIOUS PERVIOUS (i)
    Surface Area (ha)= 1.58
Dep. Storage (mm)= 2.00
                                                          5.00
    Average Slope (%)= 2.00 5.0

Length (m)= 50.00 250.00

Mannings n = 0.013 0.250
                                                          5.00
    Mannings n
        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                               -- TRANSFORMED HYETOGRAPH --
               TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                        1.40 | 6.083 | 2.54 | 12.083 | 18.33 | 18.08
1.40 | 6.167 | 2.54 | 12.167 | 18.32 | 18.17
              0.083
              0.250
                         1.40 | 6.250 | 2.54 | 12.250 | 18.32 | 18.25
                         1.40 | 6.333 | 2.54 | 12.333 | 18.32 | 18.33 | 1.40 | 6.417 | 2.54 | 12.417 | 18.32 | 18.42
              0.333
                        1.40 | 6.500 | 2.54 | 12.500 | 18.32 | 18.50 | 1.40 | 6.583 | 2.54 | 12.583 | 9.41 | 18.58 | 1.40 | 6.667 | 2.54 | 12.667 | 9.41 | 18.67
              0.500
                                                                                        2.29
              0.583
              0.667
              0.750
                        1.40 | 6.750
1.40 | 6.833
                                            2.54 | 12.750 | 9.41 | 18.75
2.54 | 12.833 | 9.41 | 18.83
              0.833
                         1.40 | 6.917
1.40 | 7.000
1.40 | 7.083
                                             2.54 | 12.917 | 9.41 | 18.92
2.54 | 13.000 | 9.41 | 19.00
              0.917
              1.083
                                             2.54 13.083 6.87 19.08
                        1.40 | 7.167
1.40 | 7.250
                                             2.54 | 13.167 | 6.87 | 19.17
2.54 | 13.250 | 6.87 | 19.25
              1.250
                        1.40 | 7.250

1.40 | 7.333

1.40 | 7.417

1.40 | 7.500

1.40 | 7.583

1.40 | 7.667

1.40 | 7.750

1.40 | 7.833

1.40 | 7.917
              1.333
                                            2.54 | 13.333 | 6.87 | 19.33 | 2.54 | 13.417 | 6.87 | 19.42
              1.417
                                             2.54 | 13.500 | 6.87 | 19.50
2.54 | 13.583 | 5.34 | 19.58
2.54 | 13.667 | 5.34 | 19.67
              1.500
              1.583
                                            2.54 | 13.750 | 5.34 | 19.75 | 2.54 | 13.833 | 5.34 | 19.83 | 2.54 | 13.917 | 5.34 | 19.92
              1.750
              1.917
              2.000
                        1.40 | 8.000
1.65 | 8.083
                                            2.54 | 14.000
3.43 | 14.083
                                                                   5.34 | 20.00
                                                                 3.82 | 20.08
              2 167
                         1.65 | 8.167 | 3.43 | 14.167 | 3.82 | 20.17
                                                                                        1 53
                                                                   3.82 20.25
                         1.65 | 8.250
                                             3.43 14.250
              2.250
                                                                                        1.53
                                             3.43 | 14.333 | 3.82 | 20.33 | 3.43 | 14.417 | 3.82 | 20.42
              2.333
                         1.65 | 8.333
              2.500
                         1.65 | 8.500
                                             3.43 | 14.500
                                                                  3.82 | 20.50
                                                                  3.82 | 20.58
3.82 | 20.67
              2.583
                         1.65 | 8.583
                                             3.43 14.583
                                                                                        1.53
                         1.65 | 8.667
1.65 | 8.750
              2.667
                                              3.43 |14.667
              2.750
                                             3.43 14.750
                                                                   3.82 | 20.75
                                                                                        1.53
                          1.65 | 8.833
                                              3.43 | 14.833
              2.917
                         1.65 | 8.917
                                             3.43 14.917
                                                                   3.82 | 20.92
                                                                                        1.53
                                                                 3.82 | 21.00
3.82 | 21.08
                         1.65 | 9.000
1.65 | 9.083
                                             3.43 | 15.000
4.07 | 15.083
              3.083
              3.167
                         1.65 | 9.167
                                             4.07 [15.167]
                                                                   3.82 | 21.17
                        1.65 | 9.250 | 4.07 | 15.250 | 3.82 | 21.25
```

```
1.65 | 9.500 | 4.07 | 15.500
1.65 | 9.583 | 4.58 | 15.583
                                                               3.82 | 21.50
3.82 | 21.58
             3.583
             3.667
                        1.65 | 9.667
                                           4.58 | 15.667
                                                                3.82 | 21.67
                                           4.58 | 15.750
             3.833
                        1.65 | 9.833
                                          4.58 [15.833]
                                                               3.82 | 21.83
                                          4.58 | 15.833
4.58 | 15.917
4.58 | 16.000
5.85 | 16.083
5.85 | 16.167
                        1.65 | 9.917
1.65 | 10.000
             3.917
                                                                3.82 | 21.92
             4.000
                                                                3.82 | 22.00
             4.083
                        2.03 [10.083
                                                                2.29 | 22.08
                        2.04 |10.167
             4.250
                       2.04 | 10.250
                                            5.85 | 16.250 | 2.29 | 22.25
             4.333
                        2.04 |10.333
                                            5.85 |16.333
5.85 |16.417
                                                                2.29 | 22.33
             4.417
                        2.04 | 10.417
                                                                                     1.53
                        2.04 | 10.500
2.04 | 10.583
                                            5.85 |16.500
7.89 |16.583
                                                                2.29 | 22.50
2.29 | 22.58
                                            7.89 16.667
             4.667
                        2.04 10.667
                                                                2.29 | 22.67
                                                                                     1.53
                                           7.89 | 16.750
7.89 | 16.833
                                                                2.29 | 22.75
2.29 | 22.83
                        2.04 10.750
             4.750
             4.833
                       2.04 10.833
                                           7.89 |16.917
7.89 |17.000
                                                                2.29 | 22.92
2.29 | 23.00
             4 917
                        2.04 10.917
                        2.04 11.000
             5.083
                       2.04 | 11.083 | 12.21 | 17.083
                                                                 2.29 | 23.08
                        2.04 |11.167 | 12.21 |17.167
                                                                 2.29 | 23.17
             5.250
                       2.04 | 11.250 | 12.21 | 17.250
                                                                 2.29 | 23.25
                                                                                     1.53
                       2.04 | 11.333 | 12.21 | 17.333 | 2.04 | 11.417 | 12.21 | 17.417 | 2.04 | 11.500 | 12.21 | 17.500 |
                                                                2.29 | 23.33
2.29 | 23.42
2.29 | 23.50
              5.333
             5.500
                                                                                     1.53
              5.583
                        2.04 |11.583 | 52.91 |17.583 |
2.04 |11.667 | 52.91 |17.667
                                                                 2.29 | 23.58
2.29 | 23.67
             5.667
                                                                                     1.53
             5.857 2.04 | 11.850 52.91 | 17.750 2.29 | 23.85

5.853 2.04 | 11.833 | 140.42 | 17.833 2.29 | 23.83

5.917 2.04 | 11.917 | 140.43 | 17.917 | 2.29 | 23.92

6.000 2.04 | 12.000 | 140.43 | 18.000 | 2.29 | 24.00
                                                                                     1.53
    Max.Eff.Inten.(mm/hr)= 140.43
over (min) 5.00 20.
                                               20.00
   over (min) 5.00 20.00
Storage Coeff. (min)= 1.20 (ii) 17.75 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
   Unit Hyd. peak (cms)= 0.33 0.06
*TOTALS*
    PEAK FLOW (cms)= 0.31 1.09 1.128 (iii)
TIME TO PEAK (hrs)= 12.00 12.17 12.17
RUNOFF VOLUME (mm)= 125.20 77.65 82.41
TOTAL RANFALL (mm)= 127.20 127.20
RUNOFF COEFFICIENT = 0.98 0.61 0.65
***** WARNING: STORAGE COFFE IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
           YOU SHOULD CONSIDER SPLITTING THE AREA.
     (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
     CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
         THAN THE STORAGE COEFFICIENT.
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(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
(ha) (cms) (hrs) (mm)

ID1=1 ( 0105): 7.90 1.128 12.17 82.41

+ ID2=2 ( 0110): 16.60 1.447 12.58 83.91
     ID = 3 ( 0006): 24.50 2.230 12.25 83.43
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
CALIB
| NASHYD ( 0100)| Area (ha)= 23.46 Curve Number (CN)= 80.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                 --- U.H. Tp(hrs)= 0.49
       NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
             ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
hrs mm/hr | hrs mm/hr |
                     1.40 | 6.083 | 2.54 | 12.083 | 18.33 | 18.08 | 1.40 | 6.167 | 2.54 | 12.167 | 18.32 | 18.17
            0.083
            0.250 1.40 | 6.250 2.54 | 12.250 18.32 | 18.25
            0.333
                      1.40 | 6.333 | 2.54 | 12.333 | 18.32 | 18.33
            0.417
                      1.40 | 6.417 | 2.54 | 12.417 | 18.32 | 18.42
                                       2.54 | 12.500 | 18.32 | 18.50
2.54 | 12.583 | 9.41 | 18.58
2.54 | 12.667 | 9.41 | 18.67
            0.500
0.583
                      1.40 | 6.500
1.40 | 6.583
            0.667
                      1.40 6 667
                      1.40 | 6.750
                                        2.54 |12.750
                                        2.54 12.833 9.41 18.83
            0.833
                      1.40 | 6.833
                      1.40 | 6.917
                                        2.54 12.917
             1.000
                      1.40 7.000
                                        2.54 13.000
                                                           9.41 | 19.00
                                                                              2.29
                      1.40 | 7.083
1.40 | 7.167
1.40 | 7.250
                                        2.54 | 13.083 | 6.87 | 19.08
2.54 | 13.167 | 6.87 | 19.17
2.54 | 13.250 | 6.87 | 19.25
                                       2.54 | 13.083
2.54 | 13.167
             1.083
             1.250
                      1.40 | 7.333
1.40 | 7.417
                                        2.54 |13.333
2.54 |13.417
                                                           6.87 | 19.33
6.87 | 19.42
             1.333
             1.417
             1.500
                      1.40 | 7.500
1.40 | 7.583
                                        2.54 13.500 6.87 19.50
                                        2.54 13.583
                      1.40 | 7.667
1.40 | 7.750
1.40 | 7.833
                                                           5.34 | 19.67
5.34 | 19.75
             1.667
                                        2.54 | 13.667
                                        2.54 | 13.750
2.54 | 13.833
             1.833
                                                           5.34 | 19.83
             1.917
                      1 40 7 917
                                        2.54 13.917
                                                           5.34 | 19.92
                     1.40 | 8.000 | 2.54 | 13.917 | 3.34 | 20.90 | 1.65 | 8.083 | 3.43 | 14.083 | 3.82 | 20.08 | 1.65 | 8.167 | 3.43 | 14.167 | 3.82 | 20.17
             2.000
            2.083
                                                                             1.53
            2.250 1.65 | 8.250 3.43 | 14.250 3.82 | 20.25 1.53
```

```
1.65 | 8.333 | 3.43 | 14.333 | 3.82 | 20.33 | 1.65 | 8.417 | 3.43 | 14.417 | 3.82 | 20.42
                  2 333
                  2.417
                                                                                              1.53
                  2.500
                              1.65 | 8.500
                                                  3.43 14.500
                                                                         3.82 20.50
                                                                                              1.53
                             1.65 | 8.583
                                                  3.43 |14.583
3.43 |14.667
                                                                         3.82 | 20.58
3.82 | 20.67
                  2.583
                  2.667
                  2.750
                             1.65 18 750
                                                  3 43 114 750
                                                                         3 82 | 20 75
                                                                                              1 53
                  2.833
                              1.65 | 8.833
                                                   3.43 |14.833
                  2.917
                              1.65 | 8.917
                                                   3.43 14.917
                                                                         3.82 | 20.92
                                                                                              1.53
                             1.65 | 9.000
1.65 | 9.083
                                                  3.43 | 15.000
4.07 | 15.083
                  3.083
                                                                         3.82 | 21.08
                  3.167
                             1.65 | 9.167
1.65 | 9.250
                                                  4.07 | 15.167
4.07 | 15.250
                                                                         3.82 | 21.17
                  3 333
                             1.65 | 9.333
                                                  4.07 | 15.333
                                                                        3.82 | 21.33
                             1.65 | 9.417
1.65 | 9.500
                                                  4.07 |15.417
4.07 |15.500
                  3.500
                                                                        3.82 21.50
                             1.65 | 9.583
1.65 | 9.667
                                                  4.58 | 15.583
4.58 | 15.667
                                                                        3.82 | 21.58
3.82 | 21.67
                  3.583
                  3.667
                             1.65 | 9.750
1.65 | 9.833
1.65 | 9.917
                                                  4.58 |15.750
4.58 |15.833
4.58 |15.917
                                                                        3.82 | 21.75
3.82 | 21.83
3.82 | 21.92
                  3 750
                  3.917
                                                   4.58 | 16.000 | 3.82 | 22.00 | 5.85 | 16.083 | 2.29 | 22.08 | 5.85 | 16.167 | 2.29 | 22.17
                  4.000
                             1.65 10.000
                             2.03 |10.083
                  4.083
                  4.167
                             2.04 10.167
                  4.333
                             2.04 110.333
                                                   5.85 | 16.333 | 2.29 | 22.33
                  4.417
4.500
                             2.04 |10.417
2.04 |10.500
                                                   5.85 |16.417 | 2.29 | 22.42
5.85 |16.500 | 2.29 | 22.50
                                                   7.89 | 16.583 | 2.29 | 22.58 | 7.89 | 16.667 | 2.29 | 22.67 | 7.89 | 16.750 | 2.29 | 22.75
                  4.583
                            2.04 110.583
                             2.04 | 10.667
                  4.750
                            2.04 10.750
                                                                                               1.53
                  4.833
                             2.04 | 10.833
2.04 | 10.917
                                                   7.89 | 16.833
7.89 | 16.917
                                                                        2.29 | 22.83
2.29 | 22.92
                  4.917
                            2.04 |11.000 7.89 |17.000 2.29 | 23.00
2.04 |11.083 | 12.21 |17.083 | 2.29 | 23.08
2.04 |11.167 | 12.21 |17.167 | 2.29 | 23.17
                  5,000
                                                                                               1.53
                                                                                               1.53
                  5.167
                            2.04 |11.250 | 12.21 |17.250 | 2.04 |11.333 | 12.21 |17.333
                                                                          2.29 | 23.25
                                                                                               1.53
                  5.250
                   5.333
                             2.04 11.417 12.21 17.417 2.29 23.42
                  5.417
                                                                                               1.53
                            2.04 |11.417 | 12.21 | 17.417 | 2.29 | 23.42 | 2.04 | 11.500 | 12.21 | 17.500 | 2.29 | 23.50 | 2.04 | 11.583 | 52.91 | 17.683 | 2.29 | 23.67 | 2.04 | 11.667 | 52.91 | 17.667 | 2.29 | 23.67 | 2.04 | 11.750 | 52.91 | 17.750 | 2.29 | 23.75
                  5.583
                                                                                               1.53
                  5,667
                  5.750
                                                                                               1.53

    5.833
    2.04
    11.833
    140.42
    17.833
    2.29
    23.83
    1.53

    5.917
    2.04
    11.917
    140.43
    17.917
    2.29
    23.92
    1.53

    6.000
    2.04
    12.000
    140.43
    18.000
    2.29
    24.00
    1.53

        Unit Hyd Qpeak (cms)= 1.829
        PEAK FLOW (cms)= 2.600 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 80.409
TOTAL RAINFALL (mm)= 127.199
RUNOFF COEFFICIENT = 0.632
```

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. Junction Command(0007) AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) INFLOW: ID= 2( 0100) 23.46 2.60 12.33 80.41 OUTFLOW: ID= 2( 0007) 23.46 2.60 12.33 80.41 V V I SSSSS U U A L (v 6.2.2015) V V I SS U U AA L V V I SS U U AAAAA L V V I SS U U AA A L VV I SSSSS UUUUU A A LLLLL OOO TTTTT TTTTT H H Y Y M M OOO TM
O O T T H H Y Y M M M O O
O O T T H H Y M M O O
OOO T T H H Y M M OO
Developed and Distributed by Smart City Water Inc Copyright 2007 - 2022 Smart City Water Inc All rights reserved. \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\*  $Input\ filename: C: \Program Files (x86) \Visual OTTHYMO 6.2 \VO2 \voin.dat \\Output\ filename: C: \Users \uyokich \App Data \Local \Civica \VH5 \3783 a080-e662-4500-89 be-26df3e227620 \10 bd51b2-9b77-4b69-95f7-cad577c25983 \scen$ Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\10bd51b2-9b77-4b69-95f7-cad577c25983\scen DATE: 03/11/2024 TIME: 11:36:38 USER: COMMENTS: ........... \*\* SIMULATION : SCS 10yr

\* READ STORM | Filename: C:\Users\nyokich\AppD ata\Local\Temp\
8a20bc98-3229-45bd-86a2-c24eba0248e6\7983e628 Ptotal= 88.80 mm | Comments: SCS\_10yr TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | hrs mm/hr | hrs 0.98 | 6.75 | 1.78 | 12.75 | 6.57 | 18.75 | 0.98 | 7.00 | 1.78 | 13.00 | 4.80 | 19.00 | 0.98 | 7.25 | 1.78 | 13.25 | 4.80 | 19.25 1.25 1.60 0.98 | 7.50 | 1.78 | 13.50 | 3.73 | 19.50 | 0.98 | 7.75 | 1.78 | 13.75 | 3.73 | 19.75 1.50 1.75 1.60 1.15 | 8.00 | 2.40 | 14.00 | 2.66 | 20.00 | 1.15 | 8.25 | 2.40 | 14.25 | 2.66 | 20.25 2.00 1.07 1.15 | 8.50 | 2.40 | 14.50 | 2.66 | 20.50 | 1.15 | 8.75 | 2.40 | 14.75 | 2.66 | 20.75 | 1.15 | 9.00 | 2.84 | 15.00 | 2.66 | 21.00 2.50 3.00 1.07 1.15 | 9.50 | 2.84 | 15.05 | 2.66 | 21.05 | 1.15 | 9.50 | 2.84 | 15.25 | 2.66 | 21.25 | 1.15 | 9.50 | 3.20 | 15.50 | 2.66 | 21.50 | 1.15 | 9.75 | 3.20 | 15.75 | 2.66 | 21.75 | 1.42 | 10.00 | 4.09 | 16.00 | 1.60 | 22.00 | 1.42 | 10.25 | 4.09 | 16.25 | 1.60 | 22.25 | 3.75 1.07 4.25 1.07 1.42 | 10.50 | 5.51 | 16.50 | 1.60 | 22.50 | 1.42 | 10.75 | 5.51 | 16.75 | 1.60 | 22.75 4.50 1.07 5.00 1.42 11.00 8.52 17.00 1.60 23.00 1.07 1.42 | 11.25 | 8.52 | 17.25 1.42 | 11.50 | 36.94 | 17.50 1.60 | 23.25 5.50 1.60 | 23.50 5.75 1.42 | 11.75 | 98.04 | 17.75 | 1.60 | 23.75 | 1.07 CALIB NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. TRANSFORMED HYETOGRAPH TIME RAIN | TIME R

0.333 0.98 | 6.333 1.78 | 12.333 12.79 | 18.33 1.60

ing%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]

1.78 | 12.583 | 6.57 | 18.58 1.78 | 12.667 | 6.57 | 18.67 0.583 0.98 6.583 1.60 0.98 | 6.667 0.750 0.98 | 6.750 1.78 12.750 6.57 | 18.75 1.60 0.98 | 6.833 0.98 | 6.917 1.78 | 12.833 1.78 | 12.917 6.57 | 18.83 6.57 | 18.92 0.833 0.917 1.60 0.98 | 7.000 0.98 | 7.083 1.78 | 13.000 1.78 | 13.083 6.57 | 19.00 4.80 | 19.08 4.80 | 19.17 1.000 1.083 0.98 | 7.167 0.98 | 7.250 0.98 | 7.333 1.167 1.78 | 13.167 1.60 1.78 | 13.167 | 4.80 | 19.17 1.78 | 13.250 | 4.80 | 19.25 1.78 | 13.333 | 4.79 | 19.33 1.78 | 13.417 | 4.80 | 19.42 1.78 | 13.500 | 4.80 | 19.50 1.333 1.60 0.98 | 7.417 0.98 | 7.500 0.98 | 7.583 1.417 1.500 1.60 3.73 | 19.58 3.73 | 19.67 3.73 | 19.75 1.583 1.78 13.583 0.98 | 7.667 0.98 | 7.750 1.78 | 13.667 1.78 | 13.750 1.750 1.60 1.833 0.98 7.833 1.917 0.98 7.917 1.78 | 13.833 | 3.73 | 19.83 | 1.78 | 13.917 | 3.73 | 19.92 | 1.78 | 14.000 | 3.73 | 20.00 1.60 2 000 0.98 | 8.000 1.15 | 8.083 1.15 | 8.167 2.40 |14.083 | 2.66 | 20.08 2.40 |14.167 | 2.66 | 20.17 2.167 1.07 2.250 2.333 1.15 | 8.250 1.15 | 8.333 2.40 | 14.250 | 2.66 | 20.25 2.40 | 14.333 | 2.66 | 20.33 2.417 2.500 1.15 | 8.417 1.15 | 8.500 1.15 | 8.583 2.583 2.667 1.15 | 8.667 1.15 | 8.750 2.750 1.15 | 8.833 1.15 | 8.917 2.833 1.07 2.40 |14.917 2.66 | 20.92 3.000 1.15 | 9.000 2.40 | 15.000 | 2.66 | 21.00 1.07 3.083 1.15 | 9.083 1.15 | 9.167 2.84 | 15.083 2.84 | 15.167 2.66 | 21.08 2.66 | 21.17 3.167 3.250 1.15 9.250 2 84 115 250 2 66 1 21 25 1.07 1.15 | 9.333 1.15 | 9.417 3.333 2.84 |15.333 2.66 | 21.33 3.417 2.84 | 15.417 2.66 21.42 1.07 1.15 | 9.500 1.15 | 9.583 2.84 | 15.500 | 2.66 | 21.50 | 3.20 | 15.583 | 2.66 | 21.58 3.583 1.15 | 9.667 1.15 | 9.750 1.15 | 9.833 3.20 | 15.585 | 2.66 | 21.58 3.20 | 15.667 | 2.66 | 21.67 3.20 | 15.750 | 2.66 | 21.75 3.20 | 15.833 | 2.66 | 21.83 3.20 | 15.917 | 2.66 | 21.92 3.20 | 16.000 | 2.66 | 22.00 3.667 3.833 1.15 | 9.917 1.15 | 10.000 3.917 4.000 4.083 1.42 | 10.083 | 4.08 | 16.083 | 1.60 | 22.08 | 1.42 | 10.167 | 4.09 | 16.167 | 1.60 | 22.17 4.09 |16.250 | 1.60 | 22.25 4.08 |16.333 | 1.60 | 22.33 4.09 |16.417 | 1.60 | 22.42 4.250 1.42 110.250 1.07 4.333 1.42 10.333 4.417 1.42 10.417 1.07 4.09 | 16.417 | 1.60 | 22.42 4.09 | 16.500 | 1.60 | 22.50 5.51 | 16.583 | 1.60 | 22.58 5.51 | 16.667 | 1.60 | 22.67 5.51 | 16.750 | 1.60 | 22.75 1.42 | 10.500 1.42 | 10.583 4 500 1.07 4.583 4.667 1.42 10.667 1.07 4.833 1.42 | 10.833 5.51 | 16.833 1.60 | 22.83

```
1.42 | 10.917 | 5.51 | 16.917 | 1.60 | 22.92 | 1.42 | 11.000 | 5.51 | 17.000 | 1.60 | 23.00
                                                                                                                                                                    0.500 0.98 | 6.500 1.78 | 12.500 12.79 | 18.50
              4 917
                                                                                                                                                                                                                                1.60
                                                                         1.07
                                                                                                                                                                                              1.78 | 12.583 | 6.57 | 18.58
1.78 | 12.667 | 6.57 | 18.67
                                                                                                                                                                    0.583 0.98 6.583
              5.000
                                                                          1.07
              5.083
                       1.42 111.083
                                        8.52 17.083
                                                          1.60 | 23.08
                                                                          1.07
                                                                                                                                                                    0.667
                                                                                                                                                                             0.98 | 6.667
                                                                                                                                                                                                                                1.60
                       1.42 |11.167
1.42 |11.250
                                        8.52 | 17.167
8.52 | 17.250
                                                          1.60 | 23.17
                                                                                                                                                                              0.98 | 6.750
                                                                                                                                                                                               1.78 112.750
              5 333
                       1.42 [11.333
                                        8 52 117 333
                                                         1 60 | 23 33
                                                                          1.07
                                                                                                                                                                    0.917
                                                                                                                                                                             0.98 | 6.917
                                                                                                                                                                                               1.78 112.917
                                                                                                                                                                                                               6.57 | 18.92
                                                                                                                                                                                                                                1.60
                                        8.52 | 17.417
                                                          1.60 | 23.42
                                                                                                                                                                             0.98 | 7.000
                                                                                                                                                                                               1.78 | 13.000
                                                                                                                                                                                                               6.57 19.00
                       1.42 11.417
              5,500
                       1.42 | 11.500 8.52 | 17.500
                                                          1.60 | 23.50
                                                                          1.07
                                                                                                                                                                     1.083
                                                                                                                                                                                              1.78 | 13.083
                                                                                                                                                                                                              4.80 | 19.08
                                                                                                                                                                                                                                1.60
                       1.42 |11.583 | 36.94 |17.583 | 1.42 |11.667 | 36.94 |17.667
                                                                                                                                                                             0.98 | 7.167
0.98 | 7.250
                                                                                                                                                                                                               4.80 | 19.17
4.80 | 19.25
               5.583
                                                          1.60 | 23.58
                                                                                                                                                                                               1.78 | 13.167
                                                                                                                                                                                               1.78 | 13.250
              5.667
                                                          1.60 | 23.67
                                                                          1.07
                                                                                                                                                                                                                                1.60
              5.750
                       1.42 | 11.750 | 36.94 | 17.750 | 1.60 | 23.75 | 1.42 | 11.833 | 98.03 | 17.833 | 1.60 | 23.83 | 1.42 | 11.917 | 98.04 | 17.917 | 1.60 | 23.92
                                                                                                                                                                    1.333
                                                                                                                                                                             0.98 | 7.333
                                                                                                                                                                                               1.78 | 13.333
                                                                                                                                                                                                              4.79 | 19.33
4.80 | 19.42
4.80 | 19.50
                                                                                                                                                                                                                                1.60
                                                                                                                                                                             0.98 | 7.417
0.98 | 7.500
              5.917
                                                                          1.07
                                                                                                                                                                     1.500
                                                                                                                                                                                               1.78 | 13.500
                                                                                                                                                                                                                                1.60
              6.000 1.42 | 12.000 98.04 | 18.000 1.60 | 24.00
                                                                                                                                                                     1.583
                                                                                                                                                                             0.98 | 7.583
0.98 | 7.667
                                                                                                                                                                                              1.78 | 13.583
1.78 | 13.667
                                                                                                                                                                                                               3.73 | 19.58
3.73 | 19.67
                                                                                                                                                                     1.667
                                                                                                                                                                                                                                1.60
                                                                                                                                                                                                               3.73 | 19.75
3.73 | 19.83
3.73 | 19.92
                                                                                                                                                                             0.98 | 7.750
0.98 | 7.833
      Unit Hyd Qpeak (cms)= 0.977
                                                                                                                                                                     1.750
                                                                                                                                                                                               1.78 | 13.750
                                                                                                                                                                                                                                1.60
                                                                                                                                                                                               1.78 |13.833
      PEAK FLOW (cms)= 1.065 (i)
TIME TO PEAK (lus)= 12.833
RUNOFF VOLUME (mm)= 51.703
TOTAL RAINFALL (mm)= 88.801
RUNOFF COEFFICIENT = 0.582
                                                                                                                                                                     1.917
                                                                                                                                                                             0.98 7.917
                                                                                                                                                                                               1.78 113.917
                                                                                                                                                                                                                                1.60
                                                                                                                                                                             0.98 | 8.000
                                                                                                                                                                                              1.78 |14.000
2.40 |14.083
                                                                                                                                                                                                              3.73 | 20.00 | 2.66 | 20.08
                                                                                                                                                                     2.083
                                                                                                                                                                    2.167
                                                                                                                                                                             1.15 | 8.167
                                                                                                                                                                                              2.40 114.167
                                                                                                                                                                                                              2.66 | 20.17
                                                                                                                                                                                                                                1.07
                                                                                                                                                                                             2.40 |14.250 | 2.66 | 20.25
2.40 |14.333 | 2.66 | 20.33
                                                                                                                                                                             1.15 8.250
                                                                                                                                                                    2.333
                                                                                                                                                                             1.15 | 8.333
                                                                                                                                                                                                                                1.07
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                     2.417
                                                                                                                                                                              1.15 | 8.417
                                                                                                                                                                                             2.40 | 14.417 | 2.66 | 20.42 | 2.40 | 14.500 | 2.66 | 20.50
                                                                                                                                                                     2.500
                                                                                                                                                                             1.15 | 8.500
                                                                                                                                                                                                                                1.07
                                                                                                                                                                                             2.40 | 14.583 | 2.66 | 20.58 | 2.40 | 14.667 | 2.66 | 20.67
                                                                                                                                                                    2.583
                                                                                                                                                                             1.15 | 8.583
                                                                                                                                                                                                                                1.07
                                                                                                                                                                             1.15 | 8.667
1.15 | 8.750
                                                                                                                                                                    2,750
                                                                                                                                                                                              2.40 14.750 2.66 20.75
                                                                                                                                                                                                                                1.07
                                                                                                                                                                             1.15 | 8.833
1.15 | 8.917
                                                                                                                                                                                             2.40 | 14.833 | 2.66 | 20.83 | 2.40 | 14.917 | 2.66 | 20.92
                                                                                                                                                                     2.833
    Junction Command(0005)
                                                                                                                                                                     2.917
                                                                                                                                                                    3.000
                                                                                                                                                                             1.15 | 9.000
1.15 | 9.083
                                                                                                                                                                                             2.40 15.000 2.66 21.00
                                                                                                                                                                                                                                1.07
                                                                                                                                                                                              2.84 |15.083
                                                                                                                                                                                                              2.66 | 21.08
                      AREA QPEAK TPEAK R.V.
                                                                                                                                                                                                                                1.07
                                                                                                                                                                     3.083
   (ha) (cms) (hrs) (mm)

INFLOW: ID=2( 0115) 23.79 1.07 12.83 51.70

OUTFLOW: ID=2( 0005) 23.79 1.07 12.83 51.70
                                                                                                                                                                    3.167
                                                                                                                                                                              1.15 | 9.167
                                                                                                                                                                                              2.84 15.167
                                                                                                                                                                                                              2.66 | 21.17
                                                                                                                                                                                                                                1.07
                                                                                                                                                                             1.15 | 9.250
1.15 | 9.333
                                                                                                                                                                                             2.84 |15.250
2.84 |15.333
                                                                                                                                                                                                              2.66 | 21.25
2.66 | 21.33
                                                                                                                                                                     3.333
                                                                                                                                                                             1.15 | 9.417
1.15 | 9.500
                                                                                                                                                                    3.417
                                                                                                                                                                                             2.84 | 15.417 | 2.66 | 21.42
                                                                                                                                                                                                                                1.07
                                                                                                                                                                                              2.84 | 15.500
                                                                                                                                                                                                               2.66 | 21.50
                                                                                                                                                                    3.583
                                                                                                                                                                              1.15 | 9.583
                                                                                                                                                                                              3.20 | 15.583 | 2.66 | 21.58
                                                                                                                                                                                                                                1.07
                                                                                                                                                                             1.15 | 9.667
1.15 | 9.750
                                                                                                                                                                                             3.20 | 15.667
3.20 | 15.750
                                                                                                                                                                                                              2.66 | 21.67
2.66 | 21.75
                                                                                                                                                                     3.667
   | CALIB | NASHYD ( 0110)| Area (ha)= 16.60 Curve Number (CN)= 82.0 | | D= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.73
                                                                                                                                                                     3.750
                                                                                                                                                                                             3.20 | 15.833 | 2.66 | 21.83
3.20 | 15.917 | 2.66 | 21.92
   ID= 1 DT= 5.0 min | Ia
                                                                                                                                                                    3 833
                                                                                                                                                                             1.15 9.833
                                                                                                                                                                                                                                1.07
                                                                                                                                                                              1.15 | 9.917
                                                                                                                                                                    3.917
                                                                                                                                                                                                                                1.07
                                                                                                                                                                     4.000
                                                                                                                                                                              1.15 110.000
                                                                                                                                                                                               3.20 16.000 2.66 22.00
                                                                                                                                                                                                                                 1.07
         NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                              1.42 |10.083
                                                                                                                                                                                              4.08 | 16.083 | 1.60 | 22.08
                                                                                                                                                                     4.167
                                                                                                                                                                              1.42 10.167
                                                                                                                                                                                               4.09 | 16.167
                                                                                                                                                                                                                1.60 | 22.17
                                                                                                                                                                                                                                 1.07
                                                                                                                                                                    4.250
                                                                                                                                                                              1.42 10.250
                                                                                                                                                                                              4.09 16.250 1.60 22.25
                                                                                                                                                                                                                                 1.07
                                                                                                                                                                                               4.08 |16.333
                            - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                              1.42 | 10.333
                                                                                                                                                                                                                1.60 | 22.33
              TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                                                                                                                                                                    4.417
                                                                                                                                                                              1.42 | 10.417
                                                                                                                                                                                               4.09 16.417
                                                                                                                                                                                                                1.60 | 22.42
                                                                                                                                                                                                                                 1.07
                                                                                                                                                                                               4.09 | 16.500
                                                                                                                                                                                                                1.60 | 22.50
                                                                                                                                                                              1.42 | 10.500
                      0.98 | 6.083 | 1.78 | 12.083 | 12.80 | 18.08 | 0.98 | 6.167 | 1.78 | 12.167 | 12.79 | 18.17
              0.083
                                                                         1.60
                                                                                                                                                                    4.583
                                                                                                                                                                             1.42 | 10.583
                                                                                                                                                                                               5.51 16.583
                                                                                                                                                                                                               1.60 | 22.58
                                                                                                                                                                                                                                 1.07
                                                                                                                                                                                               5.51 |16.667
5.51 |16.750
                                                                                                                                                                              1.42 10.667
                                                                                                                                                                                                                1.60 | 22.67
1.60 | 22.75
                                                                                                                                                                    4.667
                                                                                                                                                                                                                                 1.07
                                                                                                                                                                              1.42 10.750
                                       1.78 | 12.250 | 12.79 | 18.25
                                                                                                                                                                    4.750
                                                                                                                                                                                                                                 1.07
              0.250 0.98 | 6.250
                                                                          1.60
                                                                                                                                                                             1.42 | 10.833 | 5.51 | 16.833 | 1.60 | 22.83 | 1.42 | 10.917 | 5.51 | 16.917 | 1.60 | 22.92
              0.333 0.98 6.333
                                       1 78 112 333 12 79 18 33
                                                                                                                                                                    4.833
                                                                                                                                                                                                                                 1.07
              0.417 0.98 | 6.417 1.78 | 12.417 12.79 | 18.42 1.60
1.000 0.98 | 7,000
1.083 0.98 | 7.083
                                                                                                                                                                                             1.78 | 13.000
1.78 | 13.083
                                                                                                                                                                                                              6.57 | 19.00
4.80 | 19.08
              5.000
                      1.42 | 11.000 | 5.51 | 17.000 | 1.60 | 23.00
                                                                                                                                                                                                                                1.60
                      1.42 | 11.083 | 8.52 | 17.083 | 1.60 | 23.08
              5.083
                                                                          1.07
              5 167
                       1.42 11.167 8.52 17.167 1.60 23.17
                                                                          1.07
                                                                                                                                                                     1.167
                                                                                                                                                                             0.98 | 7.167
                                                                                                                                                                                              1.78 113 167
                                                                                                                                                                                                              4.80 | 19.17
                                                                                                                                                                                                                                1.60
                                                                                                                                                                                               1.78 |13.250
                                        8.52 | 17.250
                                                          1.60 | 23.25
                       1.42 | 11.250
              5.250
                                                                          1.07
              5.333
                       1.42 111.333
                                        8.52 17.333
                                                          1.60 | 23.33
                                                                                                                                                                     1.333
                                                                                                                                                                             0.98 | 7.333
                                                                                                                                                                                               1.78 | 13.333
                                                                                                                                                                                                               4.79 | 19.33
                                                                                                                                                                                                                                1.60
                                                                                                                                                                             0.98 | 7.417
0.98 | 7.500
                       1.42 11.417
                                        8.52 17.417
                                                          1.60 | 23.42
                                                                                                                                                                                               1.78 | 13.417
                                                                                                                                                                                                               4.80 19.42
                                                                                                                                                                                              1.78 13.500 4.80 19.50
              5,500
                       1.42 111.500 8.52 117.500 1.60 | 23.50
                                                                          1.07
                                                                                                                                                                     1.500
                                                                                                                                                                                                                                1.60
                       1.42 |11.583 | 36.94 |17.583
1.42 |11.667 | 36.94 |17.667
                                                                                                                                                                             0.98 | 7.583
0.98 | 7.667
                                                                                                                                                                                              1.78 | 13.583
1.78 | 13.667
                                                                                                                                                                                                               3.73 | 19.58
3.73 | 19.67
              5 583
                                                          1.60 | 23.58
                                                                                                                                                                     1.583
                                                                                                                                                                                                                                1.60
                                                          1.60 | 23.67
              5.667
              5.750
                                                                          1.07
                                                                                                                                                                     1.750
                                                                                                                                                                                              1.78 | 13.750
                                                                                                                                                                                                               3.73 | 19.75
                                                                                                                                                                                                                                1.60
```

```
1.42 | 11.750 | 36.94 | 17.750 | 1.60 | 23.75 | 1.42 | 11.833 | 98.03 | 17.833 | 1.60 | 23.83 | 1.42 | 11.917 | 98.04 | 17.917 | 1.60 | 23.92
                                                                                                                                                                                     0.98 | 7.750
0.98 | 7.833
0.98 | 7.917
                                                                                                                                                                             1.833
                                                                                                                                                                                                        1.78 | 13.833
            5.917
                                                                            1.07
                                                                                                                                                                            1.917
                                                                                                                                                                                                       1.78 | 13.917
                                                                                                                                                                                                                          3.73 | 19.92
                                                                                                                                                                                                                                            1.60
            6.000 1.42 12.000 98.04 18.000 1.60 24.00
                                                                                                                                                                                     0.98 | 8.000
1.15 | 8.083
                                                                                                                                                                                                       1.78 | 14.000
2.40 | 14.083
                                                                                                                                                                                                                        3.73 | 20.00
2.66 | 20.08
                                                                                                                                                                            2.083
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                            2 167
                                                                                                                                                                                      1.15 | 8.167
                                                                                                                                                                                                       2 40 14 167
                                                                                                                                                                                                                         2 66 20 17
                                                                                                                                                                                                                                            1.07
   Unit Hyd Opeak (cms)= 0.869
                                                                                                                                                                                     1.15 | 8.250
                                                                                                                                                                                                       2.40 |14.250
2.40 |14.333
                                                                                                                                                                                                                        2.66 | 20.25
   PEAK FLOW (cms)= 0.862 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 50.320
TOTAL RAINFALL (mm)= 88.801
RUNOFF COEFFICIENT = 0.567
                                                                                                                                                                            2.333
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                     1.15 | 8.417
1.15 | 8.500
                                                                                                                                                                                                      2.40 | 14.417 | 2.66 | 20.42 | 2.40 | 14.500 | 2.66 | 20.50
                                                                                                                                                                            2.417
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                            2.500
                                                                                                                                                                            2 583
                                                                                                                                                                                      1 15 | 8 583
                                                                                                                                                                                                       2.40 14 583 2.66 20 58
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                     1.15 | 8.667
1.15 | 8.750
                                                                                                                                                                                                       2.40 |14.667
                                                                                                                                                                                                       2.40 14.750 2.66 20.75
                                                                                                                                                                            2,750
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.15 | 8.833
1.15 | 8.917
                                                                                                                                                                                                      2.40 | 14.833 | 2.66 | 20.83 | 2.40 | 14.917 | 2.66 | 20.92
                                                                                                                                                                            2.833
   (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
                                                                                                                                                                            2.917
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.15 | 9.000
1.15 | 9.083
1.15 | 9.167
                                                                                                                                                                                                      2.40 | 15.000 | 2.66 | 21.00 | 2.84 | 15.083 | 2.66 | 21.08
                                                                                                                                                                            3 000
                                                                                                                                                                                                                                            1.07
CALIB
                                                                                                                                                                            3.167
                                                                                                                                                                                                       2.84 | 15.167
                                                                                                                                                                                                                         2.66 21.17
                                                                                                                                                                                                                                            1.07
| STANDHYD ( 0105)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                                                                                                                                                                            3.250
                                                                                                                                                                                      1.15 | 9.250
1.15 | 9.333
                                                                                                                                                                                                       2.84 |15.250
2.84 |15.333
                                                                                                                                                                                                                        2.66 | 21.25
2.66 | 21.33
                                                                                                                                                                            3.333
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                            3.417
                                                                                                                                                                                      1.15 | 9.417
                                                                                                                                                                                                       2.84 | 15.417 | 2.66 | 21.42
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.15 | 9.500
                                                                                                                                                                                                       2.84 |15.500
                                                                                                                                                                                                                        2.66 | 21.50
                     IMPERVIOUS PERVIOUS (i)
   | Surface Area | (ha)= | 1.58 | 6.32 |
| Dep. Storage | (mm)= | 2.00 | 5.00 |
| Average Slope | (%= | 2.00 | 5.00 |
| Length | (m)= | 50.00 | 250.00 |
| Mannings n = | 0.013 | 0.250 |
                                             6.32
5.00
5.00
                                                                                                                                                                            3.583
                                                                                                                                                                                     1.15 | 9.583
                                                                                                                                                                                                       3.20 | 15.583 | 2.66 | 21.58
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                            3.667
                                                                                                                                                                                      1.15 | 9.667
1.15 | 9.750
                                                                                                                                                                                                       3.20 | 15.667
3.20 | 15.750
                                                                                                                                                                                                                        2.66 | 21.67
2.66 | 21.75
                                                                                                                                                                            3.750
                                                                                                                                                                            3 833
                                                                                                                                                                                      1.15 | 9.833
                                                                                                                                                                                                       3 20 15 833 2 66 21 83
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.15 | 9.917
                                                                                                                                                                                                        3.20 |15.917
                                                                                                                                                                                                                         2.66 | 21.92
                                                                                                                                                                            3.917
                                                                                                                                                                            4.000
                                                                                                                                                                                      1.15 | 10.000 | 3.20 | 16.000 | 2.66 | 22.00
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.42 10.083
                                                                                                                                                                                                        4.08 | 16.083 | 1.60 | 22.08
      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                            4.083
                                                                                                                                                                            4.167
                                                                                                                                                                                      1.42 10.167
                                                                                                                                                                                                        4.09 116.167
                                                                                                                                                                                                                           1.60 | 22.17
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                                        4.09 | 16.250 | 1.60 | 22.25
4.08 | 16.333 | 1.60 | 22.33
4.09 | 16.417 | 1.60 | 22.42
                                                                                                                                                                                      1.42 |10.250
1.42 |10.333
                                                                                                                                                                            4.250
                           - TRANSFORMED HYETOGRAPH -
           4.417
                                                                                                                                                                                      1.42 10.417
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.42 | 10.500
1.42 | 10.583
                                                                                                                                                                                                        4.09 | 16.500
5.51 | 16.583
                                                                                                                                                                                                                          1.60 | 22.50
1.60 | 22.58
                                                                                                                                                                            4.500
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                            4.583
                                                                                                                                                                                                                                             1.07
                                                                                                                                                                            4.667
                                                                                                                                                                                      1.42 110.667
                                                                                                                                                                                                        5.51 16.667
                                                                                                                                                                                                                          1.60 | 22.67
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.42 10.750
                                                                                                                                                                                                        5.51 |16.750
                                                                                                                                                                                                                          1.60 | 22.75
                                                                                                                                                                                                        5.51 | 16.833 | 1.60 | 22.83
5.51 | 16.917 | 1.60 | 22.92
            0 333
                    0.98 6 333
                                       1.78 12.333 12.79 18.33
                                                                            1.60
                                                                                                                                                                            4.833
                                                                                                                                                                                      1.42 110.833
                                                                                                                                                                                                                                            1.07
                     0.98 | 6.417
                                        1.78 | 12.417
                                                        12.79 | 18.42
                                                                                                                                                                                      1.42 |10.917
            0.500
                     0.98 | 6.500
                                       1.78 | 12.500 | 12.79 | 18.50
                                                                           1.60
                                                                                                                                                                            5.000
                                                                                                                                                                                      1.42 111.000
                                                                                                                                                                                                        5.51 17.000
                                                                                                                                                                                                                           1.60 | 23.00
                                                                                                                                                                                                                                            1.07
                                       1.78 | 12.583 | 6.57 | 18.58
1.78 | 12.667 | 6.57 | 18.67
            0.583
                     0.98 | 6.583
                                                                                                                                                                            5 083
                                                                                                                                                                                      1.42 111.083
                                                                                                                                                                                                        8.52 17.083
                                                                                                                                                                                                                           1.60 | 23.08
                                                                                                                                                                                                                                            1.07
                                                                                                                                                                                      1.42 11.167
                                                                                                                                                                                                        8.52 17.167
                                                                                                                                                                                                                          1.60 | 23.17
                     0.98 6.667
                                                                           1.60
                                                                                                                                                                            5.167
                                                                                                                                                                                                                                            1.07
            0.667
                                       1.78 | 12.750 | 6.57 | 18.75
1.78 | 12.833 | 6.57 | 18.83
            0.750
                    0.98 | 6.750
                                                                           1.60
                                                                                                                                                                            5.250
                                                                                                                                                                                     1.42 11.250
                                                                                                                                                                                                        8.52 17.250 1.60 23.25
                                                                                                                                                                                                                                            1.07
                     0.98 | 6.833
                                                                                                                                                                            5.333
                                                                                                                                                                                      1.42 11.333 8.52 17.333
                                                                                                                                                                                                                          1.60 | 23.33
            0.917 0.98 | 6.917 1.78 | 12.917 6.57 | 18.92 1.60
                                                                                                                                                                            5.417
                                                                                                                                                                                     1.42 | 11.417 | 8.52 | 17.417 | 1.60 | 23.42
                                                                                                                                                                                                                                            1.07
```

```
5.500 1.42 | 11.500 8.52 | 17.500 1.60 | 23.50 1.07
                                    1.42 |11.583 | 36.94 |17.583 | 1.42 |11.667 | 36.94 |17.667
                      5.583
                                                                                          1.60 | 23.58
                                                                                                                    1.07
                      5.667
                                                                                          1.60 | 23.67
                                   1.42 | 11.750 | 36.94 | 17.750 | 1.60 | 23.75 | 1.07 | 1.42 | 11.833 | 98.03 | 17.833 | 1.60 | 23.83 | 1.07 | 1.42 | 11.917 | 98.04 | 17.917 | 1.60 | 23.92 | 1.07
                                                                                                                                                                                                                                                                                                        1.78 | 12.250 | 12.79 | 18.25
1.78 | 12.333 | 12.79 | 18.33
                                                                                                                                                                                                                                                                              0.98 | 6.250
                                                                                                                                                                                                                                                                              0.98 | 6.333
                      5 917
                                                                                                                                                                                                                                                                0.417
                                                                                                                                                                                                                                                                             0.98 | 6.417
                                                                                                                                                                                                                                                                                                         1.78 112.417 12.79 | 18.42
                                                                                                                                                                                                                                                                                                                                                               1.60
                      6.000 1.42 12.000 98.04 18.000 1.60 24.00
                                                                                                                                                                                                                                                                              0.98 | 6.500
                                                                                                                                                                                                                                                                                                        1.78 | 12.500 | 12.79 | 18.50
1.78 | 12.583 | 6.57 | 18.58
                                                                 25.00
                                                                                                                                                                                                                                                                0.583
                                                                                                                                                                                                                                                                              0.98 6.583
                                                                                                                                                                                                                                                                                                                                                             1.60
                                                                                                                                                                                                                                                                              0.98 | 6.667
                                                                                                                                                                                                                                                                                                         1.78 | 12.667 | 6.57 | 18.67
1.78 | 12.750 | 6.57 | 18.75
         Max.Eff.Inten.(mm/hr)= 98.04
over (min) 5.00 25
                                                                                                                                                                                                                                                                0.667
0.750

        over (min)
        5.00
        25.00

        Storage Coeff. (min)=
        1.38 (ii)
        23.05 (ii)

        Unit Hyd. Tpeak (min)=
        5.00
        25.00

        Unit Hyd. peak (cms)=
        0.33
        0.05

        "TOTAL 8"

        PEAK FLOW (cms)=
        0.22
        0.54
        0.570 (iii)

        TIME TO PEAK (hrs)=
        12.00
        12.25
        12.25

        RUNOFF VOLUME (mm)=
        88.80
        48.72
        49.82

        TOTAL RAINFALL (mm)=
        88.80
        88.80

        RUNOFF COEFFICIENT
        0.98
        0.51
        0.56

                                                                                                                                                                                                                                                                                                                                                             1.60
                                                                                                                                                                                                                                                                0.833
                                                                                                                                                                                                                                                                              0.98 | 6.833
                                                                                                                                                                                                                                                                                                         1.78 12.833 6.57 18.83
                                                                                                                                                                                                                                                                                                                                                             1.60
                                                                                                                                                                                                                                                                                                         1.78 | 12.917 | 6.57 | 18.92
1.78 | 13.000 | 6.57 | 19.00
                                                                                                                                                                                                                                                                              0.98 | 7.000
                                                                                                                                                                                                                                                                 1.000
                                                                                                                                                                                                                                                                                                                                                             1.60
                                                                                                                                                                                                                                                                  1.083
                                                                                                                                                                                                                                                                             0.98 | 7.083
0.98 | 7.167
                                                                                                                                                                                                                                                                                                         1.78 | 13.083 | 4.80 | 19.08
1.78 | 13.167 | 4.80 | 19.17
                                                                                                                                                                                                                                                                 1.167
                                                                                                                                                                                                                                                                                                                                                             1.60
                                                                                                                                                                                                                                                                                                         1.78 | 13.250 | 4.80 | 19.25
1.78 | 13.333 | 4.79 | 19.33
                                                                                                                                                                                                                                                                 1.250
                                                                                                                                                                                                                                                                              0.98 | 7.250
                                                                                                                                                                                                                                                                 1.417
                                                                                                                                                                                                                                                                              0.98 7.417
                                                                                                                                                                                                                                                                                                         1.78 13 417 4.80 19.42
                                                                                                                                                                                                                                                                                                                                                             1.60
                                                                                                                                                                                                                                                                              0.98 | 7.500 | 0.98 | 7.583
                                                                                                                                                                                                                                                                                                         1.78 | 13.500
1.78 | 13.583
                                                                                                                                                                                                                                                                  1.583
     **** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                                                                                                                 1.667
                                                                                                                                                                                                                                                                             0.98 | 7.667
0.98 | 7.750
                                                                                                                                                                                                                                                                                                         1.78 | 13.667
                                                                                                                                                                                                                                                                                                                                 3.73 | 19.67
3.73 | 19.75
                                                                                                                                                                                                                                                                                                                                                             1:60
    ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                                                                                                                                                                                                                                                                                                         1.78 | 13.750
                                                                                                                                                                                                                                                                             0.98 | 7.833
                                                                                                                                                                                                                                                                                                        1.78 | 13.833 | 3.73 | 19.83
                    YOU SHOULD CONSIDER SPLITTING THE AREA.
                                                                                                                                                                                                                                                                 1.833
                                                                                                                                                                                                                                                                                                                                                             1.60
                                                                                                                                                                                                                                                                             0.98 | 7.917
0.98 | 8.000
                                                                                                                                                                                                                                                                                                         1.78 | 13.917
           (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                                                                                                                                                                                                                                 2.000
                                                                                                                                                                                                                                                                                                        1.78 114.000 3.73 | 20.00
                                                                                                                                                                                                                                                                                                                                                             1.60
          CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                                                                                                                                                                                                                                                                              1.15 | 8.083
1.15 | 8.167
                                                                                                                                                                                                                                                                                                       2.40 | 14.083
2.40 | 14.167
                                                                                                                                                                                                                                                                                                                                 2.66 | 20.08
2.66 | 20.17
                                                                                                                                                                                                                                                                2 083
                                                                                                                                                                                                                                                                                                                                                             1.07
                THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                                                                                                                2.250
                                                                                                                                                                                                                                                                               1.15 | 8.250
                                                                                                                                                                                                                                                                                                        2.40 14.250
                                                                                                                                                                                                                                                                                                                                 2.66 | 20.25
                                                                                                                                                                                                                                                                                                                                                             1.07
                                                                                                                                                                                                                                                                              1.15 | 8.333
1.15 | 8.417
                                                                                                                                                                                                                                                                                                       2.40 | 14.333 | 2.66 | 20.33 | 2.40 | 14.417 | 2.66 | 20.42
          (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                 2.333
                                                                                                                                                                                                                                                                2.417
                                                                                                                                                                                                                                                                2.500
                                                                                                                                                                                                                                                                              1.15 | 8.500
1.15 | 8.583
                                                                                                                                                                                                                                                                                                       2.40 | 14.500 | 2.66 | 20.50 | 2.40 | 14.583 | 2.66 | 20.58
                                                                                                                                                                                                                                                                 2.583
                                                                                                                                                                                                                                                                2.667
                                                                                                                                                                                                                                                                               1.15 | 8.667
                                                                                                                                                                                                                                                                                                        2.40 14.667 2.66 20.67
                                                                                                                                                                                                                                                                                                                                                             1.07
                                                                                                                                                                                                                                                                2.750
2.833
                                                                                                                                                                                                                                                                              1.15 | 8.750
1.15 | 8.833
                                                                                                                                                                                                                                                                                                       2.40 | 14.750 | 2.66 | 20.75 | 2.40 | 14.833 | 2.66 | 20.83
    | ADD HYD ( 0006)|
    | 1 + 2 = 3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1 = 1 ( 0.105): 7.90 0.570 12.25 49.82
                                                                                                                                                                                                                                                                              1.15 | 8.917
1.15 | 9.000
                                                                                                                                                                                                                                                                2.917
                                                                                                                                                                                                                                                                                                       2.40 14.917 2.66 20.92
                                                                                                                                                                                                                                                                                                        2.40 | 15.000 | 2.66 | 21.00
           + ID2=2 ( 0110): 16.60 0.862 12.67 50.32
                                                                                                                                                                                                                                                                3.083
                                                                                                                                                                                                                                                                               1.15 | 9.083
                                                                                                                                                                                                                                                                                                       2.84 | 15.083 | 2.66 | 21.08
                                                                                                                                                                                                                                                                              1.15 | 9.167
1.15 | 9.250
                                                                                                                                                                                                                                                                                                       2.84 |15.167 | 2.66 | 21.17
2.84 |15.250 | 2.66 | 21.25
                                                                                                                                                                                                                                                                 3.167
            ID = 3 ( 0006): 24.50 1.307 12.33 50.16
                                                                                                                                                                                                                                                                              1.15 | 9.333
1.15 | 9.417
                                                                                                                                                                                                                                                                3 333
                                                                                                                                                                                                                                                                                                       2.84 | 15.333 | 2.66 | 21.33
                                                                                                                                                                                                                                                                                                        2.84 15.417
                                                                                                                                                                                                                                                                                                                                  2.66 21.42
         NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                                                                3.417
                                                                                                                                                                                                                                                                3.500
                                                                                                                                                                                                                                                                               1.15 | 9.500
                                                                                                                                                                                                                                                                                                       2.84 | 15.500 | 2.66 | 21.50
                                                                                                                                                                                                                                                                              1.15 9.583
                                                                                                                                                                                                                                                                                                        3.20 | 15.583 | 2.66 | 21.58
     CALIB
                                                                                                                                                                                                                                                                3,667
                                                                                                                                                                                                                                                                               1.15 | 9.667
                                                                                                                                                                                                                                                                                                        3.20 [15.667]
                                                                                                                                                                                                                                                                                                                                 2.66 | 21.67
    | NASHYD ( 0100)| Area (ha)= 23.46 Curve Number (CN)= 80.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                                                                                                                                                                                                                                                                                                       3.20 | 15.750 | 2.66 | 21.75
3.20 | 15.833 | 2.66 | 21.83
3.20 | 15.917 | 2.66 | 21.92
                                                                                                                                                                                                                                                                3 750
                                                                                                                                                                                                                                                                               1.15 9.750
                                                                                                                                                                                                                                                                                                                                                             1 07
                                                                                                                                                                                                                                                                               1.15 | 9.833
                                                                                                                                                                                                                                                                               1.15 9.917
                             --- U.H. Tp(hrs)= 0.49
                                                                                                                                                                                                                                                                3.917
                                                                                                                                                                                                                                                                                                                                                             1.07
                                                                                                                                                                                                                                                                               1.15 | 10.000
                                                                                                                                                                                                                                                                                                         3.20 | 16.000 | 2.66 | 22.00
                                                                                                                                                                                                                                                                              1.42 | 10.083 | 4.08 | 16.083 | 1.60 | 22.08
             NOTE: RAINFALL WAS TRANSFORMED TO 50 MIN TIME STEP
                                                                                                                                                                                                                                                                4.083
                                                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                                              1.42 | 10.167
1.42 | 10.250
                                                                                                                                                                                                                                                                                                        4.09 | 16.167
4.09 | 16.250
                                                                                                                                                                                                                                                                                                                                   1.60 | 22.17
1.60 | 22.25
                                                                                                                                                                                                                                                                4.250
                                                                                                                                                                                                                                                                                                                                                               1.07
                       ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                                                                                                                                4.333
                                                                                                                                                                                                                                                                              1.42 10.333 4.08 16.333 1.60 22.33
                                                                                                                                                                                                                                                                 4.417 1.42 | 10.417 4.09 | 16.417 1.60 | 22.42
[ile://V/...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%

        4.500
        1.42 | 10.500
        4.09 | 16.500
        1.60 | 22.50

        4.583
        1.42 | 10.583
        5.51 | 16.583
        1.60 | 22.58

        4.667
        1.42 | 10.667
        5.51 | 16.667
        1.60 | 22.67

        4.750
        1.42 | 10.750
        5.51 | 16.750
        1.60 | 22.75

                                                                                                                                                                                                                                               OOO T T H H Y M M OOO
Developed and Distributed by Smart City Water Inc
                                                                                                                   1.07
                                                                                                                   1.07
                                                                                                                                                                                                                                               Copyright 2007 - 2022 Smart City Water Inc
                                                                                                                                                                                                                                               All rights reserved.
                                                                                                                    1.07
                                                              5.51 |16.833
5.51 |16.917
                      4.833
                                     1.42 10.833
                                                                                          1.60 | 22.83
                                     1.42 |10.917
                                                                                                                                                                                                                                                                    ***** DETAILED OUTPUT *****
                      5.000
                                    1.42 111.000
                                                              5.51 117.000
                                                                                         1.60 | 23.00
                                                                                                                   1.07
                                                              8.52 |17.083
8.52 |17.167
                                                                                         1.60 | 23.08
                      5.083
                                    1.42 |11.083
                      5.167
                                     1.42 11.167
                      5.250
                                     1.42 111.250
                                                              8.52 17.250
                                                                                         1.60 | 23.25
                       5.333
                                     1.42 |11.333
                                                              8.52 | 17.333
                                                                                         1.60 | 23.33
                      5.417
                                    1.42 | 11.417 | 8.52 | 17.417 | 1.60 | 23.42
                                                                                                                   1.07
                                    1.42 |11.500 8.52 |17.500
1.42 |11.583 36.94 |17.583
                                                                                                                                                                                                                                               Summary filename: C:\Users\nyokich\AppData\Loca\\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\a023b859-ec59-44a5-9d2e-09d1e9efef45\scen
                      5.583
                                                                                          1.60 | 23.58
                                                                                                                    1.07
                                    1.42 |11.667 | 36.94 |17.667 | 1.42 |11.750 | 36.94 |17.750
                                                                                           1.60 | 23.67
1.60 | 23.75
                       5.667

    5.833
    1.42 | 11.833
    98.03 | 17.833
    1.60 | 23.83

    5.917
    1.42 | 11.917
    98.04 | 17.917
    1.60 | 23.92

    6.000
    1.42 | 12.000
    98.04 | 18.000
    1.60 | 24.00

                                                                                                                                                                                                                                               DATE: 03/11/2024
                                                                                                                                                                                                                                                                                                             TIME: 11:36:38
                                                                                                                    1.07
                                                                                                                                                                                                                                               USER:
          Unit Hyd Qpeak (cms)= 1.829
                                                                                                                                                                                                                                               COMMENTS:
```

5.583 1.42 [11.583 36.94 [17.583 1.60] 23.58 1.07
5.667 1.42 [11.667 36.94 [17.567 1.60] 23.57 1.07
5.750 1.42 [11.750 36.94 [17.750 1.60] 23.75 1.07
5.833 1.42 [11.833 98.03 [17.933 1.60] 23.83 1.07
5.917 1.42 [11.917 98.04 [17.917 1.60] 23.92 1.07
6.000 1.42 [12.000 98.04 [18.000 1.60] 24.00 1.07

Unit Hyd Opeak (cms)= 1.829

PEAK FLOW (cms)= 1.528 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 47.673
TOTAL RAINFALL (mm)= 88.801
RUNOFF COEFFICIENT = 0.537

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)

INFLOW: ID=2 ( 0007) 23.46 1.53 12.33 47.67

OUTFLOW: ID=2 ( 0007) 23.46 1.53 12.33 47.67

V V I SSSSS U U A L (v 6.2.2015)
V V I SS U U AA AL
VV I SS U U AA AL
VV I SS U U AA AL
VV I SS U U AA L
VV I SS U U A A L
VV I SSSSS UUUUU A A LLLLL

OOO TITITI TITIT H H Y Y M M OOO TM
O O T T H H YY MMMMO O
O O T T H H YY MMMMO O
O T T H H YY MMMMO O
O T T H H YY MMMMO O
O T T H H YY MMMMO O
O T T H H YY MMMMO O

 $Input\ filename: C:\Program Files\ (x86)\Visual\ OTTHYMO\ 6.2\VO2\voin.dat \\ Output\ filename: C:\Users'uyokich'AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\a023b859-ec59-44a5-9d2e-09dle9efef45\scen$ READ STORM | Filename: C:\Users\nyokich\AppD TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | HME RAIN 1.16 | 7.25 | 2.11 | 13.25 | 5.70 | 19.25 | 1.16 | 7.50 | 2.11 | 13.50 | 4.43 | 19.50 | 1.16 | 7.75 | 2.11 | 13.75 | 4.43 | 19.75 | 1.37 | 8.00 | 2.85 | 14.00 | 3.17 | 20.00 | 1.25 1.90 1.75 1.90 2.25 1.37 | 8.25 | 2.85 | 14.25 | 3.17 | 20.25 1.27 1.37 | 8.50 | 2.85 | 14.50 | 3.17 | 20.50 | 1.37 | 8.75 | 2.85 | 14.75 | 3.17 | 20.75 2.50 3.00 1.37 | 9.00 3.38 | 15.00 3.17 | 21.00 3.25 1.37 | 9.25 3.38 | 15.25 3.17 | 21.25 1.27 3.50 1.37 | 9.50 3.80 | 15.50 3.17 | 21.50 1.27

```
1.27
                                                                                                                                                                                                                                                                                                                                                     2.750
                                                                                                                                                                                                                                                                                                                                                                        1.37 | 8.750
                               4.25
                                              1.69 | 10.25 | 4.86 | 16.25
                                                                                                                   1.90 | 22.25
                                                                                                                                                      1.27
                                                                                                                                                                                                                                                                                                                                                                                                          2.85 | 14,750
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 20.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.27
                               4.50
                                              1.69 | 10.50 | 6.55 | 16.50
1.69 | 10.75 | 6.55 | 16.75
                                                                                                                  1.90 | 22.50
1.90 | 22.75
                                                                                                                                                                                                                                                                                                                                                     2.833
                                                                                                                                                                                                                                                                                                                                                                        1.37 | 8.833
                                                                                                                                                                                                                                                                                                                                                                                                          2.85 14.833
                                                                                                                                                                                                                                                                                                                                                                                                          2.85 |14.917
                               5.00
                                             1.69 | 11.00 | 10.14 | 17.00
                                                                                                                   1.90 | 23.00
                                                                                                                                                      1.27
                                                                                                                                                                                                                                                                                                                                                     3.000
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.000
                                                                                                                                                                                                                                                                                                                                                                                                         2.85 [15.000]
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.00
                                              1.69 | 11.25 | 10.14 | 17.25
                                                                                                                   1.90 | 23.25
                                                                                                                                                      1.27
                                                                                                                                                                                                                                                                                                                                                                       1.37 9.083
                                                                                                                                                                                                                                                                                                                                                                                                          3.38 | 15.083
                                                                                                                                                                                                                                                                                                                                                      3.083
                                              1.69 | 11.50 | 43.93 | 17.50 | 1.90 | 23.50
                                                                                                                                                                                                                                                                                                                                                                        1.37 | 9.167
                                                                                                                                                                                                                                                                                                                                                                                                          3.38 | 15.167
                               5.50
                                                                                                                                                      1.27
                                                                                                                                                                                                                                                                                                                                                     3.167
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.27
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.250
1.37 | 9.333
                                                                                                                                                                                                                                                                                                                                                                                                          3.38 |15.250
3.38 |15.333
                                           1.69 | 11.75 | 116.58 | 17.75 | 1.90 | 23.75
                                                                                                                                                                                                                                                                                                                                                      3.250
                                                                                                                                                                                                                                                                                                                                                      3.333
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.33
                                                                                                                                                                                                                                                                                                                                                     3.417
                                                                                                                                                                                                                                                                                                                                                                        1.37 | 9.417
                                                                                                                                                                                                                                                                                                                                                                                                          3.38 | 15,417
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.42
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.500
1.37 | 9.583
                                                                                                                                                                                                                                                                                                                                                                                                         3.38 | 15.500
3.80 | 15.583
                                                                                                                                                                                                                                                                                                                                                     3.583
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.27
                                                                                                                                                                                                                                                                                                                                                      3.667
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.667
1.37 | 9.750
                                                                                                                                                                                                                                                                                                                                                                                                         3.80 | 15.667 | 3.17 | 21.67 | 3.80 | 15.750 | 3.17 | 21.75
       CALIB
     3.750
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.833
1.37 | 9.917
                                                                                                                                                                                                                                                                                                                                                                                                        3.80 | 15.833 | 3.17 | 21.83
3.80 | 15.917 | 3.17 | 21.92
                                                                                                                                                                                                                                                                                                                                                     3 833
                                                                                                                                                                                                                                                                                                                                                                                                           3.80 | 16.000 | 3.17 | 22.00
4.86 | 16.083 | 1.90 | 22.08
4.86 | 16.167 | 1.90 | 22.17
                                                                                                                                                                                                                                                                                                                                                     4.000
                                                                                                                                                                                                                                                                                                                                                                        1.37 110.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                                                                                                                                                                                        1.69 |10.083
1.69 |10.167
                   NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                      4.083
                                                                                                                                                                                                                                                                                                                                                                       1.69 | 10.250 | 4.86 | 16.250 | 1.90 | 22.25 | 1.69 | 10.333 | 4.86 | 16.333 | 1.90 | 22.33 | 1.69 | 10.417 | 4.86 | 16.417 | 1.90 | 22.42
                                                                                                                                                                                                                                                                                                                                                     4.250
                                                                                                                                                                                                                                                                                                                                                     4.333
                                                          - TRANSFORMED HYETOGRAPH
                           TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                     4.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                                                                                                                                                                     4.500
4.583
                                                                                                                                                                                                                                                                                                                                                                       1.69 | 10.500 | 4.86 | 16.500 | 1.90 | 22.50 | 1.69 | 10.583 | 6.55 | 16.583 | 1.90 | 22.58
                                                                                                                                                                                                                                                                                                                                                                                                           6.55 | 16.667 | 1.90 | 22.67
6.55 | 16.750 | 1.90 | 22.75
                                                                                                                                                                                                                                                                                                                                                     4 667
                                                                                                                                                                                                                                                                                                                                                                        1.69 10.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                                                                                                                                                                                         1.69 10.750
                                               1.16 | 6.333 | 2.11 | 12.333 | 15.21 | 18.33 | 1.16 | 6.417 | 2.11 | 12.417 | 15.21 | 18.42 | 1.16 | 6.500 | 2.11 | 12.500 | 15.21 | 18.50
                             0.333
                                                                                                                                                                                                                                                                                                                                                     4.833
                                                                                                                                                                                                                                                                                                                                                                        1.69 | 10.833
                                                                                                                                                                                                                                                                                                                                                                                                           6.55 16.833
                                                                                                                                                                                                                                                                                                                                                                                                                                              1.90 | 22.83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                                                                                                                                                                                       1.69 | 10.917 | 6.55 | 16.917 | 1.90 | 22.92 | 1.69 | 11.000 | 6.55 | 17.000 | 1.90 | 23.00
                             0.500
                                                                                                                                                         1.90
                                                                                                                                                                                                                                                                                                                                                      5.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.27
                             0.583
                                               1.16 | 6.583
1.16 | 6.667
                                                                                2.11 |12.583
2.11 |12.667
                                                                                                                   7.81 | 18.58
7.81 | 18.67
                                                                                                                                                                                                                                                                                                                                                     5.083
                                                                                                                                                                                                                                                                                                                                                                       1.69 | 11.083 | 10.14 | 17.083 | 1.90 | 23.08 | 1.69 | 11.167 | 10.14 | 17.167 | 1.90 | 23.17
                                                                                                                                                                                                                                                                                                                                                      5.167
                             0.667
                                                                                                                                                         1.90
                                               1.16 | 6.667

1.16 | 6.750

1.16 | 6.833

1.16 | 6.917

1.16 | 7.000

1.16 | 7.083

1.16 | 7.167

1.16 | 7.250

1.16 | 7.333
                                                                                                                    7.81 | 18.67

7.81 | 18.75

7.81 | 18.83

7.81 | 18.92

7.81 | 19.00

5.70 | 19.08

5.70 | 19.17
                                                                                2.11 |12.750
2.11 |12.833
                             0.750
                                                                                                                                                                                                                                                                                                                                                      5.250
                                                                                                                                                                                                                                                                                                                                                                        1.69 111.250 10.14 17.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                1.90 | 23.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.27
                                                                                                                                                                                                                                                                                                                                                                       1.69 |11.333 | 10.14 |17.333 | 1.69 |11.417 | 10.14 |17.417
                                                                                                                                                                                                                                                                                                                                                                                                                                               1.90 | 23.33
1.90 | 23.42
                                                                                                                                                                                                                                                                                                                                                       5.333
                             0.917
                                                                                2.11 | 12.917
                                                                                                                                                        1.90
                                                                                2.11 | 13.000
2.11 | 13.083
2.11 | 13.167
                             1.000
                                                                                                                                                         1.90
                                                                                                                                                                                                                                                                                                                                                     5.500
                                                                                                                                                                                                                                                                                                                                                                        1.69 11.500 10.14 17.500 1.90 23.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                                                                                                                                                                                        1.69 |11.583 | 43.93 |17.583
1.69 |11.667 | 43.93 |17.667
                             1.083
                                                                                                                                                         1.90
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.90 | 23.58
                             1.167
                                                                                                                                                         1.90
                                                                                                                                                                                                                                                                                                                                                      5.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.90 | 23.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.27
                                                                                                                                                                                                                                                                                                                                                                       1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75 | 1.27 | 1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83 | 1.27 | 1.69 | 11.917 | 116.58 | 17.917 | 1.90 | 23.92 | 1.27
                                                                                                                                                                                                                                                                                                                                                      5.750
                                                                                                                      5.70 | 19.33
                                                                                                                                                                                                                                                                                                                                                     5.833
                             1.333
                                                                                2.11 | 13.333
                                                                                                                                                         1.90
                                               1.16 | 7.333
1.16 | 7.417
1.16 | 7.500
1.16 | 7.583
1.16 | 7.667
1.16 | 7.750
                                                                                2.11 |13.417
2.11 |13.500
                                                                                                                     5.70 | 19.42
5.70 | 19.50
                             1.417
                                                                                                                                                                                                                                                                                                                                                     5.917
                                                                                                                                                                                                                                                                                                                                                     6.000 1.69 | 12.000 116.58 | 18.000 1.90 | 24.00
                             1.500
                                                                                                                                                         1.90
                                                                                2.11 |13.583
2.11 |13.667
                              1.583
                                                                                                                      4.44 | 19.58
                              1.667
                                                                                                                      4.43 | 19.67
                                                                                                                                                                                                                                                                                                                                    Unit Hyd Qpeak (cms)= 0.977
                              1.750
                                                                                2.11 13.750
                                                                                                                      4.43 | 19.75
                                                                                                                                                         1.90
                                                                                                                                                                                                                                                                                                                                    PEAK FLOW (cms)= 1.371 (i)
TIME TO PEAK (hrs)= 12.833
RUNOFF VOLUME (mm)= 66.310
TOTAL RAINFALL (mm)= 105.602
RUNOFF COEFFICIENT = 0.628
                                               1.16 | 7.833
1.16 | 7.917
                                                                                2.11 |13.833
2.11 |13.917
                                                                                                                    4.43 | 19.83
4.43 | 19.92
                             1.833
                             1.917
                                               1.16 | 8.000
1.37 | 8.083
                             2.000
                                                                                2.11 | 14.000
                                                                                                                      4.43 | 20.00
                                                                                 2.85 |14.083
                                                                                                                      3.17 | 20.08
                             2.083
                                                                                                                     3.17 | 20.17
3.17 | 20.25
                             2.167
                                               1.37 | 8.167
                                                                                 2.85 14.167
                                                                                                                                                        1.27
                                                1.37 | 8.250
                                                                                2.85 |14.250
2.85 |14.333
                                                                                                                                                                                                                                                                                                                                    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                               1.37 | 8.333
                                                                                                                     3.17 | 20.33
                             2.333
                                                                                                                                                         1.27
                                               1.37 | 8.417 | 2.85 | 14.417 | 3.17 | 20.42 | 1.37 | 8.500 | 2.85 | 14.500 | 3.17 | 20.50
                             2 417
file:///V....4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO
                                                                                                                                                                                                                                                                                                                                                     2.667 1.37 | 8.667 2.85 | 14.667
2.750 1.37 | 8.750 2.85 | 14.750
                                                                                                                                                                                                                                                                                                                                                                                                                                           3.17 | 20.67
3.17 | 20.75
                                                                                                                                                                                                                                                                                                                                                                                                                                           3.17 | 20.83
3.17 | 20.92
       | Junction Command(0005) |
                                                                                                                                                                                                                                                                                                                                                     2.833
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 8.833
                                                                                                                                                                                                                                                                                                                                                                                                         2 85 114 833
                                                                                                                                                                                                                                                                                                                                                                                                          2.85 14.917
                                                                                                                                                                                                                                                                                                                                                     3.000
                                                                                                                                                                                                                                                                                                                                                                        1.37 | 9.000
                                                                                                                                                                                                                                                                                                                                                                                                         2.85 | 15.000
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.27
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.083
1.37 | 9.167
                                                                                                                                                                                                                                                                                                                                                                                                         3.38 | 15.083
3.38 | 15.167
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.08
3.17 | 21.17
                                              AREA QPEAK TPEAK R.V.
       (ha) (cms) (hrs) (mm)
INFLOW: ID= 2( 0115) 23.79 1.37 12.83 66.31
OUTFLOW: ID= 2( 0005) 23.79 1.37 12.83 66.31
                                                                                                                                                                                                                                                                                                                                                     3.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.27
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.250
1.37 | 9.333
                                                                                                                                                                                                                                                                                                                                                                                                          3.38 |15.250
3.38 |15.333
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.25
3.17 | 21.33
                                                                                                                                                                                                                                                                                                                                                      3 250
                                                                                                                                                                                                                                                                                                                                                     3.417
                                                                                                                                                                                                                                                                                                                                                                        1.37 | 9.417
                                                                                                                                                                                                                                                                                                                                                                                                           3.38 | 15.417
                                                                                                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.42
                                                                                                                                                                                                                                                                                                                                                                      1.37 | 9.500
                                                                                                                                                                                                                                                                                                                                                                                                        3.38 | 15.500 | 3.17 | 21.50
3.80 | 15.583 | 3.17 | 21.58
                                                                                                                                                                                                                                                                                                                                                     3.583
                                                                                                                                                                                                                                                                                                                                                     3.667
                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.667
1.37 | 9.750
                                                                                                                                                                                                                                                                                                                                                                                                          3.80 | 15.667
3.80 | 15.750
                                                                                                                                                                                                                                                                                                                                                                                                                                             3.17 | 21.67
3.17 | 21.75
                                                                                                                                                                                                                                                                                                                                                      3.750
                                                                                                                                                                                                                                                                                                                                                     3 833
```

```
| CALID
| NASHYD ( 0110)| Area (ha)= 16.60 Curve Number (CN)= 82.0
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
| U.H. Tp(hrs)= 0.73
                                                                                                                                                                                                                                                                                                                                                                                       1.37 | 9.833
1.37 | 9.917
1.37 | 10.000
                                                                                                                                                                                                                                                                                                                                                                                                                           3.80 | 15.833
3.80 | 15.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.17 | 21.83
3.17 | 21.92
                                                                                                                                                                                                                                                                                                                                                                                       1.37 | 10.000 | 3.80 | 16.000 | 3.17 | 22.00 | 1.69 | 10.083 | 4.86 | 16.083 | 1.90 | 22.08 | 1.69 | 10.167 | 4.86 | 16.167 | 1.90 | 22.17
                                                                                                                                                                                                                                                                                                                                                                    4.000
             NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                    4 083
                                                                                                                                                                                                                                                                                                                                                                    4.167
                                                                                                                                                                                                                                                                                                                                                                    4 250
                                                                                                                                                                                                                                                                                                                                                                                        1 69 110 250
                                                                                                                                                                                                                                                                                                                                                                                                                            4 86 116 250 1 90 1 22 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 27
                                                                                                                                                                                                                                                                                                                                                                    4.333
                                                                                                                                                                                                                                                                                                                                                                                       1.69 | 10.333 | 4.86 | 16.333 | 1.90 | 22.33 | 1.69 | 10.417 | 4.86 | 16.417 | 1.90 | 22.42
                                                        - TRANSFORMED HYETOGRAPH -
                         TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                                    4.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.27
                                                                                                                                                                                                                                                                                                                                                                                       1.69 | 10.500 | 4.86 | 16.500 | 1.90 | 22.50 | 1.69 | 10.583 | 6.55 | 16.583 | 1.90 | 22.58
                                                                                                                                                                                                                                                                                                                                                                    4.500
                                                                                                                                                                                                                                                                                                                                                                    4.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.27
                                                                                                                                                                                                                                                                                                                                                                                                                           6.55 | 16.587 | 1.90 | 22.58
6.55 | 16.675 | 1.90 | 22.75
6.55 | 16.833 | 1.90 | 22.83
6.55 | 16.917 | 1.90 | 22.92
6.55 | 17.000 | 1.90 | 23.00
                                                                                                                                                                                                                                                                                                                                                                    4.667
4.750
                                                                                                                                                                                                                                                                                                                                                                                       1.69 | 10.667
1.69 | 10.750
1.69 | 10.833
                                                                                                                                                                                                                                                                                                                                                                    4.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.27
                                            1.16 | 6.417
1.16 | 6.500
                                                                               2.11 |12.417 | 15.21 | 18.42
2.11 |12.500 | 15.21 | 18.50
                                                                                                                                                                                                                                                                                                                                                                    4.917
                                                                                                                                                                                                                                                                                                                                                                                       1.69 | 10.917
1.69 | 11.000
                         0.417
                                                                                                                                                                                                                                                                                                                                                                    5.000
                         0.500
                                                                                                                                                             1.90
                                            1.16 | 6.583 | 2.11 | 12.583 | 7.81 | 18.58
1.16 | 6.667 | 2.11 | 12.667 | 7.81 | 18.67
                                                                                                                                                                                                                                                                                                                                                                                       1.69 | 11.083 | 10.14 | 17.083 | 1.69 | 11.167 | 10.14 | 17.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.90 | 23.08
1.90 | 23.17
                         0.583
                                                                                                                                                           1.90
                                                                                                                                                                                                                                                                                                                                                                    5.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.27
                         0.667
                                                                                                                                                            1.90
                         0.750
                                            1.16 | 6.750
                                                                               2.11 112.750
                                                                                                                     7.81 | 18.75
7.81 | 18.83
7.81 | 18.92
                                                                                                                                                           1.90
                                                                                                                                                                                                                                                                                                                                                                    5.250
                                                                                                                                                                                                                                                                                                                                                                                       1.69 11.250 10.14 117.250 1.90 | 23.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.27
                         0.833
                                            1.16 | 6.833
1.16 | 6.917
                                                                               2.11 |12.833
2.11 |12.917
                                                                                                                                                                                                                                                                                                                                                                    5 333
                                                                                                                                                                                                                                                                                                                                                                                       1.69 |11.333 | 10.14 |17.333 | 1.69 |11.417 | 10.14 |17.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.90 | 23.33
1.90 | 23.42
                         0.917
                                                                                                                                                            1.90
                                                                                                                                                                                                                                                                                                                                                                    5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.27
                         1.000
1.083
                                            1.16 | 7.000
1.16 | 7.083
                                                                               2.11 |13.000
2.11 |13.083
                                                                                                                      7.81 | 19.00
5.70 | 19.08
                                                                                                                                                                                                                                                                                                                                                                    5.500
                                                                                                                                                                                                                                                                                                                                                                                        1.69 11.500 10.14 17.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.90 | 23.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.27
                                                                                                                                                                                                                                                                                                                                                                                       1.69 |11.583 | 43.93 |17.583
1.69 |11.667 | 43.93 |17.667
                                                                                                                                                            1.90
                                           1.16 | 7.083

1.16 | 7.167

1.16 | 7.250

1.16 | 7.333

1.16 | 7.417

1.16 | 7.500

1.16 | 7.583

1.16 | 7.667

1.16 | 7.750
                                                                                                                      5.70 | 19.17
5.70 | 19.25
                         1.167
                                                                               2.11 | 13.167
                                                                                                                                                            1.90
                                                                                                                                                                                                                                                                                                                                                                    5.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.90 | 23.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.27
                                                                                                                                                                                                                                                                                                                                                                   5.867 1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.56

5.853 1.69 | 11.850 | 43.93 | 17.750 | 1.90 | 23.75

5.833 1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83

5.917 1.69 | 11.917 | 116.58 | 17.917 | 1.90 | 23.92

6.000 | 1.69 | 12.000 | 116.58 | 18.000 | 1.90 | 24.00
                                                                                 2.11 |13.250
                         1 333
                                                                               2 11 113 333
                                                                                                                       5.70 | 19.33
5.70 | 19.42
                                                                                                                                                            1.90
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.27
                                                                               2.11 |13.533
2.11 |13.417
2.11 |13.500
2.11 |13.583
                         1.500
                                                                                                                       5.70 | 19.50
4.44 | 19.58
                                                                                                                                                            1.90
                         1.583
                                                                                                                                                            1.90
                                                                                2.11 13.667
                                                                                                                       4.43 19.67
                                                                                                                                                                                                                                                                                                                                                  Unit Hyd Qpeak (cms)= 0.869
                                                                                                                                                                                                                                                                                                                                                   TIME TO PEAK (hrs)= 1.113 (i)
RUNOFF VOA
                         1.750
                                                                               2.11 | 13.750
                                                                                                                       4.43 | 19.75
                                                                                                                                                            1.90
                         1.833
                                            1.16 | 7.833 | 2.11 | 13.833 | 4.43 | 19.83 | 1.16 | 7.917 | 2.11 | 13.917 | 4.43 | 19.92
                                                                                                                                                                                                                                                                                                                                                  PEAK FLOW
                         1.917
                                                                                                                                                           1.90
                                                                                                                                                                                                                                                                                                                                                  RUNOFF VOLUME (mm)= 64.727
TOTAL RAINFALL (mm)= 105.602
RUNOFF COEFFICIENT = 0.613
                                                                               2.11 |14.000
2.85 |14.083
                         2 000
                                             1.16 8.000
                                                                                                                      4.43 | 20.00
                                                                                                                                                            1.90
                                            1.37 | 8.083
1.37 | 8.167
                         2.083
                                                                                                                       3.17 | 20.08
                         2.167
                                                                                2.85 14.167
                                                                                                                       3.17 | 20.17
                                                                                                                                                            1.27
                                            1.37 | 8.250
1.37 | 8.333
                                                                               2.85 |14.250
2.85 |14.333
                         2.250
                                                                                                                                                                                                                                                                                                                                                  (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                         2.333
                                                                                                                      3.17 | 20.33
                                                                                                                                                           1.27
                                            1.37 | 8.417
1.37 | 8.500
                                                                               2.85 |14.417 | 3.17 | 20.42 | 2.85 |14.500 | 3.17 | 20.50
                         2.417
                                                                                                                                                          1.27
                         2.583 1.37 | 8.583 2.85 | 14.583 3.17 | 20.58 1.27
                                                                                                                                              ing%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]
```

```
3.167 1.37 | 9.167 3.38 | 15.167 3.17 | 21.17
3.250 1.37 | 9.250 3.38 | 15.250 3.17 | 21.25
    CALIR
    STANDHYD ( 0105)| Area (ha)= 7.90
                                                                                                                                                                                                                                              3.17 21.33
   ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                                                                                                                                                                                             3.333
                                                                                                                                                                                                        1.37 | 9.333
                                                                                                                                                                                                                           3.38 | 15.333
                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                              3.417
                                                                                                                                                                                                        1.37 | 9.417
                                                                                                                                                                                                                           3.38 15.417
                                                                                                                                                                                                                                              3.17 | 21.42
                                                                                                                                                                                                                           3.38 | 15.500
                           IMPERVIOUS PERVIOUS (i)
       | Surface Area | (ha)= | 1.58 | 6.32 |
| Dep. Storage | (mm)= | 2.00 | 5.00 |
| Average Slope | (%a)= | 2.00 | 5.00 |
| Length | (m)= | 50.00 | 250.00 |
| Mannings n = | 0.013 | 0.250 |
                                                      6.32
                                                                                                                                                                                             3.583
                                                                                                                                                                                                       1.37 | 9.583
                                                                                                                                                                                                                           3.80 115.583
                                                                                                                                                                                                                                              3.17 | 21.58
                                                                                                                                                                                                        1.37 | 9.667
                                                                                                                                                                                                                           3.80 15.667
                                                                                                                                                                                                        1.37 | 9.750
                                                                                                                                                                                                                           3.80 | 15.750
                                                         5.00
                                                                                                                                                                                             3.750
                                                                                                                                                                                                                                              3.17 | 21.75
                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                        1.37 | 9.833
1.37 | 9.917
                                                                                                                                                                                                                          3.80 | 15.833 | 3.17 | 21.83 | 3.80 | 15.917 | 3.17 | 21.92
                                                                                                                                                                                              3.833
                                                                                                                                                                                              3.917
                                                                                                                                                                                             4.000
                                                                                                                                                                                                        1.37 110,000
                                                                                                                                                                                                                           3.80 | 16.000 | 3.17 | 22.00
4.86 | 16.083 | 1.90 | 22.08
4.86 | 16.167 | 1.90 | 22.17
                                                                                                                                                                                                        1.69 | 10.083
1.69 | 10.167
          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP
                                                                                                                                                                                             4.167
                                                                                                                                                                                                                                                                   1.27
                                                                                                                                                                                              4.250
                                                                                                                                                                                                        1.69 | 10.250 | 4.86 | 16.250 | 1.90 | 22.25
1.69 | 10.333 | 4.86 | 16.333 | 1.90 | 22.33
                                                                                                                                                                                             4.333
                              --- TRANSFORMED HYETOGRAPH --
                 TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                                                                                                                                                                                                        1.69 | 10.417 | 4.86 | 16.417 | 1.90 | 22.42 | 1.69 | 10.500 | 4.86 | 16.500 | 1.90 | 22.50
                                                                                                                                                                                             4 417
                          1.16 | 6.083 | 2.11 | 12.083 | 15.22 | 18.08 | 1.16 | 6.167 | 2.11 | 12.167 | 15.21 | 18.17 | 1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25
                0.083
                                                                                                                                                                                             4.583
                                                                                                                                                                                                        1.69 110.583
                                                                                                                                                                                                                           6.55 116.583
                                                                                                                                                                                                                                               1.90 | 22.58
                                                                                                                                                                                                                                                                   1.27
                                                                                                                                                                                                        1.69 | 10.667
1.69 | 10.750
                                                                                                                                                                                                                           6.55 | 16.667
6.55 | 16.750
                                                                                                                                                                                                                                              1.90 | 22.67
                                                                                                                                                                                              4.667
                0.250
                0.333
                          1.16 | 6.333
                                             2.11 | 12.333 | 15.21 | 18.33
                                                                                     1.90
                                                                                                                                                                                             4.833
                                                                                                                                                                                                        1.69 | 10.833 | 6.55 | 16.833 | 1.90 | 22.83 | 1.69 | 10.917 | 6.55 | 16.917 | 1.90 | 22.92
                           1.16 | 6.417
                                              2.11 |12.417
                                                                15.21 | 18.42
                          1.16 | 6.500 | 2.11 | 12.500 | 15.21 | 18.50 | 1.16 | 6.583 | 2.11 | 12.583 | 7.81 | 18.58 | 1.16 | 6.667 | 2.11 | 12.667 | 7.81 | 18.67
                                                                                                                                                                                                        1.69 | 11.000 | 6.55 | 17.000 | 1.90 | 23.00
                0.500
                                                                                     1.90
                                                                                                                                                                                              5.000
                                                                                                                                                                                                                                                                   1.27
                                                                                                                                                                                              5.083
                                                                                                                                                                                                        1.69 | 11.083 | 10.14 | 17.083 | 1.69 | 11.167 | 10.14 | 17.167
                                                                                                                                                                                                                                               1.90 | 23.08
1.90 | 23.17
                0.667
                                                                                    1.90
                                                                                                                                                                                              5.167
                          1.16 | 6.750
1.16 | 6.833
                                             2.11 |12.750
2.11 |12.833
                                                                 7.81 | 18.75
7.81 | 18.83
                0.750
                                                                                                                                                                                              5.250
                                                                                                                                                                                                        1 69 111 250 10 14 117 250
                                                                                                                                                                                                                                                1 90 | 23 25
                                                                                                                                                                                                        1.69 |11.333 | 10.14 |17.333 | 1.69 |11.417 | 10.14 |17.417
                0.833
                          1.16 | 6.917
1.16 | 7.000
1.16 | 7.083
                0.917
                                             2.11 [12.917
                                                                 7.81 | 18.92
                                                                                     1.90
                                                                                                                                                                                              5.417
                                                                                                                                                                                                                                                1.90 | 23.42
                                                                                                                                                                                                                                                                   1.27
                                                                                                                                                                                                        1.69 | 11.500 | 10.14 | 17.500 | 1.90 | 23.50 | 1.69 | 11.583 | 43.93 | 17.583 | 1.90 | 23.58 | 1.69 | 11.667 | 43.93 | 17.667 | 1.90 | 23.67
                                             2.11 |13.000
2.11 |13.083
                                                                 7.81 | 19.00
5.70 | 19.08
                                                                                                                                                                                              5.583
                1.083
                                                                                    1.90
                 1.167
                          1.16 | 7.167
1.16 | 7.250
                                             2.11 |13.167
2.11 |13.250
                                                                 5.70 | 19.17
5.70 | 19.25
                                                                                                                                                                                             5.667
                                                                                                                                                                                                                                                                   1.27
                                                                                                                                                                                                        1.69 |11.750 43.93 |17.750
                                                                                                                                                                                                                                               1.90 | 23.75
                                                                                                                                                                                              5.750
                1.250
                                                                                     1.90
                          1.16 | 7.250

1.16 | 7.333

1.16 | 7.417

1.16 | 7.500

1.16 | 7.583

1.16 | 7.667

1.16 | 7.750
                                                                5.70 | 19.33
5.70 | 19.42
5.70 | 19.50

    5.833
    1.69 | 11.833
    116.57 | 17.833
    1.90 | 23.83

    5.917
    1.69 | 11.917 | 116.58 | 17.917
    1.90 | 23.92

    6.000
    1.69 | 12.000 | 116.58 | 18.000
    1.90 | 24.00

                                             2.11 |13.333
2.11 |13.417
                1.333
                                                                                                                                                                                                                                                                    1.27
                1.500
                                             2.11 |13.500
                                                                                    1.90
                                             2.11 |13.583
                                                                 4.44 | 19.58
4.43 | 19.67
                1 583
                                                                                     1.90
                                                                                                                                                                                    Max.Eff.Inten.(mm/hr)= 116.58
                 1.667
                                                                                                                                                                                    over (min) 5.00 20.00
Storage Coeff. (min)= 1.29 (ii) 19.73 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
                1.750
                                             2.11 113.750
                                                                 4.43 | 19.75
                                                                                     1.90
                          1.16 | 7.833
1.16 | 7.917
                                             2.11 |13.833
                                                                                                                                                                                                                          5.00
                                                                 4.43 | 19.92
                1.917
                                             2.11 | 13.917
                                                                                    1.90
                          1.16 | 8.000
1.37 | 8.083
                                             2.11 |14.000
2.85 |14.083
                                                                 4.43 | 20.00
3.17 | 20.08
                                                                                                                                                                                     Unit Hyd. peak (cms)=
                                                                                                                                                                                                                         0.33
                                                                                                                                                                                                                                      0.06
                                                                                                                                                                                                                                *TOTALS*
                2.083
                                                                                     1.27
                                                                                                                                                                                    PEAK FLOW (cms)= 0.26 0.79 0.831 (iii)
TIME TO PEAK (hrs)= 12.00 12.17 12.00
RUNOFF VOLUME (mm)= 103.60 59.33 63.76
TOTAL RAINFALL (mm)= 105.60 105.60
RUNOFF COEFFICIENT = 0.98 0.56 0.60
                          1.37 | 8.167
1.37 | 8.250
1.37 | 8.333
                                             2.85 |14.167
2.85 |14.250
                2.167
                                                                 3.17 | 20.17
                2.250
                                                                 3.17 | 20.33
                2.333
                                             2.85 | 14.333
                          1.37 | 8.417
1.37 | 8.500
                                             2.85 |14.417
2.85 |14.500
                                                                 3.17 | 20.42
3.17 | 20.50
                2.417
                2.500
                                                                 3.17 | 20.58
3.17 | 20.67
                2.583
                           1.37 | 8.583
                                             2.85 |14.583
                           1.37 | 8.667
                                              2.85 |14.667
                                                                                                                                                                                 ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP
                                                                 3.17 | 20.75
3.17 | 20.83
                                                                                                                                                                                 ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                2.750
                          1.37 | 8.750
                                             2.85 | 14.750
                                                                                    1.27
                2.833
                           1.37 | 8.833
                                             2.85 |14.833
2.85 |14.917
                                                                                                                                                                                            YOU SHOULD CONSIDER SPLITTING THE AREA
                          1.37 | 8.917 | 2.85 | 14.917 | 3.17 | 20.92 | 1.37 | 9.000 | 2.85 | 15.000 | 3.17 | 21.00 | 1.37 | 9.083 | 3.38 | 15.083 | 3.17 | 21.08
                2.917
                                                                                     1.27
                                                                                                                                                                                      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                3.000
                                                                                                                                                                                           CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                                                                                                                                                                                                       1.37 | 8.167 | 2.85 | 14.167
1.37 | 8.250 | 2.85 | 14.250
                                                                                                                                                                                                                                              3.17 | 20.17
3.17 | 20.25
            THAN THE STORAGE COEFFICIENT.
       (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                              3.17 | 20.33
3.17 | 20.42
                                                                                                                                                                                             2 333
                                                                                                                                                                                                        1.37 | 8.333
                                                                                                                                                                                                                          2 85 114 333
                                                                                                                                                                                                        1.37 | 8.417
                                                                                                                                                                                                                           2.85 14.417
                                                                                                                                                                                             2.500
                                                                                                                                                                                                        1.37 | 8.500
                                                                                                                                                                                                                          2.85 14.500
                                                                                                                                                                                                                                              3.17 | 20.50
                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                        1.37 | 8.583
1.37 | 8.667
                                                                                                                                                                                                                          2.85 |14.583
2.85 |14.667
                                                                                                                                                                                                                                              3.17 | 20.58
3.17 | 20.67
                                                                                                                                                                                              2.583
                                                                                                                                                                                             2.667
                                                                                                                                                                                                                                                                  1.27
                                                                                                                                                                                                        1.37 | 8.750
1.37 | 8.833
                                                                                                                                                                                                                          2.85 |14.750
2.85 |14.833
                                                                                                                                                                                                                                              3.17 | 20.75
3.17 | 20.83
                                                                                                                                                                                             2.750
   ADD HYD ( 0006)
                                                                                                                                                                                             2.917
                                                                                                                                                                                                        1.37 | 8.917
                                                                                                                                                                                                                           2.85 | 14.917
                                                                                                                                                                                                                                              3.17 | 20.92
```

```
1.37 | 9.000
                                                                                                                                                                                                                                                                                                                                                                                                 2.85 |15.000
                                                                                                                                                                                                                                                                                                                                             3.083
                                                                                                                                                                                                                                                                                                                                                                                                 3.38 | 15.083 | 3.17 | 21.08
                                                                                                                                                                                                                                                                                                                                                               1.37 | 9.167
1.37 | 9.250
                                                                                                                                                                                                                                                                                                                                                                                                 3.38 | 15.167
3.38 | 15.250
                                                                                                                                                                                                                                                                                                                                                                                                                                    3.17 | 21.17
3.17 | 21.25
                                                                                                                                                                                                                                                                                                                                              3.167
           ID = 3 ( 0006): 24.50 1.678 12.25 64.42
                                                                                                                                                                                                                                                                                                                                              3.250
                                                                                                                                                                                                                                                                                                                                                                                                 3.38 | 15.333 | 3.17 | 21.33
3.38 | 15.417 | 3.17 | 21.42
3.38 | 15.500 | 3.17 | 21.50
                                                                                                                                                                                                                                                                                                                                             3 333
                                                                                                                                                                                                                                                                                                                                                                1.37 9.333
                                                                                                                                                                                                                                                                                                                                                               1.37 | 9.417
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                                                                                                                                             3.500
                                                                                                                                                                                                                                                                                                                                                              1.37 | 9.583
1.37 | 9.667
                                                                                                                                                                                                                                                                                                                                                                                                3.80 | 15.583 | 3.17 | 21.58
3.80 | 15.667 | 3.17 | 21.67
                                                                                                                                                                                                                                                                                                                                             3.583
CALIB
                                                                                                                                                                                                                                                                                                                                             3.667
| NASHYD ( 0100) | Area (ha)= 23.46 Curve Number (CN)= 80.0 | | ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.49
                                                                                                                                                                                                                                                                                                                                                                                                 3.80 | 15.750 | 3.17 | 21.75
                                                                                                                                                                                                                                                                                                                                             3 750
                                                                                                                                                                                                                                                                                                                                                                1 37 19 750
                                                                                                                                                                                                                                                                                                                                                               1.37 | 9.833 | 3.80 | 15.833 | 3.17 | 21.83 | 1.37 | 9.917 | 3.80 | 15.917 | 3.17 | 21.92
                                                                                                                                                                                                                                                                                                                                             3.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.27
                                                                                                                                                                                                                                                                                                                                                               1.37 | 10.000 | 3.80 | 16.000 | 3.17 | 22.00 | 1.69 | 10.083 | 4.86 | 16.083 | 1.90 | 22.08
                                                                                                                                                                                                                                                                                                                                              4.000
            NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                             4.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.27
                                                                                                                                                                                                                                                                                                                                                                1.69 | 10.167
1.69 | 10.250
                                                                                                                                                                                                                                                                                                                                                                                                 4.86 | 16.167
4.86 | 16.250
                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90 | 22.17
1.90 | 22.25
                                                                                                                                                                                                                                                                                                                                             4.167
                                                                                                                                                                                                                                                                                                                                                               1.69 | 10.333 | 4.86 | 16.333 | 1.90 | 22.33 | 1.69 | 10.417 | 4.86 | 16.417 | 1.90 | 22.42 | 1.69 | 10.500 | 4.86 | 16.500 | 1.90 | 22.50
                                                   -- TRANSFORMED HYETOGRAPH --
                                                                                                                                                                                                                                                                                                                                             4.333
                        TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
                                                                                                                                                                                                                                                                                                                                             4.417
                                                                                                                                                                                                                                                                                                                                             4.500
                                        1.16 | 6.083 | 2.11 | 12.083 | 15.22 | 18.08
1.16 | 6.167 | 2.11 | 12.167 | 15.21 | 18.17
                                                                                                                                                                                                                                                                                                                                                               1.69 | 10.583 | 6.55 | 16.583 | 1.69 | 10.667 | 6.55 | 16.667
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.90 | 22.58
1.90 | 22.67
                       0.083
                                                                                                                                                                                                                                                                                                                                             4.583
                       0.167
                       0.250
                                         1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25
                                                                                                                                                                                                                                                                                                                                             4.750
                                                                                                                                                                                                                                                                                                                                                                1.69 | 10.750 | 6.55 | 16.750 | 1.90 | 22.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.27
                                                                                                                                                                                                                                                                                                                                                               1.69 | 10.833 | 6.55 | 16.833 | 1.90 | 22.83 | 1.69 | 10.833 | 6.55 | 16.833 | 1.90 | 22.83 | 1.69 | 10.917 | 6.55 | 16.917 | 1.90 | 22.92 | 1.69 | 11.000 | 6.55 | 17.000 | 1.90 | 23.00 | 1.69 | 11.083 | 10.14 | 17.083 | 1.90 | 23.08
                                         1.16 | 6.333
                                                                          2.11 |12.333 | 15.21 | 18.33
2.11 |12.417 | 15.21 | 18.42
                                                                                                                                                                                                                                                                                                                                              4.833
                       0.417
                                        | 1.16 | 6.417 | 2.11 | 12.417 | 15.21 | 18.42 | 1.16 | 6.500 | 2.11 | 12.500 | 15.21 | 18.50 | 1.16 | 6.583 | 2.11 | 12.583 | 7.81 | 18.58 | 1.16 | 6.667 | 2.11 | 12.670 | 7.81 | 18.67 | 1.16 | 6.750 | 2.11 | 12.750 | 7.81 | 18.75 | 1.16 | 6.833 | 2.11 | 12.833 | 7.81 | 18.83 | 1.16 | 6.917 | 2.11 | 12.917 | 7.81 | 18.92 | 1.16 | 7.083 | 2.11 | 13.083 | 5.70 | 19.08 | 1.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.16 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 7.167 | 
                                                                                                                                                                                                                                                                                                                                              4.917
                                                                                                                                                                                                                                                                                                                                             5 000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1.27
                       0.583
                                                                                                                                                 1.90
                       0.667
                                                                                                                                                 1.90
                                                                                                                                                                                                                                                                                                                                             5.167
                                                                                                                                                                                                                                                                                                                                                                1.69 | 11.167 | 10.14 | 17.167
                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90 | 23.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.27
                                                                                                                                                                                                                                                                                                                                                                 1.69 11.250 10.14 17.250
                                                                                                                                                                                                                                                                                                                                                                                                                                        1.90 | 23.25
                       0.833
                                                                                                                                                  1.90
                                                                                                                                                                                                                                                                                                                                             5.333
                                                                                                                                                                                                                                                                                                                                                                1.69 111.333 10.14 17.333
                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90 | 23.33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.27
                                         1.16 | 6.833

1.16 | 6.917

1.16 | 7.000

1.16 | 7.083

1.16 | 7.167

1.16 | 7.250

1.16 | 7.333

1.16 | 7.417

1.16 | 7.500

1.16 | 7.583

1.16 | 7.667
                                                                                                                                                                                                                                                                                                                                                               1.69 | 11.535 | 10.14 | 17.355 | 1.69 | 11.417 | 10.14 | 17.507 | 10.14 | 17.509 | 11.583 | 43.93 | 17.583 | 1.69 | 11.667 | 43.93 | 17.667 | 1.69 | 11.750 | 43.93 | 17.750
                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90 | 23.42
1.90 | 23.50
                                                                                                                                                                                                                                                                                                                                              5.417
                       1.000
                       1.083
                                                                                                                                                  1.90
                                                                                                                                                                                                                                                                                                                                              5.583
                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90 | 23.58
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.27
                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90 | 23.67
1.90 | 23.75
                        1.167
                                                                                                                                                                                                                                                                                                                                              5.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1.27
                       1.250
                                                                          2.11 |13.250
                                                                                                               5.70 | 19.25
                                                                                                                                                  1.90
                       1.333
                                                                          2.11 |13.333
                                                                                                              5.70 | 19.33
5.70 | 19.42
                                                                                                                                                                                                                                                                                                                                              5.833
                                                                                                                                                                                                                                                                                                                                                              1.69 |11.833 | 116.57 |17.833 | 1.90 | 23.83 | 1.69 |11.917 | 116.58 |17.917 | 1.90 | 23.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.27
                                                                           2.11 | 13.417
                       1.417
                                                                                                                                                 1.90
                       1.500
                                                                           2.11 13.500
                                                                                                               5.70 19.50
                                                                                                                                                  1.90
                                                                                                                                                                                                                                                                                                                                             6.000 1.69 12.000 116.58 18.000 1.90 24.00
                                                                            2.11 |13.583
                       1.667
                                                                            2.11 13.667
                                                                                                               4.43 19.67
                                                                                                                                                  1.90
                                                                                                                                                                                                                                                                                                                            Unit Hyd Qpeak (cms)= 1.829
                                                                         2.11 | 13.667 | 4.43 | 19.67
2.11 | 13.750 | 4.43 | 19.75
2.11 | 13.833 | 4.43 | 19.83
2.11 | 13.917 | 4.43 | 19.92
2.11 | 14.000 | 4.43 | 20.00
                         1.750
                                          1.16 7.750
                                                                                                                                                                                                                                                                                                                            PEAK FLOW (cms)= 1.987 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 61.670
                                         1.16 7.833
                       1.833
                                                                                                                                                 1.90
                                                                                                                                                1.90
                       1.917
                                         1.16 | 7.917
                                          1.16 8.000
                                                                                                                                                                                                                                                                                                                             TOTAL RAINFALL (mm)= 105.602
                       2.083
                                         1.37 | 8.083 | 2.85 | 14.083 | 3.17 | 20.08 | 1.27
```

```
RUNOFF COEFFICIENT = 0.584
                     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
            Junction Command(0007)
            AREA QPEAK TPEAK R.V.
(lia) (cms) (lms) (mm)

INFLOW: ID=2( 0100) 23.46 1.99 12.33 61.67

OUTFLOW: ID=2( 0007) 23.46 1.99 12.33 61.67
                             V V I SSSSS U U A L
                                                                                                                                                                                                                 (v 6.2.2015)
                           V V I SS U U AA L
V V I SS U U AAAAA L
V V I SS U U A A L
                                                          I SSSSS UUUUU A A LLLLL
      OOO TTTTT TTTTT H H Y Y M M OOO TM
O O T T H H YY MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
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                                                               ***** DETAILED OUTPUT *****
            \label{lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-lower-low
         71f3-4735-83fb-5516db7fcf78\scen
       Summary filename: C:\Users\uyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\e896555b-71f3-4735-83fb-5516db7fcf78\scen
         DATE: 03/11/2024
                                                                                                                                                                           TIME: 11:36:38
       USER:
         COMMENTS:
\label{eq:control_control} \text{file:} /// V. // 4/20 Updated %20 EA/20 Analysis VO Detailed %20 Output Existing %20 VO %20 Detailed %20 Updated %20 Output Existing %20 VO %20 Detailed %20 Output Existing %2
```

```
...........
     READ STORM | Filename: C:\Users\nyokich\AppD
 TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                               2.25
                                                     0.78 | 8.25 | 1.62 | 14.25 | 1.80 | 20.25 | 0.72
                                2.25 0,78 8.25 1.62 14.25 1.80 20.25 0.72 2.50 0.78 8.50 1.62 14.50 1.80 20.55 0.72 2.75 0.78 8.75 1.62 14.75 1.80 20.75 0.72 3.00 0.78 9.00 1.92 15.00 1.80 21.00 0.72 3.50 0.78 9.25 1.92 15.25 1.80 21.25 0.72 3.50 0.78 9.50 2.16 15.50 1.80 21.50 0.72
                                 3.75  0.78 | 9.75  2.16 | 15.75  1.80 | 21.75  0.72  4.00  0.96 | 10.00  2.76 | 16.00  1.08 | 22.00  0.72

    4.25
    0.96 | 10.25
    2.76 | 16.25
    1.08 | 22.25
    0.72

    4.50
    0.96 | 10.50
    3.72 | 16.50
    1.08 | 22.50
    0.72

    4.75
    0.96 | 10.75
    3.72 | 16.75
    1.08 | 22.75
    0.72

    4.75
    0.96 | 10.75
    3.72 | 16.75
    1.08 | 22.75
    0.72

                                 4.75 0.96 | 10.75 3.72 | 16.75 1.08 | 22.75 
5.00 0.96 | 11.00 5.76 | 17.00 1.08 | 23.00 
5.25 0.96 | 11.25 5.76 | 17.25 1.08 | 23.25
                                  5.50 0.96 11.50 24.96 17.50 1.08 23.50 0.72
                                  5.75 0.96 | 11.75 66.24 | 17.75 1.08 | 23.75
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                    -- TRANSFORMED HYETOGRAPH --
                              TIME RAIN | TIME R
```

0.417 0.66 6.417 0.500 0.66 6.500 1.20 |12.417 1.20 |12.500 8.64 | 18.42 8.64 | 18.50 1.08 1.08 4.44 | 18.58 4.44 | 18.67 0.583 0.66 | 6.583 1.20 12.583 0.66 | 6.667 1.20 |12.667 4.44 | 18.75 4.44 | 18.83 4.44 | 18.92 4.44 | 19.00 0.750 0.66 | 6.750 1.20 [12.750] 1.08 0.66 | 6.833 1.20 |12.833 0.833 0.917 1.08 0.66 | 7.000 0.66 | 7.083 1.000 1.20 | 13.000 1.08 1.083 1.20 |13.083 1.167 0.66 | 7.167 1.20 13.167 3.24 | 19.17 1.08 1.250 0.66 | 7.250 0.66 | 7.333 1.20 |13.250 1.20 |13.333 3.24 | 19.25 3.24 | 19.33 1.08 1.417 1.500 0.66 | 7.417 0.66 | 7.500 0.66 | 7.583 1.20 | 13.417 1.20 | 13.500 1.20 | 13.583 3.24 | 19.33 3.24 | 19.42 3.24 | 19.50 2.52 | 19.58 1.583 1.08 1.667 1.750 0.66 | 7.667 0.66 | 7.750 1.20 |13.667 1.20 |13.750 2.52 | 19.67 2.52 | 19.75 1.08 0.66 | 7.833 1.20 | 13.833 | 2.52 | 19.83 1.20 | 13.917 | 2.52 | 19.92 1.833 1.917 1.20 | 14.000 | 2.52 | 20.00 1.62 | 14.083 | 1.80 | 20.08 2.000 0.66 | 8.000 1.08 0.78 8.083 2.167 0.78 | 8.167 1.62 14.167 1.80 | 20.17 0.72 2.250 0.78 | 8.250 0.78 | 8.333 0.78 | 8.417 1.62 |14.250 1.62 |14.333 1.80 | 20.25 1.80 | 20.33 1.62 14.417 1.80 | 20.42 2.417 2.500 2.583 0.78 | 8.500 0.78 | 8.583 1.62 | 14.500 1.62 | 14.583 1.80 | 20.50 1.80 | 20.58 2.667 2.750 0.78 | 8.667 0.78 | 8.750 1.62 | 14.667 1.62 | 14.750 1.80 | 20.67 1.80 | 20.75 2.833 0.78 | 8.833 1.62 14.833 1.80 | 20.83 0.78 | 8.917 1.62 | 14.917 1.62 | 15.000 3.000 0.78 | 9.000 1.80 | 21.00 0.72 3.083 3.167 0.78 | 9.083 0.78 | 9.167 1.92 |15.083 1.92 |15.167 1.80 | 21.08 1.80 | 21.17 1.92 |15.250 1.92 |15.333 3.250 0.78 | 9.250 1.80 | 21.25 3.333 0.78 9.333 3.417 0.78 | 9.417 1.92 | 15.417 1.80 | 21.42 1.92 | 15.500 2.16 | 15.583 2.16 | 15.667 0.78 | 9.500 1.80 | 21.50 0.72 0.78 | 9.583 0.78 | 9.667 0.78 | 9.750 3.583 1.80 | 21.58 1.80 | 21.67 3.667 2.16 | 15.750 2.16 | 15.833 3.750 0.78 | 9.750 | 2.65 | 15.833 | 1.80 | 21.83 | 0.72 | 0.78 | 9.833 | 2.16 | 15.833 | 1.80 | 21.83 | 0.72 | 0.78 | 9.917 | 2.16 | 15.917 | 1.80 | 21.92 | 0.72 | 0.78 | 10.000 | 2.16 | 16.000 | 1.80 | 22.00 | 0.72 | 0.96 | 10.083 | 2.76 | 16.083 | 1.08 | 22.08 | 0.72 | 0.96 | 10.16 | 2.76 | 16.16 | 1.08 | 22.17 | 0.75 | 0.76 | 10.16 | 2.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 1.08 | 22.25 | 0.75 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 | 0.76 3.833 3.917 4.000 4 083 4.167 4.250 0.96 |10.333 0.96 |10.417 2.76 | 16.333 | 1.08 | 22.33 | 0.72 | 2.76 | 16.417 | 1.08 | 22.42 | 0.72 4.333 4.417 4.500 0.96 | 10.500 4.583 0.96 | 10.583 2.76 | 16.500 | 1.08 | 22.50 | 0.72 | 3.72 | 16.583 | 1.08 | 22.58 | 0.72 4.667 0.96 10.667 3.72 16.667 1.08 22.67

```
4.835 0.96 [10.917 3.72 [16.917 1.08 [22.92 0.72 5.000 0.96 [11.000 3.72 [17.000 1.08 [23.00 0.72 5.083 0.96 [11.083 5.76 [17.083 1.08 [23.00 0.72 5.083 0.96 [11.083 5.76 [17.083 1.08 [23.08 0.72 5.167 0.96 [11.167 5.76 [17.167 1.08 [23.17 0.72 5.250 0.96 [11.250 5.76 [17.250 1.08 [23.25 0.72
                                                       0.96 |11.333
0.96 |11.417
                                                                                                         5.76 |17.333
5.76 |17.417
                                                                                                                                                         1.08 | 23.33
1.08 | 23.42
                                 5 333
                                                       0.96 111.500 5.76 17.500
                                 5.500
                                                                                                                                                          1.08 | 23.50
                                 5.667
                                5.750 0.96 |11.750 24.96 |17.750 1.08 | 23.75
5.833 0.96 |11.833 66.24 |17.833 1.08 | 23.83
5.917 0.96 |11.917 66.24 |17.917 1.08 | 23.92
                                                                                                                                                                                                          0.72
                                 6.000 0.96 12.000 66.24 18.000 1.08 24.00
         Unit Hyd Qpeak (cms)= 0.977
        PEAK FLOW (cms)= 0.573 (i)
TIME TO PEAK (hrs)= 12.917
RUNOFF VOLUME (mm)= 28.265
TOTAL RAINFALL (mm)= 60.000
RUNOFF COEFFICIENT = 0.471
         (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   | Junction Command(0005) |
                                                       AREA OPEAK TPEAK R.V.
   (ha) (cms) (hrs) (mm)
INFLOW: ID=2( 0115) 23.79 0.57 12.92 28.26
OUTFLOW: ID=2( 0005) 23.79 0.57 12.92 28.26
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                        - TRANSFORMED HYETOGRAPH -
                              TIME RAIN | TIME R
                                0.250 0.66 6.250 1.20 12.250 8.64 18.25 1.08
```

```
1.08
                                                                                                                                                                          3.72 |17.000
5.76 |17.083
5.76 |17.167
             0.500
                     0.66 | 6.500
                                    1.20 12.500
                                                   8.64 | 18.50
                                                                  1.08
                                                                                                                                                    5,000
                                                                                                                                                           0.96 111.000
                                                                                                                                                                                           1.08 | 23.00
                     0.66 | 6.583
                                    1.20 |12.583
                                                   4.44 | 18.58
4.44 | 18.67
             0.583
                                                                                                                                                            0.96 111.083
                                                                                                                                                                                           1.08 | 23.08
             0.667
                                                                  1.08
             0.750
                    0.6616.750
                                    1 20 112 750
                                                   4 44 | 18 75
                                                                  1 08
                                                                                                                                                    5 250 0.96 11.250
                                                                                                                                                                           5.76 [17.250]
                                                                                                                                                                                          1.08 | 23.25
                     0.66 | 6.833
                                                                                                                                                    5.333
                                                                                                                                                           0.96 11.333
                                                                                                                                                                           5.76 |17.333
5.76 |17.417
                                                                                                                                                                                           1.08 | 23.33
             0.833
                                    1.20 |12.833
             0.917
                     0.66 | 6.917
                                    1.20 12.917
                                                   4.44 | 18.92
                                                                  1.08
                                                                                                                                                    5.417
                                                                                                                                                           0.96 111.417
                                                                                                                                                                                           1.08 | 23.42
                    0.66 | 7.000
0.66 | 7.083
                                                                                                                                                           0.96 |11.500 5.76 |17.500
0.96 |11.583 24.96 |17.583
                                                                                                                                                                                          1.08 | 23.50
1.08 | 23.58
                                    1.20 |13.000
                                                   4.44 19.00
                                                                                                                                                    5.583
             1.083
                                    1.20 | 13.083
                                                   3.24 | 19.08
                                                                  1.08
             1.167
                     0.66 | 7.167
0.66 | 7.250
                                    1.20 | 13.167
                                                   3.24 | 19.17
                                                                  1.08
                                                                                                                                                   5.667
                                                                                                                                                           0.96 11.667 24.96 17.667
                                                                                                                                                                                           1.08 | 23.67
                                                                                                                                                   1.20 | 13.250
             1.333
                    0.66 7.333
                                    1.20 13.333
                                                   3.24 | 19.33
                                                                  1.08
                    0.66 | 7.417
                                                  3.24 | 19.50
             1.500
                                    1.20 | 13.500
                                                                  1.08
                     0.66 | 7.583
                                    1.20 |13.583
1.20 |13.667
                                                   2.52 | 19.58
2.52 | 19.67
             1.583
                                                                                                                                            Unit Hyd Qpeak (cms)= 0.869
             1.667
                                                                  1.08
                    0.66 | 7.750
0.66 | 7.833
0.66 | 7.917
                                                   2.52 | 19.75
2.52 | 19.83
2.52 | 19.92
             1 750
                                    1.20 [13.750
                                                                  1.08
                                   1.20 |13.833
1.20 |13.917
                                                                                                                                            PEAK FLOW
                                                                                                                                             PEAK FLOW (cms)- 0.461 (i)
TIME TO PEAK (hrs)= 12.667
             1.917
                                                                  1.08
                                                                                                                                            RUNOFF VOLUME (nm)= 27.312
TOTAL RAINFALL (mm)= 60.000
RUNOFF COEFFICIENT = 0.455
             2.000
                    0.66 8.000
                                   1.20 |14.000
1.62 |14.083
                                                   2.52 | 20.00
                                                                  1.08
                     0.78 | 8.083
                                                   1.80 | 20.08
             2.083
             2.167
                     0.78 | 8.167
                                    1.62 14.167
                                                   1.80 | 20.17
                                                                 0.72
                                                                                                                                            (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
             2.333
                    0.78 | 8.333
                                    1.62 | 14.333
                                                   1.80 | 20.33
                                                                 0.72
                     0.78 | 8.417
0.78 | 8.500
                                   1.62 |14.417
1.62 |14.500
                                                   1.80 | 20.42
1.80 | 20.50
             2.417
             2.583
                    0.78 | 8.583
                                    1.62 | 14.583
                                                   1.80 | 20.58
                                                                 0.72
             2.667 0.78 | 8.667
2.750 0.78 | 8.750
                                    1.62 |14.667
                                                                                                                                          STANDHYD ( 0105) Area (ha)= 7.90
                                   1.62 | 14.750
                                                   1.80 | 20.75
                                                                 0.72
             2.833
                    0.78 | 8.833
0.78 | 8.917
                                   1.62 |14.833
1.62 |14.917
                                                   1.80 | 20.83
                                                                                                                                         ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
             2.917
                                                   1.80 | 20.92
                    0.78 | 9.000
0.78 | 9.083
0.78 | 9.167
                                   1.62 | 15.000
1.92 | 15.083
1.92 | 15.167
                                                   1.80 | 21.00
1.80 | 21.08
                                                                                                                                                           IMPERVIOUS PERVIOUS (i)
             3.000
                                                                                                                                            Surface Area (ha)= 1.58
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
                                                                                                                                                                                 6.32
5.00
             3.167
                                                   1.80 | 21.17
                                                                                                                                            Average Slope (%)= 2.00 5.00

Length (m)= 50.00 250.00

Mamings n = 0.013 0.250
                    0.78 | 9.250 | 0.78 | 9.333
                                   1.92 | 15.250
1.92 | 15.333
                                                   1.80 | 21.25
1.80 | 21.33
             3.250
                                                                                                                                                                                   5.00
             3.333
             3.417
                     0.78 9.417
                                    1.92 115.417
                                                   1.80 | 21.42
                                                                 0.72
                                                                                                                                            Mannings n
                                   1.92 | 15.500
2.16 | 15.583
                     0.78 9.500
                                                                                                                                               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                    0.78 | 9.583
             3.583
                                                   1.80 | 21.58
                                   2.16 | 15.667
2.16 | 15.750
             3,667
                     0.78 9.667
                                                   1.80 | 21.67
             3.750
                     0.78 | 9.750
                                                   1.80 | 21.75
                                                                                                                                                    ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                    0.78 | 9.833
0.78 | 9.917
                                   2.16 |15.833
2.16 |15.917
                                                   1.80 | 21.83
1.80 | 21.92
             3.833
             3.917
             4.000
                     0.78 | 10.000
                                    2.16 16.000
                                                   1.80 | 22.00
                                                                                                                                                           0.66 | 6.083 | 1.20 | 12.083 | 8.65 | 18.08 | 0.66 | 6.167 | 1.20 | 12.167 | 8.64 | 18.17
                     0.96 |10.083
0.96 |10.167
                                   2.76 | 16.083 | 1.08 | 22.08 | 2.76 | 16.167 | 1.08 | 22.17
             4.083
                                                                                                                                                   0.083
                                                                                                                                                                                                        1.08
             4.167
             4.250
                     0.96 [10.250]
                                    2.76 | 16.250
                                                   1.08 | 22.25
                                                                                                                                                   0.250
                                                                                                                                                           0.66 | 6.250
                                                                                                                                                                          1.20 12.250
                                                                                                                                                                                          8.64 | 18.25
                                                                                                                                                                                                         1.08
                     0.96 | 10.333
                                    2.76 |16.333
                                                   1.08 | 22.33
                                                                                                                                                           0.66 | 6.333
                                                                                                                                                                           1.20 | 12.333
             4.333
                                                                                                                                                   0.333
                                                                                                                                                                                          8.64 | 18.33
             4.417
                     0.96 10.417
                                    2.76 16.417 1.08 22.42 0.72
                                                                                                                                                   0.417
                                                                                                                                                           0.66 | 6.417
                                                                                                                                                                          1.20 12.417
                                                                                                                                                                                          8.64 | 18.42
                                                                                                                                                                                                         1.08
                                                                                                                                                                          1.20 | 12.500 | 8.64 | 18.50 | 1.20 | 12.583 | 4.44 | 18.58 | 1.20 | 12.667 | 4.44 | 18.67
                                                                                                                                                           0.66 | 6.500
                     0.96 |10.500
                                    2.76 |16.500
                                                    1.08 | 22.50
                                                                                                                                                   0.500
                                                                                                                                                                                                         1.08
                                                                                                                                                   0.583
                                    3.72 116.583
                                                                                                                                                                                                         1.08
             4.583
                    0.96 10.583
                                                   1.08 | 22.58
                                                                  0.72
             4.667 0.96 | 10.667 3.72 | 16.667 1.08 | 22.67 4.750 0.96 | 10.750 3.72 | 16.750 1.08 | 22.75
                                                                                                                                                   0.667
                                                                                                                                                           0.66 | 6.667
                                                                                                                                                                                                         1.08
                                                                                                                                                   0.750 0.66 6.750 1.20 12.750 4.44 18.75
0.833 0.66 | 6.833
                                    1.20 | 12.833
                    0.66 | 6.917
             0.917
                                   1.20 | 12.917
                                                   4.44 | 18.92
                                                                 1.08
             1.000
                     0.66 | 7.000
                                    1.20 | 13.000
                                                  4.44 19.00
                                                                  1.08
                                                                                                                                                   5.500 0.96 11.500 5.76 17.500 1.08 23.50 0.72
                                                   3.24 | 19.08
                                                                                                                                                           0.96 |11.583 24.96 |17.583
             1.083
                     0.66 | 7.083
                                    1.20 | 13.083
                                                                  1.08
             1.167
                                    1.20 13.167
                                                   3.24 | 19.17
                                                                  1.08
                                                                                                                                                   5.667
                                                                                                                                                           0.96 111.667 24.96 17.667
                                                                                                                                                                                           1.08 | 23.67
                                                                                                                                                                                                         0.72
```

```
0.66 | 7.167
0.66 | 7.250
                                                                                                                                                                          5.861 0.96 | 11.50 24.96 | 17.50 1.08 | 23.75 0.72  
5.833 0.96 | 11.833 66.24 | 17.833 1.08 | 23.83 0.72  
5.917 0.96 | 11.917 66.24 | 17.91 1.08 | 23.92 0.72  
6.000 0.96 | 12.000 66.24 | 18.000 1.08 | 24.00 0.72  

                             1.20 |13.250
1.333
         0.66 | 7.333
                             1.20 [13.333]
                                                3.24 | 19.33
                                                                   1.08
          0.66 7.417
                            1.20 |13.417
1.20 |13.500
                                               3.24 | 19.42
3.24 | 19.50
1.417
1.500
                                                                   1.08
                            1.20 | 13.583 | 2.52 | 19.58
1.20 | 13.667 | 2.52 | 19.67
1.583
         0.66 | 7.583
                                                                   1.08
        0.66 | 7.667

    Max.Eff.Inten.(mm/hr)=
    66.24
    22.13

    over (min)
    5.00
    35.00

    Storage Coeff. (min)=
    1.61 (ii)
    31.05 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    35.00

1.750
                             1.20 | 13.750 | 2.52 | 19.75
                                                                   1.08
1.833
          0.66 | 7.833
0.66 | 7.917
                             1.20 |13.833
                                                2.52 | 19.83
2.52 | 19.92
                                                                                                                                                                                                      5.00 35.00
0.32 0.03
*TOTALS*
1.917
                             1.20 | 13.917
                                                                   1.08
          0.66 | 8.000
0.78 | 8.083
                             1.20 |14.000
1.62 |14.083
                                                2.52 | 20.00
1.80 | 20.08
                                                                                                                                                                  Unit Hyd. peak (cms)=
                                                                                                                                                                 PEAK FLOW (cms)= 0.15 0.23 0.250 (iii)
TIME TO PEAK (lns)= 12.00 12.42 12.42
RUNOFF VOLUME (mm)= 58.00 24.33 27.70
TOTAL RANFALL (mm)= 60.00 60.00 60.00
RUNOFF COEFFICIENT = 0.97 0.41 0.46
2.167
         0.78 | 8.167
                             1.62 14.167
                                                1.80 | 20.17
                                                                   0.72
2.250
                            1.62 | 14.250
1.62 | 14.333
          0.78 | 8.250
                                                1.80 | 20.25
2.333
         0.78 | 8.333
                                                1.80 | 20.33
                                                                   0.72
         0.78 | 8.417
0.78 | 8.500
                            1.62 |14.417
1.62 |14.500
                                                1.80 | 20.42
1.80 | 20.50
2.417
         0.78 | 8.583
0.78 | 8.667
                            1.62 |14.583
1.62 |14.667
2.583
                                                1.80 | 20.58
                                                                                                                                                              ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
2,750
         0.78 | 8.750
                             1.62 | 14.750
                                                1.80 | 20.75
                                                                  0.72
         0.78 | 8.833
0.78 | 8.917
0.78 | 9.000
                            1.62 | 14.833
1.62 | 14.917
1.62 | 15.000
                                                1.80 | 20.83
1.80 | 20.92
2.833
                                                                                                                                                                         YOU SHOULD CONSIDER SPLITTING THE AREA.
2.917
                                                                                                                                                                   (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                1.80 | 21.00
3.000
         0.78 | 9.083
                            1.92 |15.083
1.92 |15.167
                                                1.80 | 21.08
1.80 | 21.17
                                                                                                                                                                   CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
3.083
3.167
         0.78 | 9.250
0.78 | 9.333
                            1.92 | 15.250
1.92 | 15.333
3 250
                                                1.80 21.25 0.72
                                                                                                                                                                       THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                  (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
3.333
                                                1.80 | 21.33
3.417
          0.78 | 9.417
                             1.92 | 15.417
                                                1.80 | 21.42
          0.78 | 9.500
                            1.92 |15.500
2.16 |15.583
3.583
          0.78 | 9.583
                                                1.80 | 21.58
                                                                   0.72
3.667
3.750
         0.78 | 9.667
0.78 | 9.750
                            2.16 | 15.667
2.16 | 15.750
                                                1.80 | 21.67
1.80 | 21.75
                                                                                                                                                             3.833
          0.78 | 9.833
                            2.16 | 15.833
                                                1.80 | 21.83
                                                                                                                                                                   (ha) (cms) (hrs) (mm)

ID1=1 ( 0105): 7.90 0.250 12.42 27.70

+ ID2=2 ( 0110): 16.60 0.461 12.67 27.31
                             2.16 15.917
                                                1.80 21.92
                            2.16 | 16.000 | 1.80 | 22.00 | 2.76 | 16.083 | 1.08 | 22.08 | 2.76 | 16.167 | 1.08 | 22.17 | 2.76 | 16.250 | 1.08 | 22.25
4.000
          0.78 10.000
                                                                   0.72
4.083
          0.96 |10.083
          0.96 10.167
4.167
4.250
          0.96 10.250
                                                                                                                                                                    ID = 3 ( 0006): 24.50 0.694 12.50 27.44
                             2.76 | 16.333
2.76 | 16.417
4.333
          0.96 10.333
                                                1.08 | 22.33
                                                                                                                                                                  NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
4.417
          0.96 | 10.417
                                                 1.08 | 22.42
4.500
         0.96 10.500
0.96 10.583
                            2.76 | 16.500 | 1.08 | 22.50 | 0.72 | 3.72 | 16.583 | 1.08 | 22.58 | 0.72
4.583
4 667
          0.96 110.667
                             3.72 16.667 1.08 22.67
                                                                   0.72
                                                                                                                                                              CALIB
                                                                                                                                                              0.96 |10.750
                             3.72 |16.750
                                                 1.08 | 22.75
4.833
          0.96 10.833
                             3.72 16.833
                                                1.08 | 22.83
                                                                   0.72
         0.96 |10.917
0.96 |11.000
                            3.72 |16.917 | 1.08 | 22.92
3.72 |17.000 | 1.08 | 23.00
4.917
5.000
                                                                   0.72
         0.96 11.083
0.96 11.167
                            5.76 17.083
5.76 17.167
                                                1.08 | 23.08 | 0.72
1.08 | 23.17 | 0.72
5.083
                                                                                                                                                                     NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
5.250 0.96 11.250 5.76 17.250 1.08 23.25
                                                                   0.72
```

---- TRANSFORMED HYETOGRAPH ---TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
hrs mm/hr | hrs mm/hr |
hrs mm/hr | hrs mm/hr |
hrs mm/hr |
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hrs mm/hr |
hrs mm/hr 0.250 0.6616.250 1 20 112 250 8 64 1 18 25 1.08 0.333 0.66 | 6.333 1.20 |12.333 0.417 0.66 | 6.417 1.20 12.417 8.64 18.42 1.08 0.66 | 6.500 0.66 | 6.583 1.20 | 12.500 | 8.64 | 18.50 | 1.20 | 12.583 | 4.44 | 18.58 0.583 1.08 0.667 0.66 | 6.667 1.20 |12.667 1.20 |12.750 4.44 | 18.67 1.08 0.66 6.750 0.833 0.66 | 6.833 1.20 | 12.833 | 4.44 | 18.83 1.08 0.66 | 6.917 1.20 |12.917 0.66 7.000 1.20 13.000 4.44 19.00 1.000 1.08 0.66 | 7.083 0.66 | 7.167 1.20 |13.083 1.20 |13.167 3.24 | 19.08 3.24 | 19.17 1.083 1.167 1.08 0.66 | 7.250 0.66 | 7.333 0.66 | 7.417 0.66 | 7.500 1.20 | 13.250 1.20 | 13.333 1.20 | 13.417 3.24 | 19.25 3.24 | 19.33 3.24 | 19.42 1 250 1.08 1.333 1.417 1.08 1.500 1.20 | 13.500 3.24 | 19.50 1.08 1.583 0.66 | 7.583 1.20 |13.583 2.52 | 19.58 1.08 1.667 0.66 7.667 1.20 13.667 2.52 | 19.67 1.08 0.66 | 7.750 0.66 | 7.833 1.833 1.20 13.833 2.52 19.83 1.08 0.66 | 7.917 1.20 |13.917 1.20 |14.000 2.52 | 19.92 2.52 | 20.00 1.917 1.08 2.000 2.083 0.78 | 8.083 1.62 | 14.083 | 1.80 | 20.08 0.72 1.62 | 14.167 2.250 0.78 | 8.250 1.62 14.250 1.80 | 20.25 0.72 2.333 0.78 | 8.333 0.78 | 8.417 1.62 |14.333 1.62 |14.417 1.80 | 20.33 2.417 1.80 | 20.42 0.78 | 8.500 0.78 | 8.583 0.78 | 8.667 1.80 | 20.50 1.80 | 20.58 1.80 | 20.67 1.62 |14.500 1.62 |14.583 0.72 2 500 2.667 1.62 | 14.667 0.78 | 8.750 0.78 | 8.833 1.62 | 14.750 1.62 | 14.833 1.80 | 20.75 1.80 | 20.83 2 750 2.833 2.917 0.78 8.917 1.62 114 917 1.80 | 20.92 0.72 0.78 | 9.000 1.62 | 15.000 1.92 | 15.083 3.083 1.80 | 21.08 1.92 |15.167 1.92 |15.250 3.167 0.78 9.167 1.80 | 21.17 3.250 0.78 9.250 1.80 | 21.25 0.78 | 9.333 0.78 | 9.417 0.78 | 9.500 1.92 | 15.333 1.92 | 15.417 1.92 | 15.500 1.80 | 21.33 1.80 | 21.42 3 333 3.417 3.500 1.80 | 21.50 0.78 | 9.583 2.16 |15.583 2.16 |15.667 1.80 | 21.58 1.80 | 21.67 3.583 3.667 3.750 0.78 | 9.750 2.16 | 15.750 1.80 | 21.75 0.72 0.78 | 9.833 2.16 |15.833 1.80 | 21.83 3.917 0.78 | 9.917 2.16 15.917 1.80 | 21.92 0.72 0.78 | 10.000 | 2.16 | 15.917 | 1.80 | 21.92 | 10.000 | 2.16 | 16.000 | 1.80 | 22.00 | 0.96 | 10.167 | 2.76 | 16.167 | 1.08 | 22.17 | 0.96 | 10.250 | 2.76 | 16.250 | 1.08 | 22.25 | 4.083 0.72 4.167 [ile://V/...#%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Det

4.500 0.96 10.500 2.76 16,500 1.08 | 22.50 4.583 0.96 10.583 3.72 16.583 1.08 | 22.58 0.96 10.667 4.750 0.96 10.750 3.72 | 16.750 | 1.08 | 22.75 0.96 10.833 3.72 16.833 1.08 | 22.83 4.833 3.72 116,917 4.917 0.96 10.917 1.08 | 22.92 3.72 |16.917 3.72 |17.000 5.76 |17.083 5.76 |17.167 5.76 |17.250 5.76 |17.333 0.96 |11.000 0.96 |11.083 1.08 | 23.00 5.083 5.167 0.96 111.167 1.08 | 23.17 0.96 |11.250 0.96 111.333 5.333 1.08 | 23.33 5.583 0.96 | 11.583 24.96 | 17.583 5.667 0.96 | 11.667 24.96 | 17.667 1.08 | 23.58 1.08 | 23.67 0.96 | 11.750 | 24.96 | 17.750 | 1.08 | 23.75 | 0.96 | 11.833 | 66.24 | 17.833 | 1.08 | 23.83 | 0.96 | 11.917 | 66.24 | 17.917 | 1.08 | 23.92 5.750 0.72 5.833 6.000 0.96 12.000 66.24 18.000 1.08 24.00 0.72 Unit Hyd Qpeak (cms)= 1.829 PEAK FLOW (cms)= 0.802 (i) TIME TO PEAK (hrs)= 12.333 RUNOFF VOLUME (mm)= 25.526 TOTAL RAINFALL (mm)= 60.000 RUNOFF COEFFICIENT = 0.425 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. | Junction Command(0007) | AREA QPEAK TPEAK R.V.  $\begin{array}{cccc} (ha) & (cms) & (hrs) & (mm) \\ INFLOW: ID=2( \ 0100) & 23.46 & 0.80 & 12.33 & 25.53 \\ OUTFLOW: ID=2( \ 0007) & 23.46 & 0.80 & 12.33 & 25.53 \end{array}$ V V I SSSSS U U A L V V I SS U U AA L V V I SS U U AAAAA L (v 6.2.2015) I SS U U A A L I SSSSS UUUUU A A LLLLL OOO TITTT TITTT H H Y Y M M OOO TM

O O T T H H YY MM MM O O O O O T T H H Y M M O O OOO T T H H Y M M OOO Developed and Distributed by Smart City Water Inc Copyright 2007 - 2022 Smart City Water Inc All rights reserved. \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\* Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\7d0a4aaf-cf17-4822-a932-f46061e54517\scen Summary filename: C:\Users\nyokich\AppData\Loca\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\7d0a4aaf-cf17-4822-a932-f46061e54517\scen DATE: 03/11/2024 TIME: 11:36:38 USER: COMMENTS: \_ \* TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN TIME RAIN | TIME RAIN | TIME RAIN | TIME | T 1.50 | 8.00 | 3.11 | 14.00 | 3.46 | 20.00 | 1.50 | 8.25 | 3.11 | 14.25 | 3.46 | 20.25 2.00 1.38 2.25 1.38 1.50 | 8.50 | 3.11 | 14.50 | 3.46 | 20.50 | 1.50 | 8.75 | 3.11 | 14.75 | 3.46 | 20.75 2.50 1.38 3.00 1.50 9.00 3.69 15.00 3.46 21.00 1.38

3.25 1.50 | 9.25 3.69 | 15.25 3.46 | 21.25 1.38 3.50 1.50 | 9.50 4.15 | 15.50 3.46 | 21.50 1.38 1.50 | 9.75 | 4.15 | 15.75 | 3.46 | 21.75 | 1.38 | 1.84 | 10.00 | 5.30 | 16.00 | 2.07 | 22.00 | 1.38 | 1.84 | 10.25 | 5.30 | 16.25 | 2.07 | 22.25 | 1.38 3.75 4.25 1.84 | 10.50 | 7.14 | 16.50 | 2.07 | 22.50 | 1.84 | 10.75 | 7.14 | 16.75 | 2.07 | 22.75 4.75 1.38 1.84 | 11.25 | 11.06 | 17.00 | 2.07 | 23.00 | 1.84 | 11.25 | 11.06 | 17.25 | 2.07 | 23.25 | 1.84 | 11.50 | 47.92 | 17.50 | 2.07 | 23.50 5.00 1.38 5.50 1.38 5.75 1.84 11.75 127.18 17.75 2.07 23.75 1.38 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. -- TRANSFORMED HYETOGRAPH --TIME RAIN | TIME R 0.333 1.27 | 6.333 2.30 | 12.333 16.59 | 18.33 0.417 1.27 | 6.417 2.30 | 12.417 16.59 | 18.42 2.07 0.417 1.27 | 6.417 2.30 | 12.417 16.59 | 18.42 0.500 1.27 | 6.500 2.30 | 12.500 16.59 | 18.50 2.07 0.583 1.27 | 6.583 1.27 | 6.667 2.30 | 12.583 | 8.53 | 18.58 2.30 | 12.667 | 8.52 | 18.67 0.667 1.27 | 6.667 | 2.30 | 12.667 | 8.52 | 18.67 | 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 | 1.27 | 6.833 | 2.30 | 12.833 | 8.52 | 18.83 | 1.27 | 6.917 | 2.30 | 12.917 | 8.52 | 18.92 | 1.27 | 7.003 | 2.30 | 13.000 | 8.52 | 19.08 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 | 13.001 0.750 2.07 0.917 2.07 1.083 2.07 1.27 | 7.167 1.27 | 7.250 1.27 | 7.333 2.30 | 13.167 | 6.22 | 19.17 | 2.30 | 13.250 | 6.22 | 19.25 | 2.30 | 13.333 | 6.22 | 19.33 1.167 1.333 1.417 1.500 1.27 | 7.417 1.27 | 7.500 2.30 | 13.417 2.30 | 13.500 6.22 | 19.42 1.583 1.27 | 7.583 2.30 | 13.583 4.84 | 19.58 1.667 1.27 | 7.667 2.30 | 13.667 4.84 | 19.67 2.07 1.27 | 7.583 1.27 | 7.667 1.27 | 7.750 1.27 | 7.833 1.27 | 7.917 1.750 1.833 1.917 2.07 1.27 | 8.000 | 2.30 | 14.000 | 4.84 | 20.00 | 1.50 | 8.083 | 3.11 | 14.083 | 3.46 | 20.08 | 1.50 | 8.167 | 3.11 | 14.167 | 3.46 | 20.17 | 1.50 | 8.250 | 3.11 | 14.250 | 3.46 | 20.25 2 000 2.07 2.083 1.38 2.167 1.38 2.333 1.50 | 8.333 3.11 | 14.333 3.46 | 20.33 1.38

```
1.50 | 8.417 | 3.11 | 14.417 | 3.46 | 20.42 | 1.50 | 8.500 | 3.11 | 14.500 | 3.46 | 20.50
                             2.417
                             2.500
                                                                                                                                                         1.38
                             2.583
                                                1.50 | 8.583
                                                                                 3.11 14.583
                                                                                                                      3.46 20.58
                                                                                                                                                         1.38
                                                1.50 | 8.667
1.50 | 8.750
                                                                                 3.11 |14.667
                             2.667
2.750
                                                                                                                      3.46 | 20.75
                                                                                                                                                                                                                                                                                                                                  Junction Command(0005)
                             2 833
                                                1.50 | 8.833
                                                                                 3 11 114 833
                                                                                                                      3 46 20 83
                                                                                                                                                         1 38
                                                1.50 | 8.917
                                                                                   3.11 |14.917
                                                                                                                                                                                                                                                                                                                                                                       AREA OPEAK TPEAK R.V.
                             3.000
                                                1.50 9.000
                                                                                  3.11 15.000
                                                                                                                      3.46 | 21.00
                                                                                                                                                         1.38
                                                1.50 | 9.083
                                                                                  3.69 | 15.083
3.69 | 15.167
                                                                                                                                                                                                                                                                                                                                 (ha) (cms) (hrs) (mm)
INFLOW: ID=2( 0115) 23.79 1.55 12.83 74.86
OUTFLOW: ID=2( 0005) 23.79 1.55 12.83 74.86
                              3.083
                             3.167
                                                                                                                      3.46 21.17
                                                                                                                                                         1.38
                             3.250
                                                1.50 | 9.250
1.50 | 9.333
                                                                                 3.69 |15.250
3.69 |15.333
                                                                                                                      3.46 21.25
                                                                                                                                                         1.38
                             3.333
                             3.417
                                                1.50 | 9.417
                                                                                  3.69 115.417
                                                                                                                      3.46 21.42
                                                                                                                                                         1.38
                                                1.50 | 9.500
1.50 | 9.583
                                                                                   3.69 | 15.500
                                                                                 4.15 [15.583]
                             3.583
                                                                                                                      3.46 | 21.58
                                                                                                                                                         1.38
                                                                                                                                                                                                                                                                                                                                CALIB
                                                1.50 | 9.667
1.50 | 9.750
                                                                                 4.15 | 15.667
4.15 | 15.750
                                                                                                                     3.46 | 21.67
3.46 | 21.75
                                                                                                                                                                                                                                                                                                                               | NASHYD ( 0110)| Area (ha)= 16.60 Curve Number (CN)= 82.0
|ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                             3.667
                                                                                                                                                         1.38
                             3.750
                                                                                                                                                         1.38
                                                1.50 | 9.833
1.50 | 9.917
1.50 | 10.000
                             3 833
                                                                                4.15 |15.833
4.15 |15.917
                                                                                                                     3.46 | 21.83
3.46 | 21.92
                                                                                                                                                         1 38
                                                                                                                                                                                                                                                                                                                                                                  --- U.H. Tp(hrs)= 0.73
                                                                                  4.15 | 16.000 | 3.46 | 22.00 | 5.30 | 16.083 | 2.07 | 22.08 | 5.30 | 16.167 | 2.07 | 22.17
                                                                                                                                                                                                                                                                                                                                            NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                             4.000
                             4.083
                                                1.84 110.083
                                                                                                                                                          1.38
                                                1.84 |10.167
                             4.167
                                                                                                                                                                                                                                                                                                                                                                                   -- TRANSFORMED HYETOGRAPH --
                             4.250
                                                1.84 | 10.250
                                                                                    5.30 | 16.250
                                                                                                                      2.07 | 22.25
                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                                       TIME RAIN | TIME R
                                                                                   5.30 |16.333
5.30 |16.417
                                                                                                                     2.07 | 22.33 2.07 | 22.42
                             4.417
                                                1.84 | 10.417
                                                                                                                                                          1.38
                             4.500
                                                1.84 |10.500
1.84 |10.583
                                                                                   5.30 |16.500
7.14 |16.583
                                                                                                                      2.07 | 22.50 2.07 | 22.58
                                                                                                                     2.07 | 22.67
2.07 | 22.75
2.07 | 22.83
                             4.667
                                                1.84 10.667
                                                                                   7.14 |16.667
7.14 |16.750
                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                                       0.250
                                                                                                                                                                                                                                                                                                                                                                         1.27 | 6.250 | 2.30 | 12.250 | 16.59 | 18.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.07
                                                                                                                                                                                                                                                                                                                                                                       1.27 | 6.333 | 2.30 | 12.333 | 16.59 | 18.33
1.27 | 6.417 | 2.30 | 12.417 | 16.59 | 18.42
                                                1.84 | 10.750
                                                                                                                                                                                                                                                                                                                                                       0.333
                                                1.84 10.833
                             4.833
                                                                                   7.14 16.833
                                                                                                                                                         1.38
                                                                                                                                                                                                                                                                                                                                                       0.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.07
                                                                                                                                                                                                                                                                                                                                                                                                          2.30 | 12.500 | 16.59 | 18.50
2.30 | 12.583 | 8.53 | 18.58
2.30 | 12.667 | 8.52 | 18.67
                             4.917
                                                1.84 | 10.917
1.84 | 11.000
                                                                                   7.14 |16.917
7.14 |17.000
                                                                                                                      2.07 | 22.92
2.07 | 23.00
                                                                                                                                                                                                                                                                                                                                                       0.500
                                                                                                                                                                                                                                                                                                                                                                         1.27 | 6.500
1.27 | 6.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.07
                                                                                                                                                                                                                                                                                                                                                       0.583
                             5.000
                                                                                                                                                           1.38
                                                                                                                        2.07 | 23.08
2.07 | 23.17
2.07 | 23.25
                                                1.84 |11.083 | 11.06 |17.083
1.84 |11.167 | 11.06 |17.167
                                                                                                                                                           1.38
                             5 083
                                                                                                                                                                                                                                                                                                                                                       0.667
                                                                                                                                                                                                                                                                                                                                                                          1.27 6.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.07
                                                                                                                                                                                                                                                                                                                                                                         1.27 | 6.750
1.27 | 6.833
                                                                                                                                                                                                                                                                                                                                                                                                           2.30 | 12.750
2.30 | 12.833
                                                                                                                                                                                                                                                                                                                                                                                                                                               8.52 | 18.75
8.52 | 18.83
                                                                                                                                                                                                                                                                                                                                                       0.833
                             5.250
                                                1.84 | 11.250 11.06 | 17.250
                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                                                        1.27 | 6.853
1.27 | 6.917
1.27 | 7.000
1.27 | 7.083
1.27 | 7.167
1.27 | 7.250
                                                1.84 |11.333 | 11.06 |17.333
1.84 |11.417 | 11.06 |17.417
                                                                                                                        2.07 | 23.33
                                                                                                                                                                                                                                                                                                                                                                                                                                                8.52 | 18.92
8.52 | 19.00
                             5.333
                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                                       0.917
                                                                                                                                                                                                                                                                                                                                                                                                           2.30 12.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.07
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 |13.000
                              5.417
                             5.500
                                                1.84 11.500 11.06 17.500
                                                                                                                        2 07 | 23 50
                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                                       1.083
                                                                                                                                                                                                                                                                                                                                                                                                           2.30 13.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                6.22 | 19.08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.07
                                                1.84 |11.583 47.92 |17.583
1.84 |11.667 47.92 |17.667
                                                                                                                        2.07 | 23.58
                                                                                                                                                                                                                                                                                                                                                                                                           2.30 | 13.167
2.30 | 13.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                6.22 19.17
                               5.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                6.22 | 19.25
                             5.667
                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                                       1.250
                                                1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75

1.84 | 11.833 | 127.17 | 17.833 | 2.07 | 23.83

1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92
                                                                                                                                                                                                                                                                                                                                                                         1.27 | 7.333
1.27 | 7.417
                                                                                                                                                                                                                                                                                                                                                                                                                                               6.22 | 19.33
6.22 | 19.42
                             5.750
                                                                                                                                                            1.38
                                                                                                                                                                                                                                                                                                                                                       1.333
                                                                                                                                                                                                                                                                                                                                                                                                           2.30 13.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.07
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 13.417
                                                                                                                                                                                                                                                                                                                                                       1.417
                             5.833
                                                                                                                                                             1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.07
                                                                                                                                                                                                                                                                                                                                                                         1.27 | 7.500
1.27 | 7.583
                             5.917
                                                                                                                                                                                                                                                                                                                                                       1.500
                                                                                                                                                                                                                                                                                                                                                                                                           2.30 113.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                6.22 | 19.50
                             6.000 1.84 | 12.000 127.18 | 18.000 2.07 | 24.00
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 13.583
                                                                                                                                                                                                                                                                                                                                                                         1.27 | 7.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                4.84 | 19.67
                                                                                                                                                                                                                                                                                                                                                       1.667
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 | 13.667
                                                                                                                                                                                                                                                                                                                                                                                                                                              4.84 | 19.87
4.84 | 19.83
4.84 | 19.92
                                                                                                                                                                                                                                                                                                                                                       1.750
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 13.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.07
            Unit Hyd Qpeak (cms)= 0.977
                                                                                                                                                                                                                                                                                                                                                                         1.27 | 7.833
1.27 | 7.917
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 |13.833
                                                                                                                                                                                                                                                                                                                                                       1.833
             PEAK FLOW (cms)= 1.550 (i)
TIME TO PEAK (hrs)= 12.833
            PEAK FLOW
                                                                                                                                                                                                                                                                                                                                                       1.917
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 13.917
                                                                                                                                                                                                                                                                                                                                                                           1.27 | 8.000
                                                                                                                                                                                                                                                                                                                                                                                                            2.30 |14.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                4.84 | 20.00
            RUNOFF VOLUME (mm)= 74.859
TOTAL RAINFALL (mm)= 115.199
RUNOFF COEFFICIENT = 0.650
                                                                                                                                                                                                                                                                                                                                                       2.083
                                                                                                                                                                                                                                                                                                                                                                          1.50 | 8.083
                                                                                                                                                                                                                                                                                                                                                                                                            3.11 114.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                3.46 | 20.08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                                                                                          1.50 | 8.167
1.50 | 8.250
                                                                                                                                                                                                                                                                                                                                                                                                            3.11 |14.167
3.11 |14.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                3.46 | 20.17
3.46 | 20.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 38
                                                                                                                                                                                                                                                                                                                                                       2.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                                                                       2.333
                                                                                                                                                                                                                                                                                                                                                                           1.50 | 8.333
                                                                                                                                                                                                                                                                                                                                                                                                            3.11 114.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                3.46 | 20.33
                                                                                                                                                                                                                                                                                                                                                                         1.50 | 8.417 | 3.11 | 14.417 | 3.46 | 20.42
            (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
file:///V...49/20Updated9/20EA9/20Analysis/VO/Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Detailed9/20Output/Existing%20VO%20Det
                                               1.50 | 8.583 3.11 | 14.583
                             2.583
                                                                                                                     3.46 | 20.58
                                                                                                                                                        1.38
                             2 667
                                                1.50 | 8.667
                                                                                                                      3.46 20.67
                                                                                                                                                         1 38
                                                                                                                                                                                                                                                                                                                                CALIB
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```
3.11 | 14.667
                                                                                                                                                                                 | STANDHYD ( 0105)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                     1.50 | 8.750
                                        3.11 |14.750
                                                             3.46 | 20.75
          2.750
                                                                                  1.38
          2.833
                     1.50 | 8.833
                                        3.11 14.833
                                                             3.46 | 20.83
                     1.50 | 8.917
                                        3.11 |14.917
                    1.50 | 9.000
1.50 | 9.083
1.50 | 9.167
                                       3.11 |15.000
3.69 |15.083
3.69 |15.167
                                                                                                                                                                                                          IMPERVIOUS PERVIOUS (i)
          3.000
                                                             3.46 | 21.00
                                                                                  1.38

    MPERVIOUS
    PERVIO

    Surface Area (ha)=
    1.58
    6.32

    Dep. Storage (mm)=
    2.00
    5.00

    Average Slope (\%)=
    2.00
    5.00

    Length (m)=
    50.00
    250.00

    Mannings n
    =
    0.013
    0.250

          3.083
                                                             3.46 | 21.08
          3.167
                                                             3.46 | 21.17
                                                                                  1.38
          3.250
                     1.50 | 9.250
                                        3.69 115.250
                                                             3.46 21.25
          3.333
                     1.50 | 9.333
                                         3.69 |15.333
          3.417
                    1.50 9.417
                                        3.69 15.417
                                                             3.46 21.42
                                                                                 1.38
                    1.50 | 9.500
1.50 | 9.583
                                        3.69 | 15.500
4.15 | 15.583
                                                             3.46 21.50
                                                                                                                                                                                         NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
          3.583
                                                             3.46 21.58
                                                                                  1.38
                     1.50 | 9.667
1.50 | 9.750
                                        4.15 | 15.667
4.15 | 15.750
                                                             3.46 | 21.67
3.46 | 21.75
           3.667
                                                                                                                                                                                                                 - TRANSFORMED HYETOGRAPH --
                                        4.15 15.833
          3.833
                     1.50 | 9.833
                                                             3.46 21.83
                                                                                  1.38
                    1.50 | 9.917
1.50 | 10.000
                                                                                                                                                                                                TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
          3.917
                                        4.15 15.917
                                                             3.46 21.92
                                         4.15 | 16.000
                                                             3.46 | 22.00
          4.000
                                                                                  1.38
                                                                                                                                                                                               0.083 1.27 | 6.083 2.30 | 12.083 16.60 | 18.08
0.167 1.27 | 6.167 2.30 | 12.167 16.59 | 18.17
0.250 1.27 | 6.250 2.30 | 12.250 16.59 | 18.25
                    1.84 |10.083
1.84 |10.167
                                        5.30 |16.083
5.30 |16.167
                                                             2.07 | 22.08
          4.083
          4.167
                                        5.30 |16.250 | 2.07 | 22.25
5.30 |16.333 | 2.07 | 22.33
          4.250
                    1.84 110.250
                                                                                                                                                                                                                                                                       2.07
                                                                                                                                                                                               0.333
                                                                                                                                                                                                         1.27 | 6.333
1.27 | 6.417
                                                                                                                                                                                                                             2.30 | 12.333 | 16.59 | 18.33
2.30 | 12.417 | 16.59 | 18.42
          4.333
                     1.84 |10.333
                                                                                                                                                                                                                                                                        2.07
          4.417
                     1.84 | 10.417
                                         5.30 | 16.417
                                                             2.07 | 22.42
                                                                                   1.38
                                                                                                                                                                                               0.417
          4.500
4.583
                    1.84 |10.500
1.84 |10.583
                                         5.30 | 16.500
7.14 | 16.583
7.14 | 16.667
                                                             2.07 | 22.50
2.07 | 22.58
                                                                                                                                                                                                          1.27 | 6.500
1.27 | 6.583
1.27 | 6.667
                                                                                                                                                                                                                             2.30 | 12.500 | 16.59 | 18.50
2.30 | 12.583 | 8.53 | 18.58
2.30 | 12.667 | 8.52 | 18.67
                                                                                                                                                                                               0.500
                                                                                                                                                                                                                                                                        2.07
                                                             2.07 | 22.67
          4.667
                    1.84 110.667
                                                                                   1.38
                                                                                                                                                                                               0.667
          4.750
                     1.84 | 10.750
                                         7.14 | 16.750
7.14 | 16.833
                                                             2.07 | 22.75
                                                                                                                                                                                               0.750
                                                                                                                                                                                                          1.27 | 6.750
                                                                                                                                                                                                                              2.30 | 12.750 | 8.52 | 18.75
2.30 | 12.833 | 8.52 | 18.83
                                                                                                                                                                                               0.833
                    1.84 | 10.833
          4.833
                                                                                                                                                                                                          1.27 | 6.833
1.27 | 6.917
1.27 | 7.000
1.27 | 7.083
1.27 | 7.167
1.27 | 7.250
1.27 | 7.333
1.27 | 7.417
1.27 | 7.500
                                        7.14 |16.917
7.14 |17.000
                                                             2.07 | 22.92
2.07 | 23.00
          4917
                     1.84 10.917
                                                                                                                                                                                               0.917
                                                                                                                                                                                                                              2.30 12.917
                                                                                                                                                                                                                                                   8.52 | 18.92
                                                                                                                                                                                                                              2.30 |13.000
                    1.84 | 11.000
          5.000
          5.083
                    1.84 | 11.083 | 11.06 | 17.083
                                                              2.07 | 23.08
                                                                                   1.38
                                                                                                                                                                                               1.083
                                                                                                                                                                                                                              2.30 | 13.083 | 6.22 | 19.08
                                                                                                                                                                                                                                                                      2.07
                    1.84 |11.167 | 11.06 |17.167 | 1.84 |11.250 | 11.06 |17.250
                                                              2.07 | 23.17
                                                                                                                                                                                                                              2.30 | 13.167
2.30 | 13.250
                                                                                                                                                                                                                                                   6.22 | 19.17
                                                                                                                                                                                                1.167
          5.250
                                                                                   1.38
                                                                                                                                                                                                1.250
                                                                                                                                                                                                                                                   6.22 | 19.25
          5 333
                    1.84 | 11.333 | 11.06 | 17.333 | 1.84 | 11.417 | 11.06 | 17.417
                                                              2.07 | 23.33
2.07 | 23.42
                                                                                                                                                                                                1.333
                                                                                                                                                                                                                              2.30 13.333 6.22 19.33
                                                                                                                                                                                                                                                                      2.07
                                                                                                                                                                                                                               2.30 |13.417
                                                                                                                                                                                                                                                   6.22 | 19.42
          5,417
          5.500
                    1.84 | 11.500 | 11.06 | 17.500
                                                              2.07 | 23.50
                                                                                   1.38
                                                                                                                                                                                                1.500
                                                                                                                                                                                                                              2.30 | 13.500 | 6.22 | 19.50
                                                                                                                                                                                                                                                                      2.07
                                                                                                                                                                                                          1.27 | 7.500
1.27 | 7.583
1.27 | 7.667
1.27 | 7.750
1.27 | 7.833
1.27 | 7.917
                    1.84 |11.583 47.92 |17.583
1.84 |11.667 47.92 |17.667
                                                                                                                                                                                                1.583
                                                                                                                                                                                                                              2.30 | 13.583
                                                                                                                                                                                                                                                  4.84 | 19.58
4.84 | 19.67
          5 667
                                                              2.07 | 23.67
                                                                                   1.38
                                                                                                                                                                                                1.667
                                                                                                                                                                                                                              2.30 13.667
                                                                                                                                                                                                                                                                       2.07
                    1.84 | 11.850 | 47.92 | 17.850 | 2.07 | 23.75 | 1.84 | 11.833 | 127.17 | 17.833 | 2.07 | 23.83 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92
                                                                                                                                                                                                                                                 4.84 | 19.75
4.84 | 19.75
4.84 | 19.83
4.84 | 19.92
4.84 | 20.00
3.46 | 20.08
                                                                                                                                                                                                                              2.30 |13.750
2.30 |13.833
                                                                                                                                                                                                1.750
          5.833
                                                                                                                                                                                                1.917
                                                                                                                                                                                                                              2.30 13.917
                                                                                                                                                                                                          1.27 | 8.000
1.50 | 8.083
                                                                                                                                                                                                                              2.30 |14.000
3.11 |14.083
          6.000 1.84 | 12.000 127.18 | 18.000 2.07 | 24.00
                                                                                                                                                                                               2.083
                                                                                                                                                                                                                                                                       1.38
Unit Hyd Qpeak (cms)= 0.869
                                                                                                                                                                                               2.167
                                                                                                                                                                                                           1.50 | 8.167
                                                                                                                                                                                                                              3.11 14.167
                                                                                                                                                                                                                                                   3.46 | 20.17
                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                           1.50 | 8.250
                                                                                                                                                                                                                               3.11 14.250
                                                                                                                                                                                                                                                   3.46 | 20.25
PEAK FLOW (cms)= 1.260 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 73.175
TOTAL RAINFALL (mm)= 115.199
                                                                                                                                                                                                                              3.11 |14.333
3.11 |14.417
                                                                                                                                                                                                                                                   3.46 | 20.33
3.46 | 20.42
                                                                                                                                                                                               2.333
                                                                                                                                                                                                           1 50 | 8 333
                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                               2.417
                                                                                                                                                                                                           1.50 | 8.417
                                                                                                                                                                                               2.500
                                                                                                                                                                                                           1.50 | 8.500
                                                                                                                                                                                                                              3.11 14.500
                                                                                                                                                                                                                                                   3.46 | 20.50
                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                               2 583
                                                                                                                                                                                                           1.50 | 8.583
                                                                                                                                                                                                                              3.11 14.583
                                                                                                                                                                                                                                                   3,46 | 20,58
                                                                                                                                                                                                                                                                       1 38
                                                                                                                                                                                               2.667
                                                                                                                                                                                                           1.50 | 8.667
                                                                                                                                                                                                                              3.11 14.667
                                                                                                                                                                                                                                                   3.46 20.67
RUNOFF COEFFICIENT = 0.635
                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                               2.750
                                                                                                                                                                                                          1.50 | 8.750
                                                                                                                                                                                                                              3.11 114.750 3.46 | 20.75
                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                          1.50 | 8.833
                                                                                                                                                                                                                              3.11 14.833
                                                                                                                                                                                                                                                  3.46 20.83
(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                               2.917
                                                                                                                                                                                                         1.50 | 8.917 | 3.11 | 14.917 | 3.46 | 20.92
                                                                                                                                                                                                                                                                      1.38
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```
1.50 | 9.000 | 3.11 | 15.000
1.50 | 9.083 | 3.69 | 15.083
                                                                                                                                3.46 | 21.00
3.46 | 21.08
                                3.000
                                3.083
                                                                                                                                                                        1.38
                                3.167
                                                     1.50 | 9.167
                                                                                          3.69 15.167
                                                                                                                                  3.46 21.17
                                                                                                                                                                        1.38
                                                    1.50 | 9.250
                                                                                          3.69 |15.250
3.69 |15.333
                                3.333
                                                                                                                                  3.46 21.33
                                3 417
                                                    1 50 19 417
                                                                                          3 69 115 417
                                                                                                                                  3 46 21 42
                                                                                                                                                                        1 38
                                                                                           3.69 |15.500
                                3.583
                                                    1.50 | 9.583
                                                                                          4.15 15.583
                                                                                                                                  3.46 21.58
                                                                                                                                                                         1.38
                                                     1.50 9.667
                                                                                          4.15 | 15.667
                                3.750
                                                    1.50 9.750
                                                                                         4.15 | 15.750
                                                                                                                                  3.46 | 21.75
                                                                                                                                                                        1.38
                                3.833
                                                    1.50 | 9.833
1.50 | 9.917
                                                                                          4.15 |15.833
4.15 |15.917
                                                                                                                                 3.46 21.83
3.46 21.92
                                4.000
                                                     1.50 10.000
                                                                                            4.15 16.000
                                                                                                                                  3.46 | 22.00
                                                      1.84 | 10.083
                                                                                            5.30 |16.083
                                                                                            5.30 16.167
                                4.167
                                                    1.84 | 10.167
                                                                                                                                  2.07 | 22.17
                                                                                                                                                                          1.38
                                                    1.84 |10.250
1.84 |10.333
                                                                                           5.30 |16.250
5.30 |16.333
                                                                                                                                 2.07 | 22.25
2.07 | 22.33
                                4.250
                                4.333
                                                                                           5.30 | 16.417
5.30 | 16.500
7.14 | 16.583
                                                                                                                                 2.07 | 22.42
2.07 | 22.50
2.07 | 22.58
                                4 417
                                                     1 84 110 417
                                4.500
4.583
                                                    1.84 |10.500
                                4.667
                                                    1.84 110.667
                                                                                           7.14 | 16.667
7.14 | 16.750
                                                                                                                                 2.07 | 22.67
                                                                                                                                                                           1.38
                                                     1.84 | 10.750
                                                                                                                                    2.07 | 22.75
                                                                                          7.14 | 16.833 | 2.07 | 22.83
7.14 | 16.917 | 2.07 | 22.92
7.14 | 17.000 | 2.07 | 23.00
                                4.833
                                                    1.84 | 10.833
                                                                                                                                                                           1.38
                                5.000
                                                    1.84 | 11.000
                                                                                                                                                                          1.38
                                                    1.84 |11.083 | 11.06 |17.083
1.84 |11.167 | 11.06 |17.167
                                                                                                                                    2.07 | 23.08
2.07 | 23.17
                                5.083
                                5.167
                                5.250
                                                     1.84 111.250 11.06 117.250
                                                                                                                                    2.07 | 23.25
                                                                                                                                                                           1.38
                                                    1.84 |11.333 | 11.06 |17.333
1.84 |11.417 | 11.06 |17.417
                                                                                                                                    2.07 | 23.33 | 2.07 | 23.42
                                 5.333
                                5.417
                                                                                                                                                                           1.38

    5.417
    1.84 | 11.417
    11.06 | 17.417
    2.07 | 23.42
    1.38

    5.500
    1.84 | 11.500
    11.06 | 17.500
    2.07 | 23.50
    1.38

    5.583
    1.84 | 11.583
    47.92 | 17.583
    2.07 | 23.56
    1.38

    5.667
    1.84 | 11.567
    47.92 | 17.667
    2.07 | 23.67
    1.38

    5.750
    1.84 | 11.50
    47.92 | 17.50
    2.07 | 23.57
    1.38

    5.833
    1.84 | 11.833 | 127.17 | 17.833
    2.07 | 23.80
    2.07 | 23.80

    5.917
    1.84 | 11.917 | 127.18 | 17.917
    2.07 | 23.92
    1.38

    6.000
    1.84 | 12.000 | 127.18 | 18.000
    2.07 | 24.00
    1.38

             Max.Eff.Inten.(mm/hr)= 127.18
over (min) 5.00 20.
                                                                                                 20.00
              Storage Coeff. (min)= 1.24 (ii) 18.77 (ii)
Unit Hyd. Tpeak (min)= 5.00 20.00
                                                                                     5.00 20.00
0.33 0.06
*TOTALS*
              Unit Hyd. peak (cms)=

        **TOTALS**

        PEAK FLOW (cms)*
        0.28
        0.92
        0.956 (iii)

        TIME TO PEAK (hrs)*
        12.00
        12.17
        12.17

        RUNOFF VOLUME (mm)*
        113.20
        67.38
        71.96

        TOTAL RAINFALL (mm)*
        115.20
        115.20
        115.20

        RUNOFF COEFFICIENT
        0.98
        0.58
        0.62

      ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                             YOU SHOULD CONSIDER SPLITTING THE AREA
file:///V....4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20VO%20Detailed%20Output/Existing%20V
                                                    1.27 | 8.000 | 2.30 | 14.000
                                2.083
                                                   1.50 | 8.083
                                                                                         3.11 | 14.083 | 3.46 | 20.08
                                                                                                                                                                      1.38
                                2.167
                                                    1.50 | 8.167 | 3.11 | 14.167
                                                                                                                                  3.46 20.17
                                                                                                                                                                        1 38
                                                    1.50 | 8.250
                                                                                         3.11 [14.250
                                                                                                                                  3.46 | 20.25
                                2.250
                                                                                                                                                                        1.38
                                2.333
                                                     1.50 | 8.333
                                                                                          3.11 14.333
                                                                                                                                  3.46 | 20.33
```

(i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. AREA QPEAK TPEAK R.V. + ID2= 2 ( 0110): 16.60 1.260 12.58 73.17 ID = 3 ( 0006): 24.50 1.921 12.25 72.78 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. CALIB NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. - TRANSFORMED HYETOGRAPH -TIME RAIN | TIME R 0.250 1.27 | 6.250 2.30 | 12.250 16.59 | 18.25 0.333 1.27 | 6.333 2.30 | 12.333 16.59 | 18.33 0.583 1.27 | 6.583 2.30 | 12.583 8.53 | 18.58 2.07 1.27 | 6.667 2.30 | 12.667 | 8.52 | 18.67 2.30 | 12.750 | 8.52 | 18.75 0.667 0.750 1.27 | 6.833 1.27 | 6.917 2.30 | 12.833 | 8.52 | 18.83 | 2.30 | 12.917 | 8.52 | 18.92 0.833 2.07 0.917 1.27 | 7.000 1.27 | 7.083 1.27 | 7.167 1.27 | 7.250 1.000 2.30 | 13.000 | 8.52 | 19.00 2.30 | 13.083 | 6.22 | 19.08 1.167 2.30 | 13.167 6.22 | 19.17 1.250 2.30 13.250 6.22 19.25 2.07 1.27 | 7.333 1.27 | 7.417 2.30 |13.333 1.333 1.417 2.30 13.417 6.22 | 19.42 1.27 | 7.500 1.27 | 7.583 2.30 | 13.500 2.30 13.583 4.84 | 19.58 1.583 2.07 1.27 | 7.667 1.27 | 7.750 2.30 | 13.667 2.30 | 13.750 4.84 | 19.67 4.84 | 19.75 1 667 1.750 1.27 | 7.833 | 2.30 | 13.833 | 4.84 | 19.83 1.27 | 7.917 | 2.30 | 13.917 | 4.84 | 19.92 1.833

1.50 | 8.417 3.11 | 14.417 2.500 1.50 | 8.500 3.11 114.500 3.46 | 20.50 1.38 1.50 | 8.583 3.11 |14.583 2.583 3.46 | 20.58 2,667 3.46 | 20.67 2.750 1.50 | 8.750 3.11 114.750 3.46 | 20.75 1.50 | 8.833 3.11 |14.833 2.917 1.50 | 8.917 3.11 14.917 3.46 20.92 1.38 3.11 |15.000 3.69 |15.083 1.50 | 9.083 3.083 3.46 21.08 1.38 3.167 3.250 1.50 | 9.167 1.50 | 9.250 3.69 |15.167 3.69 |15.250 3.46 | 21.17 3.46 | 21.25 3.69 15.333 3.333 1.50 | 9.333 3.46 21.33 1.38 1.50 | 9.417 1.50 | 9.500 3.69 | 15.417 3.69 | 15.500 3.417 3.46 21.42 3,500 3.46 | 21.50 1.38 1.50 | 9.583 1.50 | 9.667 4.15 |15.583 4.15 |15.667 3.46 | 21.58 3.46 | 21.67 3 583 3.667 3.750 1.50 | 9.750 4.15 [15.750] 3.46 | 21.75 1.38 1.50 | 9.833 3.833 4.15 |15.833 3.917 4.15 | 15.917 3.46 | 21.92 1.38 1.50 | 10.000 1.84 | 10.083 4.15 |16.000 5.30 |16.083 5.30 |16.167 3.46 | 22.00 2.07 | 22.08 2.07 | 22.17 4.083 4.167 1.84 110.167 1.38 1.84 | 10.250 5.30 |16.250 5.30 |16.333 2.07 | 22.25 4.333 1.84 | 10.333 5.30 | 16.333 | 2.07 | 22.33 5.30 | 16.417 | 2.07 | 22.42 5.30 | 16.500 | 2.07 | 22.50 7.14 | 16.683 | 2.07 | 22.58 7.14 | 16.667 | 2.07 | 22.67 7.14 | 16.750 | 2.07 | 22.75 4.417 1.84 10.417 1.84 10.500 4.500 4.583 1.84 110.583 1.38 1.84 | 10.667 1.84 | 10.750 4.750 1.38 4.833 1.84 |10.833 1.84 |10.917 7.14 |16.833 7.14 |16.917 2.07 | 22.83 2.07 | 22.92 4.917 5.000 1.84 | 111.000 7.14 | 17.000 | 2.07 | 23.00 1.38 1.84 | 11.083 | 11.06 | 17.083 2.07 | 23.08 5 167 1.84 | 11.167 | 11.06 | 17.167 2.07 | 23.17 1 38 2.07 | 23.25 2.07 | 23.25 2.07 | 23.33 2.07 | 23.42 1.84 |11.250 11.06 |17.250 5.333 1.84 |11.333 | 11.06 |17.333 1.84 |11.417 | 11.06 |17.417 5.417 1.38 1.84 | 11.500 | 11.06 | 17.500 | 2.07 | 23.50 1.84 | 11.583 | 47.92 | 17.583 | 2.07 | 23.50 1.84 | 11.667 | 47.92 | 17.667 | 2.07 | 23.67 1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75 5.583 1.38 5.667 5.750 1.38 1.84 |11.833 | 127.17 |17.833 | 2.07 | 23.83 | 1.84 |11.917 | 127.18 |17.917 | 2.07 | 23.92 5.833 1 38 6.000 1.84 | 12.000 127.18 | 18.000 2.07 | 24.00 1.38 Unit Hvd Opeak (cms)= 1.829 PEAK FLOW (cms)= 2.257 (i)

TIME TO PEAK (hrs)= 12.333

```
RUNOFF VOLUME (mm)= 69.909
TOTAL RAINFALL (mm)= 115.199
    RUNOFF COEFFICIENT = 0.607
   (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
 | Junction Command(0007) |
                      AREA QPEAK TPEAK R.V.
 \begin{array}{cccc} (ha) & (cms) & (hrs) & (mm) \\ INFLOW: ID=2( \ 0100) & 23.46 & 2.26 & 12.33 & 69.91 \\ OUTFLOW: ID=2( \ 0007) & 23.46 & 2.26 & 12.33 & 69.91 \\ \end{array}
         V I SSSSS U U A L
                                                            (v 6.2.2015)
     V V I SSS U U AA L (V V V I SS U U AA A L V V I SS U U AAAAA L V V I SS U U A A L V V I SSSS UUUUU A A LLLLL
      OOO TTITT TTTTT H H Y Y M M OOO TM
     0 0 T T H H YY MMMM 0 0
0 0 T T H H Y M M 0 0
000 T T H H Y M M 000
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              ***** DETAILED OUTPUT *****
Input\ filename: C:\ Verogram\ Files\ (x86)\ Visual\ OTTHYMO\ 6.2\ VO2\ Voin. dat \\ Output\ filename: C:\ Vusers\ uyokich\ App Data\ Local\ Civica\ VH5\ 3783a080-e662-4500-89be-26df3e227620\ 18df87dc-4631-434d-bf56-90bd3337284a\ scen
Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\18df87dc-4631-434d-bf$6-90bd3337284a\scen
DATE: 03/11/2024
                                           TIME: 11:36:38
USER:
COMMENTS:
```

```
0.250
                                                                                                                                                                                                                                                            0.85 | 6.250
                                                                                                                                                                                                                                                                                     1.54 | 12.250 | 11.06 | 18.25
                                                                                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                                                               0.333
                                                                                                                                                                                                                                                            0.85 6.333
                                                                                                                                                                                                                                                                                     1.54 12.333 11.06 | 18.33
      0.85 | 6.417
                                                                                                                                                                                                                                                                                     1.54 | 12.417
                                                                                                                                                                                                                                               0.500
                                                                                                                                                                                                                                                           0.85 | 6.500
                                                                                                                                                                                                                                                                                    1.54 12.500 11.06 | 18.50
                                                                                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                                                               0.583
                                                                                                                                                                                                                                                           0.85 | 6.583
                                                                                                                                                                                                                                                                                     1.54 12.583
                                                                                                                                                                                                                                                                                                            5.68 | 18.58
                                                                                                                                                                                                                                               0.667
                                                                                                                                                                                                                                                            0.85 6,667
                                                                                                                                                                                                                                                                                     1.54 12.667
                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                           0.85 | 6.750
0.84 | 6.833
                                                                                                                                                                                                                                                                                    1.54 | 12.750
1.54 | 12.833
                                                                                                                                                                                                                                                                                                             5.68 | 18.75
5.68 | 18.83
        READ STORM | Filename: C:\Users\nyokich\AppD
                                                                                                                                                                                                                                               0.750
                     ata\Local\Temp\
8a20bc98-3229-45bd-86a2-c24eba0248e6\f93665c7
                                                                                                                                                                                                                                               0.833
                                                                                                                                                                                                                                               0.917
                                                                                                                                                                                                                                                            0.85 | 6.917
                                                                                                                                                                                                                                                                                     1.54 112.917
                                                                                                                                                                                                                                                                                                             5.68 18.92
                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                            0.85 | 7.000
0.84 | 7.083
                                                                                                                                                                                                                                                                                                            5.68 | 19.00
4.15 | 19.08
    Ptotal= 76.80 mm | Comments: SCS_5yr
                                                                                                                                                                                                                                                                                     1.54 | 13.083
                                                                                                                                                                                                                                               1.083
                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                           0.85 | 7.167
0.85 | 7.250
                                                                                                                                                                                                                                                                                    1.54 | 13.167
1.54 | 13.250
                                                                                                                                                                                                                                                                                                            4.15 | 19.17
4.15 | 19.25
                     TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                                                                                                                1.167
                     1.250
                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                                                                           4.15 | 19.33
4.15 | 19.42
                                                                                                                                                                                                                                               1.333
                                                                                                                                                                                                                                                            0.85 | 7.333
                                                                                                                                                                                                                                                                                     1.54 13.333
                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                             0.85 7.417
                                                                                                                                                                                                                                                                                     1.54 13.417
                                                                                                                                                                                                                                               1.417
                               0.85 | 6.25 | 1.54 | 12.55 | 5.68 | 18.50 | 1.38 | 0.85 | 6.75 | 1.54 | 12.75 | 5.68 | 18.75 | 1.38 | 0.85 | 7.00 | 1.54 | 13.00 | 4.15 | 19.00 | 1.38 | 0.85 | 7.25 | 1.54 | 13.25 | 4.15 | 19.25 | 1.38 | 0.85 | 7.55 | 1.54 | 13.55 | 3.23 | 19.50 | 1.38 | 0.85 | 7.75 | 1.54 | 13.75 | 3.23 | 19.75 | 1.38 | 0.85 | 7.75 | 1.54 | 13.75 | 3.23 | 19.75 | 1.38 |
                     0.50
                                                                                                                                                                                                                                               1.500
                                                                                                                                                                                                                                                            0.85 | 7.500
                                                                                                                                                                                                                                                                                     1.54 [13.500]
                                                                                                                                                                                                                                                                                                             4.15 | 19.50
                                                                                                                                                                                                                                                                                                                                      1.38
                     0.75
1.00
                                                                                                                                                                                                                                               1.583
                                                                                                                                                                                                                                                            0.85 | 7.583
                                                                                                                                                                                                                                                                                    1.54 | 13.583
1.54 | 13.667
                                                                                                                                                                                                                                                                                                             3.23 | 19.58
                     1.25
                                                                                                                                                                                                                                               1.750
                                                                                                                                                                                                                                                           0.85 | 7.750
0.85 | 7.833
                                                                                                                                                                                                                                                                                     1.54 [13.750]
                                                                                                                                                                                                                                                                                                            3.23 | 19.75
3.23 | 19.83
                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                1.833
                                                                                                                                                                                                                                                                                     1.54 13.833
                     1.50
                                                                                                                                                                                                                                                            0.85 | 7.917
                                                                                                                                                                                                                                                                                                             3.23 | 19.92
                     1.75
                                                                                                                                                                                                                                               1.917
                                                                                                                                                                                                                                                                                     1.54 | 13.917
                                                                                                                                                                                                                                                                                                                                      1.38
                                1.00 | 8.00 | 2.07 | 14.00
1.00 | 8.25 | 2.07 | 14.25
                                                                             2.30 | 20.00
2.30 | 20.25
                                                                                                                                                                                                                                               2.000
2.083
                                                                                                                                                                                                                                                            0.85 | 8.000
1.00 | 8.083
                                                                                                                                                                                                                                                                                    1.54 | 14.000 | 2.07 | 14.083
                                                                                                                                                                                                                                                                                                             3.23 | 20.00
                     2.25
                                                                                                      0.92
                                                                                                                                                                                                                                                                                                            2.30 | 20.08
                                                                                                                                                                                                                                                                                                                                      0.92
                     2.50
                                1.00 | 8.50 | 2.07 | 14.50 | 2.30 | 20.50 | 1.00 | 8.75 | 2.07 | 14.75 | 2.30 | 20.75
                                                                                                                                                                                                                                               2 167
                                                                                                                                                                                                                                                            1 00 | 8 167
                                                                                                                                                                                                                                                                                    2.07 14.167
                                                                                                                                                                                                                                                                                                             2.30 | 20.17
                                                                                                                                                                                                                                                                                                                                      0.92
                                                                                                                                                                                                                                                                                   2.07 | 14.167 | 2.30 | 20.17
2.07 | 14.250 | 2.30 | 20.25
2.07 | 14.333 | 2.30 | 20.33
                                                                                                                                                                                                                                                             1.00 | 8.250

    1.00 | 9.00
    2.46 | 15.00
    2.30 | 21.00
    0.92

    1.00 | 9.25
    2.46 | 15.25
    2.30 | 21.25
    0.92

    1.00 | 9.50
    2.77 | 15.50
    2.30 | 21.50
    0.92

                     3.00
                                                                                                                                                                                                                                               2.333
                                                                                                                                                                                                                                                            1.00 | 8.333
                                                                                                                                                                                                                                                                                                                                     0.92
                                                                                                                                                                                                                                                            1.00 | 8.417
                                                                                                                                                                                                                                                                                   2.07 |14.417
2.07 |14.500
                                                                                                                                                                                                                                                                                                           2.30 | 20.42
2.30 | 20.50
                                                                                                                                                                                                                                               2.417
                     3.50
                                                                                                                                                                                                                                               2.500
                                                                                                                                                                                                                                                                                                                                      0.92
                                1.00 | 9.75 | 2.77 | 15.75
1.23 | 10.00 | 3.53 | 16.00
                                                                              2.30 | 21.75
1.38 | 22.00
                                                                                                                                                                                                                                               2.583
                                                                                                                                                                                                                                                            1.00 | 8.583
                                                                                                                                                                                                                                                                                   2.07 |14.583
2.07 |14.667
                                                                                                                                                                                                                                                                                                           2.30 | 20.58
                                                                                                                                                                                                                                                                                                                                     0.92
                                                                                                                                                                                                                                                             1.00 | 8.667
                                                                                                                                                                                                                                                                                                             2.30 | 20.67
                                                                                                                                                                                                                                               2.667
                                                                                                                                                                                                                                                                                                                                     0.92
                     4.00
                                                                                                        0.92
                                                       3.53 | 16.25
4.76 | 16.50
4.76 | 16.75
                                1.23 | 10.25
1.23 | 10.50
                                                                                1.38 | 22.25
1.38 | 22.50
                     4.25
                                                                                                        0.92
                                                                                                                                                                                                                                               2.750
                                                                                                                                                                                                                                                             1.00 | 8.750
                                                                                                                                                                                                                                                                                    2.07 114.750
                                                                                                                                                                                                                                                                                                             2.30 | 20.75
                                                                                                                                                                                                                                                                                                                                     0.92
                                                                                                                                                                                                                                                            1.00 | 8.833
1.00 | 8.917
                                                                                                                                                                                                                                                                                    2.07 |14.833
2.07 |14.917
                                                                                                                                                                                                                                                                                                            2.30 | 20.83 | 2.30 | 20.92
                                                                                                                                                                                                                                                2.833
                     4.75
                                1.23 | 10.75
                                                                                1.38 | 22.75
                                                                                                        0.92
                                                                                                                                                                                                                                               2.917
                                1.23 | 11.00 | 7.37 | 17.00 | 1.38 | 23.00 | 1.23 | 11.25 | 7.37 | 17.25 | 1.38 | 23.25
                                                                                                                                                                                                                                                            1.00 | 9.000
1.00 | 9.083
                     5.00
                                                                                                        0.92
                                                                                                                                                                                                                                               3.000
                                                                                                                                                                                                                                                                                   2.07 | 15.000 | 2.30 | 21.00
                                                                                                                                                                                                                                                                                                                                    0.92
                                                                                                                                                                                                                                                                                   2.46 | 15.083
2.46 | 15.167
                                                                                                                                                                                                                                                                                                            2.30 | 21.08
                                                                                                                                                                                                                                               3.083
                      5.25
                                                                                                        0.92
                     5.50
                               1.23 | 11.50 31.95 | 17.50
                                                                                 1.38 | 23.50
                                                                                                         0.92
                                                                                                                                                                                                                                               3.167
                                                                                                                                                                                                                                                             1.00 | 9.167
                                                                                                                                                                                                                                                                                                                                      0.92
                                                                                                                                                                                                                                               3.250
3.333
                                                                                                                                                                                                                                                            1.00 | 9.250
                                                                                                                                                                                                                                                                                   2.46 | 15.250 | 2.30 | 21.25
2.46 | 15.333 | 2.30 | 21.33
                      5.75 1.23 11.75 84.79 17.75 1.38 23.75 0.92
                                                                                                                                                                                                                                                                                                                                     0.92
                                                                                                                                                                                                                                                                                   2.46 | 15.417 | 2.30 | 21.42 | 2.46 | 15.500 | 2.30 | 21.50
                                                                                                                                                                                                                                               3 417
                                                                                                                                                                                                                                                            1.00 9.417
                                                                                                                                                                                                                                                                                                                                     0.92
                                                                                                                                                                                                                                                            1.00 | 9.500
                                                                                                                                                                                                                                               3.500
                                                                                                                                                                                                                                                                                                                                      0.92
                                                                                                                                                                                                                                                                                   2.76 | 15.583 | 2.30 | 21.58
2.77 | 15.667 | 2.30 | 21.67
2.77 | 15.750 | 2.30 | 21.75
                                                                                                                                                                                                                                               3.583
                                                                                                                                                                                                                                                            1.00 | 9.583
     CALIB
                                                                                                                                                                                                                                                             1.00 9.667
   1.00 | 9.750
                                                                                                                                                                                                                                                                                                                                      0.92
                                                                                                                                                                                                                                                                                   2.76 |15.833
2.77 |15.917
                                                                                                                                                                                                                                                                                                           2.30 | 21.83
2.30 | 21.92
                                                                                                                                                                                                                                               3 833
                                                                                                                                                                                                                                                            1.00 9.833
                                                                                                                                                                                                                                                                                                                                     0.92
                                                                                                                                                                                                                                                             1.00 | 9.917
                                                                                                                                                                                                                                               3.917
                                                                                                                                                                                                                                               4.000
                                                                                                                                                                                                                                                             1.00 10.000
                                                                                                                                                                                                                                                                                     2.77 16.000
                                                                                                                                                                                                                                                                                                             2.30 | 22.00
                                                                                                                                                                                                                                                                                                                                      0.92
                                                                                                                                                                                                                                                             1.23 |10.083
                                                                                                                                                                                                                                                                                     3.53 |16.083
            NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                               4.083
                                                                                                                                                                                                                                               4.167
                                                                                                                                                                                                                                                            1.23 | 10.167
                                                                                                                                                                                                                                                                                     3.53 | 16.167
                                                                                                                                                                                                                                                                                                              1.38 | 22.17
                                                                                                                                                                                                                                                                                                                                      0.92
                                                                                                                                                                                                                                               4.250
                                                                                                                                                                                                                                                            1.23 |10.250
1.23 |10.333
                                                                                                                                                                                                                                                                                    3.53 |16.250
3.53 |16.333
                                                                                                                                                                                                                                                                                                              1.38 | 22.25
1.38 | 22.33
                                                                                                                                                                                                                                               4.333
                                        - TRANSFORMED HYETOGRAPH -
                     TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
                                                                                                                                                                                                                                               4.417
                                                                                                                                                                                                                                                             1.23 [10.417]
                                                                                                                                                                                                                                                                                     3.53 [16.417]
                                                                                                                                                                                                                                                                                                              1.38 | 22.42
                                                                                                                                                                                                                                                           1.23 |10.500 3.53 |16.500 1.38 | 22.50
file:///V...49/20Updated9/20EA9/20Analysis/VO/Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20Detailed9/20Output/Existing9/20VO9/20
                                                                                                                                                                                                                                               1.54 | 12.167 | 11.06 | 18.17
1.54 | 12.250 | 11.06 | 18.25
                    4.583
                                1.23 | 10.583 | 4.76 | 16.583 | 1.38 | 22.58
                                 1.23 | 10.667 4.76 | 16.667 1.38 | 22.67
                    4.667
                                                                                                           0.92
                                                                                                                                                                                                                                                                                    1.54 | 12.333 | 11.06 | 18.33 | 1.54 | 12.417 | 11.06 | 18.42
                    4.750
                                  1.23 | 10.750 | 4.76 | 16.750 | 1.38 | 22.75
                                                                                                           0.92
                                                                                                                                                                                                                                               0.333
                                                                                                                                                                                                                                                           0.85 6.333
                                                                                                                                                                                                                                                                                                                                      1.38
                                                          4.76 |16.833
                                                                                   1.38 | 22.83
                                                                                                                                                                                                                                                            0.85 | 6.417
                    4.833
                                  1.23 | 10.833
                                                                                                           0.92
                    4.917
                                  1.23 10.917
                                                          4.76 16.917
                                                                                   1.38 | 22.92
                                                                                                                                                                                                                                               0.500
                                                                                                                                                                                                                                                            0.85 | 6.500
                                                                                                                                                                                                                                                                                     1.54 | 12.500 | 11.06 | 18.50
                                                                                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                                                                           0.85 | 6.583
0.85 | 6.667
                                                                                                                                                                                                                                                                                    1.54 | 12.583
1.54 | 12.667
                                                                                                                                                                                                                                                                                                             5.68 | 18.58
5.68 | 18.67
                                  1.23 |11.000
                                                          4.76 | 17.000
                                                                                                                                                                                                                                               0.583
                                                          7.37 |17.083
7.37 |17.167
7.37 |17.250
                                                                                                                                                                                                                                               0.667
                    5.083
                                  1.23 111.083
                                                                                   1.38 | 23.08
                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                  1.38 | 23.17
1.38 | 23.25
                                                                                                                                                                                                                                                           0.85 | 6.750
0.84 | 6.833
                                                                                                                                                                                                                                                                                    1.54 | 12.750
1.54 | 12.833
                                                                                                                                                                                                                                                                                                             5.68 | 18.75
5.68 | 18.83
                    5.167
                                  1.23 |11.167
                                                                                                                                                                                                                                               0.750
                                  1.23 |11.250
                     5.250
```

```
5.333
                1.23 111.333
                              7.37 17.333
                                           1.38 | 23.33
                 1.23 |11.417
                              7.37 |17.417
                                            1.38 | 23.42
         5,500
                1.23 111.500
                              7.37 17.500 1.38 23.50
                                                         0.92
         5.583
                1.23 |11.583 31.95 |17.583
1.23 |11.667 31.95 |17.667
                                            1.38 | 23.67
         5.667
                                                          0.92
                1.23 | 11.750 | 31.95 | 17.750 | 1.38 | 23.75 | 1.23 | 11.833 | 84.78 | 17.833 | 1.38 | 23.83 | 1.23 | 11.917 | 84.79 | 17.917 | 1.38 | 23.92
         5 750
         5.917
                                                          0.92
         6.000 1.23 | 12.000 84.79 | 18.000 1.38 | 24.00
  Unit Hyd Qpeak (cms)= 0.977
  PEAK FLOW
   PEAK FLOW (cms)= 0.854 (i)
TIME TO PEAK (hrs)= 12.833
  RUNOFF VOLUME (mm)= 41.634
TOTAL RAINFALL (mm)= 76.801
RUNOFF COEFFICIENT = 0.542
  (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
Junction Command(0005)
               AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)
INFLOW: ID= 2( 0115) 23.79 0.85 12.83 41.63
OUTFLOW: ID= 2( 0005) 23.79 0.85 12.83 41.63
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                    - TRANSFORMED HYETOGRAPH --
         0.083 0.85 | 6.083 1.54 | 12.083 11.07 | 18.08 1.38
                                                      %20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]
```

```
0.917
         0.85 | 6.917
                                                                   1.38
         0.85 | 7.000
0.84 | 7.083
1.083
                                                                   1.38
         0.85 | 7.167
1.167
1.250
         0.85 7.250
                                                                   1.38
                                              4.15 | 19.33
4.15 | 19.42
4.15 | 19.50
1.333
         0.85 | 7.333
         0.85 | 7.417
0.85 | 7.500
                            1.54 | 13.417
1.54 | 13.500
1.500
                                                                   1.38
                            1.54 | 13.583
1.54 | 13.667
1.54 | 13.750
                                              3.23 | 19.58
3.23 | 19.67
1.583
         0.85 7.583
                                                                   1.38
         0.85 | 7.583

0.85 | 7.667

0.85 | 7.750

0.85 | 7.833

0.85 | 7.917
1.667
1 750
                                                3 23 1 19 75
                                                                   1.38
                             1.54 | 13.833
                                                3.23 | 19.92
1.917
                            1.54 13.917
                                                                   1.38
                            1.54 | 14.000
2.07 | 14.083
                                               3.23 | 20.00
2.30 | 20.08
         0.85 | 8.000
2.083
         1.00 | 8.083
                                                                   0.92
2.167
2.250
         1.00 | 8.167
1.00 | 8.250
                            2.07 | 14.167
2.07 | 14.250
2.07 | 14.333
                                               2.30 | 20.17
2.30 | 20.25
                                                                   0.92
          1.00 | 8.333
2.333
                                               2.30 | 20.33
                                                                  0.92
2.417
          1.00 | 8.417
1.00 | 8.500
                            2.07 |14.417
                                               2.30 | 20.42
                                                                  0.92
2.500
                                                                   0.92
2.583
          1.00 | 8.583
                            2.07 14.583 2.30 | 20.58
                                                                  0.92
          1.00 | 8.667
                            2.07 | 14.667 | 2.30 | 20.67
2.07 | 14.750 | 2.30 | 20.75
2.750
          1.00 | 8.750
                                                                  0.92
2.833
          1.00 | 8.833
                            2.07 | 14.833
2.07 | 14.917
                                              2.30 | 20.83
2.30 | 20.92
          1.00 | 8.917
2.917
                                                                  0.92
3.000
          1.00 | 9.000
                            2.07 | 15.000 | 2.30 | 21.00
                                                                  0.92
          1.00 | 9.083
                            2.46 |15.083
                                                2.30 | 21.08
3.083
3.167
          1.00 | 9.167
                            2.46 15.167
                                                2.30 | 21.17
                                                                  0.92
          1.00 9.250
                            2.46 | 15.250
                                                2.30 | 21.25
3.333
          1.00 | 9.333
                            2.46 | 15.333
                                               2.30 | 21.33
                                                                   0.92
         1.00 | 9.417
1.00 | 9.500
1.00 | 9.583
                            2.46 | 15.333

2.46 | 15.417

2.46 | 15.500

2.76 | 15.583

2.77 | 15.667

2.77 | 15.750
                                              2.30 | 21.33
2.30 | 21.42
2.30 | 21.50
2.30 | 21.67
2.30 | 21.67
2.30 | 21.75
3.417
3.583
                                                                  0.92
3.667
3.750
          1.00 | 9.667
1.00 | 9.750
3.833
          1.00 | 9.833
                            2.76 | 15.833 | 2.30 | 21.83
2.77 | 15.917 | 2.30 | 21.92
                                                                  0.92
3.917
          1.00 | 9.917
4.000
          1.00 110.000
                             2.77 | 16.000 | 2.30 | 22.00
                                                                   0.92
4.083
          1.23 |10.083
                             3.53 |16.083
                                                1.38 | 22.08
4.167
          1.23 | 10.167
                             3.53 16.167
                                                 1.38 | 22.17
                                                                   0.92
          1.23 |10.250
1.23 |10.333
                            3.53 |16.250
3.53 |16.333
4.250
                                                1.38 | 22.25
4.333
                                                1.38 | 22.33
                             3.53 16.417 1.38 22.42 0.92
4.417
         1.23 110.417
          1.23 |10.500
                                                1.38 | 22.50
4.583
         1.23 | 10.583 | 4.76 | 16.583 | 1.38 | 22.58
```

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1.23 | 10.667 | 4.76 | 16.667 | 1.38 | 22.67 | 1.23 | 10.750 | 4.76 | 16.750 | 1.38 | 22.75
             4.667
             4.750
                                                                      0.92
             4.833
                      1.23 | 10.833
                                      4.76 16.833
                                                      1.38 | 22.83
                                      4.76 |16.917
4.76 |17.000
                                                      1.38 | 22.92
1.38 | 23.00
                      1.23 |10.917
                      1.23 |11.000
                                      7.37 |17.083
7.37 |17.167
             5.083
                      1 23 111 083
                                                      1 38 | 23 08
                                                                      0.92
                                                      1.38 | 23.17
                      1.23 |11.167
             5.250
                      1.23 111.250
                                      7.37 17.250
                                                      1.38 | 23.25
                                     7.37 | 17.333
7.37 | 17.417
                      1.23 |11.333
                                                      1.38 | 23.33
             5.417
                      1.23 11.417
                                                      1.38 23.42
             5.500
                      1.23 11.500
                                     7.37 17.500
                                                      1.38 | 23.50
                      1.23 |11.583 | 31.95 |17.583
                                                       1.38 | 23.58
             5.667
                      1.23 111.667 31.95 17.667
                                                      1.38 | 23.67
                      1.23 |11.750 31.95 |17.750
                     1.23 11.833 84.78 17.833 1.38 23.83
             5.833
                                                                      0.92
                     1.23 |11.917 | 84.79 |17.917 | 1.38 | 23.92 | 1.23 |12.000 | 84.79 |18.000 | 1.38 | 24.00
      Unit Hyd Qpeak (cms)= 0.869
     PEAK FLOW (cms)= 0.690 (i)
TIME TO PEAK (hrs)= 12.667
RUNOFF VOLUME (mm)= 40.416
TOTAL RAINFALL (mm)= 76.801
RUNOFF COEFFICIENT = 0.526
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   CALIB
   STANDHYD ( 0105)| Area (ha)= 7.90
  |ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                      IMPERVIOUS PERVIOUS (i)
     | Surface Area | (ha)= | 1.58 | 6.32 |
| Dep. Storage | (mm)= | 2.00 | 5.00 |
| Average Slope | (%s)= | 2.00 | 5.00 |
| Length | (m)= | 50.00 | 250.00 |
| Mannings n = | 0.013 | 0.250 |
                                              5.00
        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                          - TRANSFORMED HYETOGRAPH -
              TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                     0.85 | 6.083 | 1.54 | 12.083 | 11.07 | 18.08
0.85 | 6.167 | 1.54 | 12.167 | 11.06 | 18.17
             0.083
                                     1.54 | 12.250 | 11.06 | 18.25
1.54 | 12.333 | 11.06 | 18.33
             0.250 0.85 | 6.250
                                                                      1.38
             0.333
                     0.85 | 6.333
             0.417
                      0.85 | 6.417
                                      1.54 | 12.417 | 11.06 | 18.42
                                                                      1.38
             0.500 0.85 | 6.500 1.54 | 12.500 11.06 | 18.50 1.38 
0.583 0.85 | 6.583 1.54 | 12.583 5.68 | 18.58 1.38
1.23 | 11.250 7.37 | 17.250 1.38 | 23.25
             5.250
                      5 333
                                                                     0.92
             5.417
                      1.23 111.500
                                     7.37 17.500
                                                      1.38 | 23.50
                      1.23 |11.583 31.95 |17.583
                                                      1.38 | 23.58
             5.667
                      1.23 111.667 31.95 117.667
                                                      1.38 | 23.67
                                                                      0.92
                      1.23 | 11.050 | 31.95 | 17.750 | 1.38 | 23.75 | 1.23 | 11.833 | 84.78 | 17.833 | 1.38 | 23.83 | 1.23 | 11.917 | 84.79 | 17.917 | 1.38 | 23.92
             5.833
                                                                      0.92
             5.917
```

```
1.54 | 12.667 | 5.68 | 18.67
1.54 | 12.750 | 5.68 | 18.75
0.667 0.85 6.667
0.750
         0.85 | 6.750
                                              5.68 | 18.83
0.833
         0.84 | 6.833
                            1.54 | 12.833
                                                                 1.38
          0.85 6.917
                            1.54 112.917
                                               5.68 | 18.92
          0.85 | 7.000
                            1.54 | 13.000
1.083
        0.84 | 7.083
                            1.54 113.083
                                              4.15119.08
                                                                 1.38
         0.85 | 7.167
0.85 | 7.250
                            1.54 13.167
1.250
                            1.54 | 13.250
                                              4.15 | 19.25
                                                                 1.38
        0.85 | 7.333
0.85 | 7.417
0.85 | 7.500
                            1.54 | 13.333
1.54 | 13.417
                                              4.15 | 19.33
4.15 | 19.42
1.333
1.417
1.500
                            1.54 | 13.500
                                              4.15 | 19.50
                                                                 1.38
         0.85 | 7.583
                            1.54 13.583
         0.85 | 7.667
                            1.54 113.667
                                              3.23 | 19.67
1.667
                                                                 1.38
1.750
        0.85 | 7.750
0.85 | 7.833
                            1.54 [13.750]
1.833
                            1.54 13.833
                                              3.23 19.83
                                                                 1.38
                                              3.23 | 19.92
3.23 | 20.00
1.917
         0.85 | 7.917
                            1.54 13.917
                                                                 1.38
          0.85 8.000
                            1.54 | 14.000
2.083
         1.00 | 8.083
                           2.07 114 083
                                              2.30 | 20.08
                                                                 0.92
         1.00 | 8.167
                           2.07 |14.167
2.07 |14.250
                                              2.30 | 20.17
2.333
         1.00 | 8.333
                           2.07 114.333
                                             2.30 | 20.33
                                                                0.92
                           2.07 |14.417 | 2.07 |14.500
                                             2.30 | 20.42
2.417
          1.00 | 8,417
2.500
          1.00 | 8.500
                                                                0.92
2.583
         1.00 | 8.583
1.00 | 8.667
                          2.07 |14.583 | 2.30 | 20.58
2.07 |14.667 | 2.30 | 20.67
2.667
                                                                 0.92
                                              2.30 | 20.75
2.30 | 20.83
2.30 | 20.92
2.750
          1 00 | 8 750
                           2.07 14.750
                                                                0.92
                           2.07 |14.833 | 2.07 |14.917
          1.00 | 8.833
2.917
          1.00 | 8.917
                                                                0.92
         1.00 | 9.000
                          2.07 | 15.000 | 2.30 | 21.00 | 2.46 | 15.083 | 2.30 | 21.08
3.083
                                                                0.92
3.167
         1.00 | 9.167
1.00 | 9.250
                          2.46 | 15.167 | 2.30 | 21.17 | 2.46 | 15.250 | 2.30 | 21.25
                                                                0.92
3.250
3.333
          1.00 | 9.333
                           2.46 | 15.333 | 2.30 | 21.33
                                                                0.92
3.417
3.500
         1.00 | 9.417
                           2.46 | 15.417 | 2.30 | 21.42 | 2.46 | 15.500 | 2.30 | 21.50
                           2.76 | 15.583 | 2.30 | 21.58
2.77 | 15.667 | 2.30 | 21.67
2.77 | 15.750 | 2.30 | 21.75
3.583
         1.00 | 9.583
                                                                0.92
          1.00 9.667
3.750
          1.00 | 9.750
                                                                0.92
         1.00 | 9.833
                           2.76 | 15.833 | 2.30 | 21.83
2.77 | 15.917 | 2.30 | 21.92
3 833
3.917
                                                                 0.92
         1.00 | 10.000 | 2.77 | 16.000 | 2.30 | 22.00 | 1.23 | 10.083 | 3.53 | 16.083 | 1.38 | 22.08
4.000
                                                                 0.92
4.083
                                                                 0.92
                            3.53 | 16.167 | 1.38 | 22.17
3.53 | 16.250 | 1.38 | 22.25
4.167
          1.23 10.167
                                               1.38 | 22.17
          1.23 |10.250
4.333
          1.23 [10.333]
                            3.53 | 16.333
                                               1.38 | 22.33
4 417
          1.23 10.417
                            3.53 16.417 1.38 22.42
          1.23 |10.500
                            3.53 |16.500
                                               1.38 | 22.50
4.583
          1.23 10.583
                            4.76 16.583
                                               1.38 | 22.58
          1.23 | 10.667
                            4.76 | 16.667
          1.23 | 10.750
4.750
                            4.76 116.750
                                               1.38 | 22.75
                                                                 0.92
          1.23 |10.833
1.23 |10.917
4.833
                            4.76 |16.833
4.76 |16.917
                                               1.38 | 22.83
1.38 | 22.92
4.917
         1.23 | 11.000 | 4.76 | 17.000 | 1.38 | 23.00 | 1.23 | 11.083 | 7.37 | 17.083 | 1.38 | 23.08
5.000
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6.000 1.23 | 12.000 84.79 | 18.000 1.38 | 24.00 0.92
                                                  ../9 37.74
30.00
5 (iii)
    Max.Eff.Inten.(mm/hr)= 84.79
over (min) 5.00 30.0
     Storage Coeff. (min)= 1.46 (ii) 25.24 (ii) Unit Hyd. Tpeak (min)= 5.00 30.00 Unit Hyd. peak (cms)= 0.33 0.04
                                                      *TOTALS*

        PEAK FLOW
        (cms)=
        0.19
        0.40
        0.422 (iii)

        TIME TO PEAK
        (hrs)=
        12.00
        12.33
        12.33

        RUNOFF VOLUME
        (mm)=
        74.80
        36.44
        40.28

        TOTAL RAINFALL
        (mm)=
        76.80
        76.80
        76.80

        RUNOFF COEFFICIENT
        0.97
        0.47
        0.52

**** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
**** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
             YOU SHOULD CONSIDER SPLITTING THE AREA.
      (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
     CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
           THAN THE STORAGE COEFFICIENT.
     (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
  1+2=3 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1=1 (0105): 7.90 0.422 12.33 40.28

+ ID2=2 (0110): 16.60 0.690 12.67 40.42
       ID = 3 ( 0006): 24.50 1.054 12.42 40.37
    NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
CALIB
| NASHYD ( 0100) | Area (ha)= 23.46 Curve Number (CN)= 80.0 | ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                       -- U.H. Tp(hrs)= 0.49
        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
```

```
- TRANSFORMED HYETOGRAPH -
TIME RAIN | TIME R
0.167
1.54 |12.250 | 11.06 | 18.25
1.54 |12.333 | 11.06 | 18.33
0.417
                   0.85 | 6.417
                                                             1.54 | 12.417 | 11.06 | 18.42
                                                                                                                                               1.38
                                                          1.54 | 12.417 | 11.06 | 18.42

1.54 | 12.500 | 11.06 | 18.50

1.54 | 12.583 | 5.68 | 18.58

1.54 | 12.667 | 5.68 | 18.67

1.54 | 12.750 | 5.68 | 18.75
0.500 0.85 | 6.500
0.583 0.85 | 6.583
                                                                                                                                            1.38
0.667
0.750
                   0.85 | 6.667
0.85 | 6.750
                                                           1.54 | 12.833 | 5.68 | 18.83
1.54 | 12.917 | 5.68 | 18.92
1.54 | 13.000 | 5.68 | 19.00
0.833
                    0.84 6.833
                   0.85 | 6.917
0.85 | 7.000
1.000
                                                                                                                                            1.38
                   0.84 | 7.083
0.85 | 7.167
0.85 | 7.250
                                                           1.54 | 13.083 | 4.15 | 19.08
1.54 | 13.167 | 4.15 | 19.17
1.083
                                                                                                                                            1.38
1.167
1 250
                                                             1.54 113 250
                                                                                                  4 15 1 19 25
 1.333
                   0.85 | 7.333
0.85 | 7.417
                                                           1.417
                                                                                                                                            1.38
1.500
1.583
                   0.85 | 7.500
0.85 | 7.583
                                                           1.54 | 13.500 | 4.15 | 19.50
1.54 | 13.583 | 3.23 | 19.58
                                                                                                                                            1.38
1.667
1.750
                   0.85 | 7.667
0.85 | 7.750
0.85 | 7.833
                                                            1.54 | 13.667
1.54 | 13.750
                                                                                                    3.23 | 19.67
3.23 | 19.75
                                                            1.54 13.833
1.833
                                                                                                    3.23 | 19.83
                                                                                                                                            1.38
1.917
                   0.85 | 7.917
0.85 | 8.000
                                                           1.54 |13.917
1.54 |14.000
                                                                                                    3.23 | 19.92
3.23 | 20.00
                                                                                                                                            1 38
2.000
                                                                                                                                            1.38
2.083
                    1.00 | 8.083
                                                           2.07 |14.083
                                                                                                    2.30 | 20.08
                                                                                                                                            0.92
                      1.00 | 8.167
                                                          2.07 | 14.167 | 2.30 | 20.17
2.07 | 14.250 | 2.30 | 20.25
2.250
                    1.00 | 8.250
                                                                                                                                          0.92
2 333
                     1.00 | 8.333
                                                          2.07 | 14.333
2.07 | 14.417
                                                                                                   2.30 | 20.33 | 20.42
2.417
                     1.00 | 8.417
2.500
                     1.00 8.500
                                                          2 07 14 500 2 30 20 50
                                                                                                                                           0.92
                                                          2.07 |14.583
                      1.00 | 8.583
2.667
                     1.00 | 8.667
                                                                                                    2.30 | 20.67
                                                                                                                                           0.92
                      1.00 | 8.750
                                                          2.07 | 14.750 | 2.30 | 20.75
2.07 | 14.833 | 2.30 | 20.83
2.833
                     1.00 | 8.833
                                                                                                                                           0.92
                                                          2.07 | 14.917 | 2.30 | 20.92 | 2.07 | 15.000 | 2.30 | 21.00 | 2.46 | 15.083 | 2.30 | 21.08
                     1.00 | 8.917
2.917
3.083
                     1.00 9.083
                                                                                                                                          0.92
3.167
3.250
                     1.00 | 9.167
1.00 | 9.250
                                                           2.46 | 15.167
2.46 | 15.250
                                                                                                   2.30 | 21.17 | 2.30 | 21.25
3.333
                     1.00 9.333
                                                          2.46 | 15.333 | 2.30 | 21.33 | 2.46 | 15.417 | 2.30 | 21.42
                                                                                                                                          0.92
                      1.00 | 9.417
3.500
                     1.00 | 9.500
                                                           2.46 | 15.500
                                                                                                 2.30 | 21.50
                                                                                                                                          0.92
                                                          2.46 | 15.500 | 2.30 | 21.50 | 2.76 | 15.583 | 2.30 | 21.58 | 2.77 | 15.667 | 2.30 | 21.67 | 2.77 | 15.750 | 2.30 | 21.75 | 2.76 | 15.833 | 2.30 | 21.83
3.583
                      1.00 9.583
3.667
                      1.00 | 9.667
                                                                                                                                           0.92
3 750
                      1.00 | 9.750
                                                                                                                                           0.92
3.833
                     1.00 | 9.833
                    1.00 | 9.917 | 2.77 | 15.917 | 2.30 | 21.92 | 0.92 | 1.00 | 10.000 | 2.77 | 16.000 | 2.30 | 22.00 | 0.92
3.917
4.083
                   1.23 10.083 3.53 16.083 1.38 | 22.08
```

4.167 1.23 | 10.167 3.53 | 16.167 1.38 | 22.17 0.92 
4.250 1.23 | 10.250 3.53 | 16.250 1.38 | 22.25 0.92 
4.333 1.23 | 10.333 3.53 | 16.333 1.38 | 22.33 0.92 
4.417 1.23 | 10.417 3.53 | 16.417 1.38 | 22.42 0.92 
4.500 1.23 | 10.500 3.53 | 16.500 1.38 | 22.50 0.92 
4.683 1.23 | 10.583 4.76 | 16.583 1.38 | 22.58 0.92 
4.667 1.23 | 10.567 4.76 | 16.667 1.38 | 22.67 0.92 
4.750 1.23 | 10.750 4.76 | 16.750 1.38 | 22.75 0.92 
4.750 1.23 | 10.917 4.76 | 16.750 1.38 | 22.75 0.92 
4.833 1.23 | 10.833 4.76 | 16.833 1.38 | 22.83 0.92 
4.917 1.23 | 10.917 4.76 | 16.917 1.38 | 22.92 0.92 
5.000 1.23 | 11.003 7.76 | 17.080 1.38 | 23.00 0.92 
5.003 1.23 | 11.083 7.37 | 17.083 1.38 | 23.38 0.92 
5.167 1.23 | 11.167 7.37 | 17.167 1.38 | 23.17 0.92 
5.250 1.23 | 11.250 7.37 | 17.250 1.38 | 23.25 0.92 
5.333 1.23 | 11.333 7.37 | 17.333 1.38 | 23.33 0.92 
5.417 1.23 | 11.417 7.37 | 17.417 1.38 | 23.42 0.92 
5.500 1.23 | 11.500 7.37 | 17.500 1.38 | 23.50 0.92 
5.583 1.23 | 11.583 31.95 | 17.567 1.38 | 23.57 0.92 
5.833 1.23 | 11.583 31.95 | 17.567 1.38 | 23.57 0.92 
5.583 1.23 | 11.583 31.95 | 17.567 1.38 | 23.57 0.92 
5.583 1.23 | 11.383 84.78 | 17.833 1.38 | 23.38 0.92 
5.591 1.23 | 11.300 | 34.79 | 17.917 1.38 | 23.57 0.92 
5.333 1.23 | 11.333 84.78 | 17.833 1.38 | 23.38 0.92 
5.167 1.23 | 11.467 31.95 | 17.567 1.38 | 23.67 0.92 
5.591 1.23 | 11.917 84.79 | 17.917 1.38 | 23.57 0.92 
5.833 1.23 | 11.918 84.79 | 17.917 1.38 | 23.92 0.92 
6.000 1.23 | 12.000 84.79 | 18.000 1.38 | 24.00 0.92 

Hyd Opeak (cms)= 1.829

Unit Hyd Qpeak (cms)= 1.829

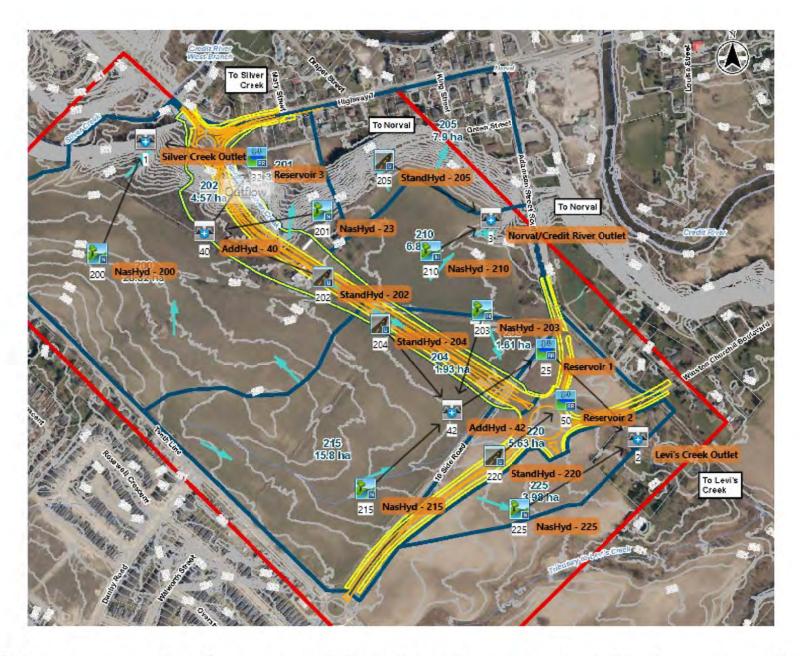
PEAK FLOW (cns)= 1.214 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm)= 38.101
TOTAL RAINFALL (mm)= 76.801
RUNOFF COEFFICIENT = 0.496

(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Junction Command(0007)

AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) INFLOW : ID= 2( 0100) 23.46 1.21 12.33 38.10 OUTFLOW: ID= 2( 0007) 23.46 1.21 12.33 38.10

file:///V...4%20Updated%20EA%20Analysis/VO/Detailed%20Output/Existing%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:41:21 AM]



Proposed Visual OTTHYMO Model Schematic

```
(v 6.2.2015)
                  VV I SSSSS UUUUUU A A LLLLL
              OOO TTTTT TTTTT H H Y Y M M OOO TM O O T T H H H YY MM MM O O O O O T T H H Y Y M M O O OOO T T H H Y M M OOO
      Developed and Distributed by Smart City Water Inc
      Copyright 2007 - 2022 Smart City Water Inc
      All rights reserved.
                                 ***** DETAILED OUTPUT*****
       Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
      Output filename: C:\Users\uyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\fdde7515-2b95-4df9-a0cc-aa6a34689c68\scen
        Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-
      26df3e227620\fdde7515-2b95-4df9-a0cc-aa6a34689c68\scen
      DATE: 03/11/2024 TIME: 11:39:29
      USER:
      COMMENTS:
       ** SIMULATION : Chicago_100yr **
           READ STORM | Filename: C:\Users\nyokich\AppD
                                              ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\dd8f026f
       Ptotal= 82.62 mm | Comments: Chicago_100yr
                             TIME RAIN | ITIME RAIN
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
              (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
```

```
| (ALID | | (ANSHYD ( 0210) | Area (ha)= 6.83 Curve Number (CN)= 83.0 | (ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (U.H. Tp(hrs)= 0.54
                    Unit Hyd Qpeak (cms)= 0.483
                      PEAK FLOW (cms)= 0.625 (i)
TIME TO PEAK (hrs)= 2.000
                    RUNOFF VOLUME (mm)= 46.468
TOTAL RAINFALL (mm)= 82.617
RUNOFF COEFFICIENT = 0.562
                    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
           | STANDHYD ( 0205)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                  Max.Eff.Inten.(mm/hr)= 206.77
                   | Max.Eff.Inten.(mm/mr)= 206.77 | 73.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.00 | 75.0
                    PEAK FLOW (cms)= 0.43 0.78
TIME TO PEAK (hrs)= 1.42 1.75
                  TIME TO PEAK (hrs)= 1.42 1.75 1.75
RUNOFF VOLUME (mm)= 80.62 40.88 44.86
TOTAL RAINFALL (mm)= 82.62 82.62 82.62
RUNOFF COEFFICIENT = 0.98 0.49 0.54
             ***** WARNING: STORAGE COEFF, IS SMALLER THAN TIME STEP!
           ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20% YOU SHOULD CONSIDER SPLITTING THE AREA.
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
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```
CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
       THAN THE STORAGE COEFFICIENT.
   (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
ADD HYD ( 0003)
 | 1+2=3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1=1 (0205): 7.90 0.851 1.75 44.86 | HD2=2 (0210): 6.83 0.625 2.00 46.47
    ID = 3 ( 0003): 14.73 1.400 1.83 45.60
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
CALIB
Unit Hyd Qpeak (cms)= 1.805
  PEAK FLOW (cms)= 1.981 (i)
TIME TO PEAK (hrs)= 1.833
RUNOFF VOLUME (mm)= 42.687
TOTAL RAINFALL (mm)= 82.617
RUNOFF COEFFICIENT = 0.517
   (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
CALIB
Unit Hyd Qpeak (cms)= 0.757
  PEAK FLOW (cms)= 0.509 (i)
TIME TO PEAK (hrs)= 1.500
RUNOFF VOLUME (mm)= 39.073
TOTAL RAINFALL (mm)= 82.617
RUNOFF COEFFICIENT = 0.473
   (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

```
CALIB
| STANDHYD ( 0202)| Area (ha)= 4.57
|ID=1 DT=5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
                                             IMPERVIOUS PERVIOUS (i)
        Max.Eff.Inten.(mm/hr)= 206.77 49.81
over (min) 5.00 40.00
        over (min) 5.00 40.00
Storage Coeff. (min)= 3.10 (ii) 35.34 (ii)
Unit Hyd. Tpeak (min)= 5.00 40.00
Unit Hyd. peak (cms)= 0.27 0.03
**TOTALS*
        ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
            (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
           CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
         THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
| ADD HYD ( 0040)|
| 1 + 2 = 3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1 = 1 ( 0201): 3.17 0.509 1.50 39.07 | + ID2 = 2 ( 0202): 4.57 0.800 1.42 51.61
              ID = 3 ( 0040): 7.74 1.176 1.42 46,47
        NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
  RESERVOIR( 0032)| OVERFLOW IS OFF
| IN=2--> OUT=1 | | | OUTFLOW STORAGE | OUTFLOW 
                                               0.0000 0.0000 | 0.1020 0.2824

0.0400 0.1208 | 0.1160 0.3268

0.0640 0.1775 | 0.1330 0.3659
                                                 0.0790 0.2218 | 0.0000
                                                                                                                                               0.0000
```

```
(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                       AREA QPEAK TPEAK R.V.
    (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0040) 7.740 1.176 1.42 46.47
OUTFLOW: ID= 1 ( 0032) 7.740 0.103 3.25 46.38
                                                                                                                                              CALIB
                                                                                                                                              | STANDHYD ( 0204)| Area (ha)= 1.93
|ID=1 DT=5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
               PEAK FLOW REDUCTION [Qout/Qin](%)= 8.72
              TIME SHIFT OF PEAK FLOW (min)=110.00
MAXIMUM STORAGE USED (ha.m.)= 0.2842
                                                                                                                                                                IMPERVIOUS PERVIOUS (i)
                                                                                                                                                 Surface Area (ha)= 1.16 0.77

Dep. Storage (mm)= 2.00 5.00

Average Slope (%)= 1.00 1.00

Length (m)= 300.00 300.00

Mannings u = 0.013 0.250
  (ha) (cms) (hrs) (mm)

ID1=1 ( 0200): 20.32 1.981 1.83 42.69

+ ID2=2 ( 0032): 7.74 0.103 3.25 46.38

        Max.Eff.Inten.(mm/hr)=
        206.77
        55.58

        over (min)
        5.00
        45.00

        Storage Coeff. (min)=
        3.69 (ii)
        40.51 (ii)

        Unit Hyd. Tpeak (nin)=
        5.00
        45.00

        Unit Hyd. peak (cms)=
        0.25
        0.03

        *TOTALS*

       ID = 3 ( 0001): 28.06 2.051 1.92 43.70
                                                                                                                                                 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   CALIB
  ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                  (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
     Unit Hyd Qpeak (cms)= 0.862
                                                                                                                                                  CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
     PEAK FLOW (cms)= 1.195 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 46.469
TOTAL RAINFALL (mm)= 82.617
RUNOFF COEFFICIENT = 0.562
                                                                                                                                                 THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                              ADD HYD ( 0042)
                                                                                                                                             ID = 3 ( 0042): 3.54 0.580 1.42 49.80
      Unit Hyd Qpeak (cms)= 0.256
                                                                                                                                                 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
      PEAK FLOW (cms)= 0.202 (i)
TIME TO PEAK (hrs)= 1.667
      RUNOFF VOLUME (mm)= 38.135
TOTAL RAINFALL (mm)= 82.617
                                                                                                                                                3+2=1 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1=3 ( 0042): 3.54 0.580 1.42 49.80
      RUNOFF COEFFICIENT = 0.462
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                                                                                                          file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
      + ID2= 2 ( 0215): 15.80 1.195 2.17 46,47
                                                                                                                                                Max.Eff.Inten.(mm/hr)= 200, // 0,000 cver (min) 5.00 10.00 Storage Coeff. (min)= 2.69 (ii) 9.44 (ii) Unit Hyd. Tpeak (min)= 5.00 10.00 Unit Hyd. peak (cms)= 0.29 0.12 *TOTALS*
       ID = 1 ( 0042): 19.34 1.381 2.17 47.08
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                 RESERVOIR( 0025)| OVERFLOW IS OFF
   IN= 2---> OUT= 1
   DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                   ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                  (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                       AREA QPEAK TPEAK R.V.
                                                                                                                                                  CN* = 80.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
    | (ha) (cms) (hrs) (cms) (mm) | NFLOW: ID= 2 ( 0042) | 19.340 | 1.381 | 2.17 | 47.08 | OUTFLOW: ID= 1 ( 0025) | 19.340 | 0.653 | 3.25 | 47.07
                                                                                                                                                 (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
```

ID = 1 ( 0002): 28.95 1.200 2.08 48.67 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. FINISH (v 6.2.2015) V V I SS U U A A L VV I SSSSS UUUUU A A LLLLL 000 TTTTT TTTTT H H Y Y M M 000 TM 0 0 T T H H H YY MM MM 0 0 0 0 0 T T H H H Y M M 0 0 000 T T H H Y M M 000 CALIB Developed and Distributed by Smart City Water Inc Copyright 2007 - 2022 Smart City Water Inc All rights reserved. \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\* Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\cc7de86bd983-419b-b502-d3da09e63189\scen Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\cc7de86b-d983-419b-b502-d3da09e63189\scen CALIB DATE: 03/11/2024 TIME: 11:39:28 USER: COMMENTS: file:///V....%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM] Max.Eff.Inten.(mm/hr)= 144.84 34.31

\* SIMULATION : Chicago 10yr \*\* READ STORM | Filename; C:\Users\nyokich\AppD ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\964de38b Ptotal= 55.07 mm | Comments: Chicago\_10yr TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN IIME RAIN | IIME RAIN | IIME RAIN | IIME | HIME RAIN | IIME | HIME | HIM Unit Hyd Qpeak (cms)= 0.483 PEAK FLOW (cms)= 0.327 (i) TIME TO PEAK (hrs)= 2.000 RUNOFF VOLUME (mm)= 24.558 TOTAL RAINFALL (mm)= 55.074 RUNOFF COEFFICIENT = 0.446 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. | STANDHYD ( 0205)| Area (ha)= 7.90 |ID=1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00 IMPERVIOUS PERVIOUS (i) file:////...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]

PEAK FLOW (cms)= 0.29 0.33 0.368 (iii)
TIME TO PEAK (hrs)= 1.42 1.92 1.83
RUNOFF VOLUME (mm)= 55.07 21.02 24.23
TOTAL RANFALL (mm)= 55.07 55.07
RUNOFF COEFFICIENT = 0.96 0.38 0.44 \*\*\*\* WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP! \*\*\*\*\* WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20% YOU SHOULD CONSIDER SPLITTING THE AREA. (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. ID = 3 ( 0003): 14.73 0.682 1.92 24.38 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. Unit Hyd Qpeak (cms)= 1.805 PEAK FLOW (cms)= 1.019 (i) TIME TO PEAK (hrs)= 1.917 RUNOFF VOLUME (mm)= 22.075 TOTAL RAINFALL (mm)= 55.074 RUNOFF COEFFICIENT = 0.401 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.

Unit Hyd Qpeak (cms)= 0.757 PEAK FLOW (cms)= 0.257 (i) TIME TO PEAK (hrs)= 1.583 RUNOFF VOLUME (mm)= 19.819 TOTAL RAINFALL (mm)= 55.074 RUNOFF COEFFICIENT = 0.360 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. STANDHYD ( 0202) Area (ha)= 4.57 ID= 1 DT= 5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00 IMPERVIOUS PERVIOUS (i) Max.Eff.Inten.(mm/hr)= 144.84 20.16 over (min) 5.00 50.00 Storage Coeff. (min)= 3.57 (ii) 49.87 (ii) Unit Hyd. Tpeak (min)= 5.00 50.00 Unit Hyd. peak (cms)= 0.26 0.02 \*TOTALS\* PEAK FLOW (cms)= 0.52 0.09 0.526 (iii)
TIME TO PEAK (hrs)= 1.42 2.25 1.42
RUNOFF VOLUME (mm)= 55.07 19.22 30.05
TOTAL RAINFALL (mm)= 55.07 55.07
RUNOFF COEFFICIENT = 0.96 0.35 0.55 \*\*\*\*\* WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP! (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT. (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. (ha) (cms) (hrs) (mm)

```
ID1=1 (0201): 3.17 0.257 1.58 19.82
+ ID2=2 (0202): 4.57 0.526 1.42 30.05
      ID = 3 ( 0040): 7.74 0.707 1.42 25.86
                                                                                                                             CALIB
                                                                                                                            NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   RESERVOIR( 0032)| OVERFLOW IS OFF
                                                                                                                               Unit Hyd Qpeak (cms)= 0.256
  | IN= 2---> OUT= 1 |
| DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                                                                                                                               PEAK FLOW
                                                                                                                                PEAK FLOW (cms)= 0.102 (i)
TIME TO PEAK (hrs)= 1.667
                 RUNOFF VOLUME (mm)= 19.228
TOTAL RAINFALL (mm)= 55.074
RUNOFF COEFFICIENT = 0.349
                 0.0790 0.2218 0.0000
                                             0.0000
                                                                                                                               (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   CALIB
                                                                                                                            PEAK FLOW REDUCTION [Qout/Qin](%)= 7.63
TIME SHIFT OF PEAK FLOW (min)=115.00
MAXIMUM STORAGE USED (ha.m.)= 0.1538
                                                                                                                                             IMPERVIOUS PERVIOUS (i)
                                                                                                                               TD1=1 ( 0200): 20.32 1.019 1.92 22.08

+ ID2=2 ( 0032): 7.74 0.054 3.33 25.76
                                                                                                                               Max.Eff.Inten.(mm/hr)= 144.84

    Max.Eff.mich.(min/mr)=
    14-84
    25.28

    over (min)
    5.00
    60.00

    Storage Coeff. (min)=
    4.26 (ii)
    56.41 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    60.00

    Unit Hyd. peak (cms)=
    0.23
    0.02

    *TOTALS*

      ID = 3 ( 0001): 28.06 1.055 1.92 23.09
                                                                                                                               NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
  CALIB
  ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
     Unit Hyd Qpeak (cms)= 0.862
    \begin{array}{lll} \text{PEAK FLOW} & (\text{cms}) = 0.628 \text{ (i)} \\ \text{TIME TO PEAK} & (\text{hrs}) = 2.250 \\ \text{RUNOFF VOLUME} & (\text{mm}) = 24.558 \\ \text{TOTAL RAINFALL} & (\text{mm}) = 55.074 \\ \text{RUNOFF COEFFICIENT} & = 0.446 \\ \end{array}
                                                                                                                                   THAN THE STORAGE COEFFICIENT.
                                                                                                                               (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/920-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
  RUNOFF COEFFICIENT = 0.415
                                                                                                                               (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
      ID = 3 ( 0042): 3.54 0.363 1.42 28.47
                                                                                                                            CALIB
                                                                                                                            | STANDHYD ( 0220) | Area (ha)= 5.63
|ID=1 DT= 5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                           IMPERVIOUS PERVIOUS (i)
```

PEAK FLOW (cms)= 0.160 (i) TIME TO PEAK (hrs)= 2.167 RUNOFF VOLUME (mm)= 22.866 TOTAL RAINFALL (mm)= 55.074

TIME SHIFT OF PEAK FLOW (min)= 20.00 MAXIMUM STORAGE USED (ha.m.)= 0.0690 DATE: 03/11/2024 TIME: 11:39:28 11 ( 14 2 2 3 ) | AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) | ID1=1 ( 0225): 3.98 0.160 2.17 22.87 + ID2=2 ( 0025): 19.34 0.347 3.25 25.27 COMMENTS: \*\*\*\*\*\*\*\*\*\*\*\*\*\* ID = 3 ( 0002): 23.32 0.431 2.83 24.86 \*\* SIMULATION : Chicago\_25yr \*\* NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. | ADD HYD ( 0002)| | 3 + 2 = 1 | AREA QPEAK TPEAK R.V. READ STORM | Filename: C:\Users\nyokich\AppD ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\ae79c4fd (ha) (cms) (hrs) (mm) ID1= 3 ( 0002): 23.32 0.431 2.83 24.86 + ID2= 2 ( 0050): 5.63 0.373 1.75 33.96 Ptotal= 65.95 mm | Comments: Chicago\_25yr TIME RAIN | ITIME RAIN | TIME ID = 1 ( 0002); 28.95 0.652 2.08 26.63 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. (v 6.2.2015) VV I SSSSS UUUUUU A A LLLLL OOO TTTTT TTTTT H H Y Y M M OOO TM
O O T T H H YY MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
Developed and Distributed by Smart City Water Inc | NASHYD ( 0210)| Area (ha)= 6.83 Curve Number (CN)= 83.0 | ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(ltrs)= 0.54 Copyright 2007 - 2022 Smart City Water Inc All rights reserved. Unit Hyd Qpeak (cms)= 0.483 PEAK FLOW (cms)= 0.440 (i) TIME TO PEAK (hrs)= 2.000 RUNOFF VOLUME (mm)= 32.878 TOTAL RAINFALL (mm)= 65.946 RUNOFF COEFFICIENT = 0.499 \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\* Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\c6a78bad-e31e-40fb-a22f-cc4534f6a033\scen (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.  $Summary\ filename: C:\Users'nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\c6a78bad-e31e-40fb-a22f-cc4534f6a033\scen$ file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM] file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM] PEAK FLOW (cms)= 1.380 (i) TIME TO PEAK (hrs)= 1.917 RUNOFF VOLUME (mm)= 29.845 TOTAL RAINFALL (mm)= 65.946 RUNOFF COEFFICIENT = 0.453 CALIB | STANDHYD ( 0205)| Area (ha)= 7.90 |ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00 IMPERVIOUS PERVIOUS (i) Surface Area (ha)= 1.58 6.32 Dep. Storage (mm)= 2.00 5.00 Average Slope ( $^{\circ}$ )= 2.00 5.00 Length (m)= 229.49 250.00 Mannings n = 0.013 0.250 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. CALIB 

```
CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                                                                                                                                                                                                                                                                                                                                                                                                                                     ---- U.H. Tp(hrs)= 0.70
                         THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                                                                                                                                                                                                                                                        Unit Hvd Opeak (cms)= 0.862
              (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                                                                                                                                        PEAK FLOW (cms)= 0.841 (i)
TIME TO PEAK (hrs)= 2.250
                                                                                                                                                                                                                                                                                                                                                                                                        RUNOFF VOLUME (mm)= 32.879
TOTAL RAINFALL (mm)= 65.946
RUNOFF COEFFICIENT = 0.499
    | ADD HYD ( 0040)|
| 1 + 2 = 3 | AREA QPEAK TPEAK R.V.
| (ha) (cms) (hrs) (mm)
| ID1 = 1 ( 0201): 3.17 0.351 1.50 27.03
| + ID2 = 2 ( 0202): 4.57 0.638 1.42 38.28
                                                                                                                                                                                                                                                                                                                                                                                                        (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                  ID = 3 ( 0040): 7.74 0.891 1.42 33.67
                                                                                                                                                                                                                                                                                                                                                                                               | NASHYD ( 0203)| Area (ha)= 1.61 Curve Number (CN)= 76.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
            NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                                                                                                                                                                                                                                             -- U.H. Tp(hrs)= 0.24
      RESERVOIR( 0032) OVERFLOW IS OFF
                                                                                                                                                                                                                                                                                                                                                                                                        Unit Hyd Qpeak (cms)= 0.256
     | IN= 2...> OUT= 1 |
| DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                                                                                                                                                                                                                                                                                                                                                                                                       PEAK FLOW (cms)= 0.139 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 26.289
TOTAL RAINFALL (mm)= 65.946
RUNOFF COEFFICIENT = 0.399
                                                  -- (cms) (ha.m.) (cms) (ha.m.)

0.0000 (0.0000 | 0.1020 | 0.2824

0.0400 | 0.1208 | 0.1160 | 0.3268

0.0640 | 0.1775 | 0.1330 | 0.3659

0.0790 | 0.2218 | 0.0000 | 0.0000
                                                                                                                                                                                                                                                                                                                                                                                                        (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
         AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) (mm)
INFLOW: ID= 2 ( 0040) 7.740 0.891 1.42 33.67
OUTFLOW: ID= 1 ( 0032) 7.740 0.073 3.25 33.58
                                                                                                                                                                                                                                                                                                                                                                                               PEAK FLOW REDUCTION [Qout/Qin](%)= 8.14
TIME SHIFT OF PEAK FLOW (min)=110.00
                                      TIME SHIFT OF PEAK FLOW (min)=110.00
MAXIMUM STORAGE USED (ha.m.)= 0.2028
                                                                                                                                                                                                                                                                                                                                                                                                       ADD HYD ( 0001) | 1+2=3 | AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) | ID1=1 ( 0200): 20.32 1.380 1.92 29.84 + ID2-2 ( 0032): 7.74 0.073 3.25 33.58

    Max.Eff.Inten.(mm/hr)=
    171.19
    35.89

    over (nim)
    5.00
    50.00

    Storage Coeff. (min)-
    3.98 (ii)
    47.84 (ii)

    Unit Hyd. Tpeak (min)-
    5.00
    50.00

    Unit Hyd. peak (cms)=
    0.24
    0.02

    *TOTALS*

                  ID = 3 ( 0001): 28.06 1.428 1.92 30.87
                                                                                                                                                                                                                                                                                                                                                                                                        PEAK FLOW (cms)= 0.38 0.04 0.383 (iii)
TIME TO PEAK (hrs)= 1.42 2.25 1.42
RUNOFF VOLUME (mm)= 65.95 27.93 45.20
TOTAL RAINFALL (mm)= 65.95 65.95
RUNOFF COEFFICIENT = 0.97 0.42 0.69
             NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
    | NASHYD ( 0215)| Area (ha)= 15.80 Curve Number (CN)= 83.0
|ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
[ile:///V...%20Updated%20E4%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20Detailed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Proposed%2OOutput/Propos
     **** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                                                                                                                                                                                                                                               | (ALID | | (ANSHYD ( 0225)| Area (ha)= 3.98 Curve Number (CN)= 81.0 | (ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1 DT= 5.0 min | Ia (mm)= 0.62 | (ID=1
                  (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
               CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                                                                                                                                                                                                                                                        Unit Hyd Qpeak (cms)= 0.245
              (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                                                                                                                                       PEAK FLOW (cms)= 0.216 (i)
TIME TO PEAK (hrs)= 2.083
RUNOFF VOLUME (mm)= 30.817
TOTAL RAINFALL (mm)= 65.946
RUNOFF COEFFICIENT = 0.467
     ADD HYD ( 0042)
          1+2=3 | AREA QPEAK TPEAK R.V.
```

```
0.0000 0.0000 | 0.5800
                                                                                                                                         0 1023
                                                                           0.0493 | 0.6600
0.0684 | 0.7600
                                                   0.2500
                                                                                                                                        0.1189
                                                  0.3700
                                                                                                                                         0.1366
                                                   0.4600 0.0822 | 0.7800
                                                                                                                                         0.1400
                                                           AREA QPEAK TPEAK R.V.
           | Cins | 
                                     ID = 3 ( 0002): 23.32 0.579 2.83 33.08
             NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
    ID = 1 ( 0002): 28.95 0.859 2.08 35.02
             NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY
                 V V I SSSSS U U A L (v
V V I SS U U AA L
V V I SS U U AAAAA L
V V I SS U U AAAAA L
V V I SSSSS UUUUU A A LLLLL
                                                                                                                          (v 6.2.2015)
                   OOO TTTTT TTTTT H H Y Y M M OOO TM
                 O O T T H H YY MMMM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
     Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2022 Smart City Water Inc
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
              Unit Hyd Qpeak (cms)= 0.483
```

```
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            ***** DETAILED OUTPUT *****
    Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
    Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\4cc8099e-
   645a-426e-bae5-afead8c69035\scen
Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-
   26df3e227620\4cc8099e-645a-426e-bae5-afead8c69035\scen
   DATE: 03/11/2024
                             TIME: 11:39:26
   USER:
   COMMENTS:
    ** SIMULATION : Chicago_2yr
     READ STORM | Filename: C:\Users\nyokich\AppD
          ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\248c7391
   Ptotal= 33.13 mm | Comments: Chicago_2yr
            TIME RAIN TIME RAIN TIME RAIN TIME RAIN
           CALIB
   | NASHYD ( 0210)| Area (ha)= 6.83 Curve Number (CN)= 83.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                - U.H. Tp(hrs)= 0.54
file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
```

ID = 3 ( 0003): 14.73 0.223 2.17 10.22 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. Unit Hyd Qpeak (cms)= 1.805 PEAK FLOW (cms)= 0.378 (i) TIME TO PEAK (hrs)= 1.917 RUNOFF VOLUME (mm)= 8.636 TOTAL RAINFALL (mm)= 33.132 RUNOFF COEFFICIENT = 0.261 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. | (ALIB | | (ANSHYD ( 0201)| Area (ha)= 3.17 Curve Number (CN)= 77.0 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (ID=1 DT=5.0 min | Ia ( Unit Hyd Qpeak (cms)= 0.757  $\begin{array}{lll} \mbox{PEAK FLOW} & (\mbox{cms}) = 0.093 \ (\mbox{i}) \\ \mbox{TIME TO PEAK} & (\mbox{hrs}) = 1.583 \\ \mbox{RUNOFF VOLUME} & (\mbox{mm}) = 7.575 \\ \mbox{TOTAL RAINFALL} & (\mbox{mm}) = 33.132 \\ \mbox{RUNOFF COEFFICIENT} & 0.229 \\ \end{array}$ (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. CALIB | STANDHYD ( 0202) | Area (ha)= 4.57 |ID=1 DT= 5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00 IMPERVIOUS PERVIOUS (i) 5.00 
 Max.Eff.Inten.(mm/hr)=
 89.35
 6.76

 over (min)
 5.00
 80.00

 Storage Coeff. (min)=
 4.33 (ii)
 76.01 (ii)

 Unit Hyd. Tpeak (min)=
 5.00
 80.00

```
Unit Hyd. peak (cms)= 0.23 0.01
*TOTALS*
              ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                 (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN<sup>e</sup> = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
              THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
     ID = 3 ( 0040): 7.74 0.361 1.42 11.95
               NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
       RESERVOIR( 0032) OVERFLOW IS OFF
        IN= 2---> OUT= 1
      | IN= 2.--> OUT= 1 | OUTFLOW STORAGE | OUTFLOW | OUTFLOW
                                                           0.0790 0.2218 0.0000 0.0000
         AREA QPEAK TPEAK R.V.
(lia) (cms) (hrs) (mm)

INFLOW: ID= 2 ( 0040) 7.740 0.361 1.42 11.95

OUTFLOW: ID= 1 ( 0032) 7.740 0.022 3.42 11.85
                                            PEAK FLOW REDUCTION [Qout/Qin](%)= 6.17
                                           TIME SHIFT OF PEAK FLOW (min)=120.00
MAXIMUM STORAGE USED (ha.m.)= 0.0673
    | ADD HYD ( 0001)|
| 1 + 2 = 3 | AREA QPEAK TPEAK R.V. (ha) (cms) (lirs) (mm)
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]

        over (min)
        5.00
        85.00

        Storage Coeff. (min)=
        5.17 (ii)
        83.10 (ii)

        Unit Hyd. Tpeak (min)=
        5.00
        85.00

        Unit Hyd. peak (cms)=
        0.21
        0.01

        "TOTALS"

        PEAK FLOW (cms)=
        0.18
        0.01
        0.180 (iii)

        TIME TO PEAK (ns)=
        1.42
        2.92
        1.42

        RUNOFF VOLUME (mm)=
        31.13
        8.15
        19.16

        TOTAL RAINFALL (mm)=
        33.13
        33.13
        33.13

        RUNOFF COEFFICIENT
        0.94
        0.25
        0.58
```

```
ID1=1 ( 0200): 20.32 0.378 1.92 8.64
+ ID2= 2 ( 0032): 7.74 0.022 3.42 11.85
        ID = 3 ( 0001): 28.06 0.395 1.92 9.52
       NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   Unit Hyd Qpeak (cms)= 0.862
      PEAK FLOW (cms)= 0.242 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 9.873
TOTAL RAINFALL (mm)= 33.132
RUNOFF COEFFICIENT = 0.298
       (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
    CALIB
   Unit Hyd Qpeak (cms)= 0.256
      PEAK FLOW (cms)= 0.036 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 7.298
TOTAL RAINFALL (mm)= 33.132
RUNOFF COEFFICIENT = 0.220
       (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   IMPERVIOUS PERVIOUS (i)
      Surface Area (ha)= 1.16 0.77 

Dep. Storage (mm)= 2.00 5.00 

Average Slope (\%)= 1.00 1.00 

Length (m)= 300.00 300.00 

Mannings n = 0.013 0.250
       Max.Eff.Inten.(mm/hr)= 89.35 8.53
file: ///V...\%20 Updated%20 EA\%20 EA\%20 Analysis/VO/Detailed%20 Output/Proposed%20 VO%20 Updated%20 Output/%20-%20 All%20 Storms.txt[3/11/2024 11:44:24 AM]
     (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0042) 19.340 0.276 2.25 10.59
OUTFLOW: ID= 1 ( 0025) 19.340 0.141 3.33 10.58
                PEAK FLOW REDUCTION [Qout/Qin](%)= 51.26
                TIME SHIFT OF PEAK FLOW (min)= 65.00
MAXIMUM STORAGE USED (ha.m.)= 0.1038
```

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT. (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. VV I SSSSS UUUUUU A A LLLLL OOO TTTTT TTTTT H H Y Y M M OOO TM 0 0 T T H H YY MMMM 0 0 0 0 T T H H Y M M 0 0 000 T T H H Y M M 000 RESERVOIR( 0050) OVERFLOW IS OFF Developed and Distributed by Smart City Water Inc Copyright 2007 - 2022 Smart City Water Inc All rights reserved. 0.3700 0.0684 0.7600 0.1366 0.4600 0.0822 | 0.7800 \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\* Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\900412d4-24e2-4223-aca5-9df5457f0fe4\scen Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-PEAK FLOW REDUCTION [Qout/Qin](%)= 37.13 26df3e227620\900412d4-24e2-4223-aea5-9df5457f0fe4\scen TIME SHIFT OF PEAK FLOW (min)= 20.00 MAXIMUM STORAGE USED (ha.m.)= 0.0322 DATE: 03/11/2024 TIME: 11:39:27 LISER: COMMENTS: ID = 3 ( 0002): 23.32 0.175 3.00 10.31 \*\*\*\*\*\*\*\*\*\*\* \*\* SIMULATION : Chicago\_50yr \*\* NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. | ADD HYD ( 0002)| | 3 + 2 = 1 | AREA QPEAK TPEAK R.V. READ STORM | Filename: C:\Users\nyokich\AppD ata\Local\Temp\ 5e49fc0a-79f7-4237-8582-77f9360bb4e5\6e087507 (ha) (cms) (hrs) (mm) ID1= 3 ( 0002): 23.32 0.175 3.00 10.31 + ID2= 2 ( 0050): 5.63 0.163 1.75 17.02 | Ptotal= 74.64 mm | Comments: Chicago\_50yr TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN TIME RAIN | TIME RAIN | TIME RAIN | TIME | | T ID = 1 ( 0002): 28.95 0.282 2.17 11.62 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. 0.33 8.10 | 1.08 34.23 | 1.83 17.89 | 2.58 0.42 8.81 | 1.17 53.85 | 1.92 15.46 | 2.67 V V I SSSSS U U A L V V I SS U U AA L (v 6.2.2015) 0.50 9.66 | 1.25 116.53 | 2.00 13.63 | 2.75 0.58 10.72 | 1.33 187.75 | 2.08 12.20 | 2.83 6.44 file:///V...%20Updated%20EA%20AnalysivVO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM] file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM] 0.67 | 12.06 | 1.42 | 81.45 | 2.17 | 11.05 | 2.92 | 6.14 ID = 3 ( 0003): 14.73 1.180 1.83 39.18 Unit Hyd Qpeak (cms)= 0.483 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.

```
PEAK FLOW REDUCTION [Qout/Qin](%)= 8.53
TIME SHIFT OF PEAK FLOW (min)=110.00
                                                                                                                                             TIME SHIFT OF PEAK FLOW (min)=110.00
MAXIMUM STORAGE USED (ha.m.)= 0.2453
     Max.Eff.Inten.(mm/hr)= 187.75 42.28
over (min) 5.00 40.00
                                                                                                                                 over (min) 5.00 40.00
Storage Coeff. (min)= 3.22 (ii) 37.65 (ii)
Unit Hyd. Tpeak (min)= 5.00 40.00
     Unit Hyd. Tpeak (min)= 5.00 40.00
Unit Hyd. peak (cms)= 0.27 0.03
*TOTALS*
    PEAK FLOW (cms)= 0.69 0.18 0.717 (iii)
TIME TO PEAK (hrs)= 1.42 2.08 1.42
RUNOFF VOLUME (mm)= 72.64 32.21 45.14
TOTAL RANFALL (mm)= 74.64 74.64 74.64
RUNOFF COEFFICIENT = 0.97 0.43 0.60
                                                                                                                                      ID = 3 ( 0001): 28.06 1.750 1.92 37.45
                                                                                                                                    NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
  ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                 (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
     CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
     THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                    Unit Hyd Qpeak (cms)= 0.862
                                                                                                                                   PEAK FLOW (cms)= 1.023 (i)
TIME TO PEAK (ltrs)= 2.250
RUNOFF VOLUME (mm)= 39.858
TOTAL RAINFALL (mm)= 74.637
RUNOFF COEFFICIENT = 0.534
  ADD HYD ( 0040)
   | 1+ 2 = 3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1 = 1 ( 0201): 3.17 0.430 1.50 33.18 | + ID2 = 2 ( 0202): 4.57 0.717 1.42 45.14
                                                                                                                                    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
      ID = 3 ( 0040): 7.74 1.031 1.42 40.24
                                                                                                                                 CALIB
                                                                                                                                 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   RESERVOIR( 0032)| OVERFLOW IS OFF
                                                                                                                                    Unit Hyd Qpeak (cms)= 0.256
  PEAK FLOW (cms)= 0.171 (i)
TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)- 32.331
TOTAL RAINFALL (mm)= 74.637
RUNOFF COEFFICIENT = 0.433
                  0.0790 0.2218 | 0.0000 0.0000
                                                                                                                                    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   CALIB
                                                                                                                                 | STANDHYD ( 0204)| Area (ha)= 1.93
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                                                                                              file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                                                                                                  RESERVOIR( 0025)| OVERFLOW IS OFF
                   IMPERVIOUS PERVIOUS (i)
                                                                                                                                 | IN= 2---> OUT= 1 |
| DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
```

```
|ID= 1 DT= 5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
  ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                             CALIB
   (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
   CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                                                                                                                                Unit Hyd Qpeak (cms)= 0.245
      THAN THE STORAGE COEFFICIENT.
  (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                               PEAK FLOW (cms)= 0.264 (i)
TIME TO PEAK (hrs)= 2.083
RUNOFF VOLUME (mm)= 37.527
TOTAL RAINFALL (mm)= 74.637
RUNOFF COEFFICIENT = 0.503
| ADD HYD ( 0042)|
ID = 3 ( 0042): 3.54 0.513 1.42 43.39
  NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                               Surface Area (ha)= 2.36 3.27 

Dep. Storage (mm)= 2.00 5.00 

Average Slope (\%)= 2.00 2.00 

Length (m)= 250.00 40.00 

Mannings n = 0.013 0.250
ADD HYD ( 0042)
| 3+2=1 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1=3 (0042): 3.54 0.513 1.42 43.39 | HD2=2 (0215): 15.80 1.023 2.25 39.86
    ID = 1 ( 0042): 19.34 1.182 2.17 40.50
  NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
```

```
| Corne | Corn
```

\*TOTALS\* PEAK FLOW (cms)= 0.93 0.63 1.357 (iii)
TIME TO PEAK (tms)= 1.42 1.50 1.42
RUNOFF VOLUME (mm)= 72.64 39.14 50.53
TOTAL RAINFALL (mm)= 74.64 74.64
RUNOFF COEFFICIENT = 0.97 0.52 0.68 \*\*\*\*\* WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP! (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 80.0 Ia = Dep. Storage (Above) (ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT. (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. RESERVOIR( 0050)| OVERFLOW IS OFF | RESERVOIK( 0050)| OVERSE TO 1. STATE | OUTFLOW STORAGE | OUTFLOW 0.3700 0.0684 0.7600 0.1366 0.4600 0.0822 0.7800 0.1400 AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) INFLOW: ID= 2 ( 0220) 5.630 1.357 1.42 50.53 OUTFLOW: ID= 1 ( 0050) 5.630 0.592 1.75 50.52 PEAK FLOW REDUCTION [Qout/Qin](%)= 43.62 TIME SHIFT OF PEAK FLOW (min)= 20.00 MAXIMUM STORAGE USED (ha.m.)= 0.1057 ID = 3 ( 0002): 23.32 0.704 2.83 39.99 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. | 3+2=1 | AREA QPEAK TPEAK R.V. (la) (cms) (lrs) (mm) ID1=3 ( 0002): 23.32 0.704 2.83 39.99 file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]

+ ID2= 2 ( 0050): 5.63 0.592 1.75 50.52 ID = 1 (0002): 28.95 1.031 2.08 42.04 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. V V I SSSSS U U A L V V I SS U U AA L V V I SS U U AAAAA L V V I SS U U A A A L (v 6.2.2015) VV I SSSSS UUUUU A A LLLLL OOO TITTT TITTT H H Y Y M M OOO TM
O O T T H H YY MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
Developed and Distributed by Smart City Water Inc Copyright 2007 - 2022 Smart City Water Inc All rights reserved. \*\*\*\*\* DETAILED OUTPUT \*\*\*\*\*  $Input\ filename: C:\Program Files\ (x86)\Visual\ OTTHYMO\ 6.2\VO2\voin.dat \\ Output\ filename: C:\Users'uyokich\AppData\Local'Civica\VH5\3783a080-e662-4500-89be-26df3e227620\94155239-92bf-4ed2-9c10-010b48af8d21\scen$ Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\94155239-92bf-4ed2-9c10-010b48af8d21\scen DATE: 03/11/2024 TIME: 11:39:28 USER: COMMENTS: \*\* SIMULATION : Chicago\_5yr \*\* READ STORM | Filename: C:\Users\nyokich\AppD ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\f4232b31 Ptotal= 46.03 mm | Comments: Chicago\_5yr file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]

TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | hrs mm/hr | hrs mm

RUNOFF COEFFICIENT = 0.96 0.33 \*\*\*\* WARNING: STORAGE COEFF IS SMALLER THAN TIME STEP! \*\*\*\*\* WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20% YOU SHOULD CONSIDER SPLITTING THE AREA. (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 76.0 la = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT. (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. ID = 3 ( 0003): 14.73 0.478 2.00 18.14 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. CALIB | NASHYD ( 0200)| Area (ha)= 20.32 Curve Number (CN)= 80.0 |ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 -- U.H. Tp(hrs)= 0.43 Unit Hyd Qpeak (cms)= 1.805 PEAK FLOW (cms)= 0.739 (i) TIME TO PEAK (hrs)= 1.917 RUNOFF VOLUME (mm)= 16.101 TOTAL RAINFALL (mm)= 46.025 RUNOFF COEFFICIENT = 0.350 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. Unit Hyd Qpeak (cms)= 0.757 PEAK FLOW (cms)= 0.187 (i) TIME TO PEAK (hrs)= 1.583 RUNOFF VOLUME (mm)= 14.333 TOTAL RAINFALL (mm)= 46.025

```
(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   | STANDHYD ( 0202) | Area (ha)= 4.57
  ID= 1 DT= 5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00

    Max.Eff.Inten.(mm/hr)=
    126.08
    13.70

    over (min)
    5.00
    60.00

    Storage Coeff. (min)=
    3.77 (ii)
    57.82 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    60.00

    Unit Hyd. peak (cms)=
    0.25
    0.02

    *TOTALS*

      PEAK FLOW (cms)= 0.44 0.06 0.446 (iii)
TIME TO PEAK (hrs)= 1.42 2.42 1.42
RUNOFF VOLUME (mm)= 44.03 13.91 23.54
TOTAL RANTFALL (mm)= 46.03 46.03 46.03
RUNOFF COEFFICIENT = 0.96 0.30 0.51
  ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
      CN* = 73.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
      (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   ADD HYD ( 0040)]

1 + 2 = 3 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1=1 ( 0201): 3.17 0.187 1.58 14.33

+ ID2-2 ( 0202): 4.57 0.446 1.42 23.54
        ID = 3 ( 0040): 7.74 0.573 1.42 19.77
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   RESERVOIR( 0032)| OVERFLOW IS OFF
  |IN=2...> OUT=1 |
|DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
file:///V/...%20Updated%20EA%20Analysiv/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
     TIME TO PEAK (hrs)= 1.667
RUNOFF VOLUME (mm)= 13.869
TOTAL RAINFALL (mm)= 46.025
RUNOFF COEFFICIENT = 0.301
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   CALIB
  | STANDHYD ( 0204)| Area (ha)= 1.93
|ID=1 DT=5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
                        IMPERVIOUS PERVIOUS (i)
```

RUNOFF COEFFICIENT = 0.311

```
-- (cms) (ha.m.) | (cms) (ha.m

0.0000 0.0000 | 0.1020 0.2824

0.0400 0.1208 | 0.1160 0.3268

0.0640 0.1775 | 0.1330 0.3659
                                                      (ha.m.)
                    0.0790 0.2218 | 0.0000 0.0000
                        AREA QPEAK TPEAK R.V.
     (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0040) 7.740 0.573 1.42 19.77
OUTFLOW: ID= 1 ( 0032) 7.740 0.038 3.42 19.67
               PEAK FLOW REDUCTION [Qout/Qin](%)= 6.68
TIME SHIFT OF PEAK FLOW (min)=120.00
               TIME SHIFT OF PEAK FLOW (min)=120.00
MAXIMUM STORAGE USED (ha.m.)= 0.1157
   ID = 3 ( 0001): 28.06 0.766 1.92 17.09
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
    CALIB
   | NASHYD ( 0215)| Area (ha)= 15.80 Curve Number (CN)= 83.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                   --- U.H. Tp(hrs)= 0.70
      Unit Hyd Qpeak (cms)= 0.862
      PEAK FLOW (cms)= 0.460 (i)
TIME TO PEAK (hrs)= 2.250
RUNOFF VOLUME (mm)= 18.088
TOTAL RAINFALL (mm)= 46.025
      RUNOFF COEFFICIENT = 0.393
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   Unit Hyd Qpeak (cms)= 0.256
      PEAK FLOW (cms)= 0.073 (i)
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
   ADD HYD ( 0042)
    3 + 2 = 1 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1= 3 ( 0042): 3.54 0.300 1.42 22.09
        + ID2= 2 ( 0215): 15.80 0.460 2.25 18.09
```

ID = 1 ( 0042): 19.34 0.521 2.17 18.82 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. RESERVOIR( 0025) OVERFLOW IS OFF IN= 2---> OUT= 1 | DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE | OUTFLOW STORAGE | OUTF -- (cms) (ha.m.) (cms) (ha.m.) 0.0000 0.0000 | 0.6300 0.4548 0.2600 0.1908 | 0.7100 0.5242 0.3900 0.2842 | 0.8100 0.5932 0.4900 0.3533 | 1.4000 1.1965 AREA OPEAK TPEAK R.V. (ha) (cms) (lnrs) (mm) INFLOW: ID= 2 ( 0042) 19.340 0.521 2.17 18.82 OUTFLOW: ID=1 ( 0025) 19.340 0.256 3.25 18.81 PEAK FLOW REDUCTION [Qout/Qin](%)= 49.12 TIME SHIFT OF PEAK FLOW (min)= 65.00 MAXIMUM STORAGE USED (ha.m.)= 0.1878 | (ALID | (0.225)| Area (ha)= 3.98 Curve Number (CN)= 81.0 | (D=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | (U.H. Tp(hrs)= 0.62 Unit Hyd Qpeak (cms)= 0.245 PEAK FLOW (cms)= 0.116 (i)
TIME TO PEAK (hrs)= 2.167
RUNOFF VOLUME (mm)= 16.729
TOTAL RAINFALL (mm)= 46.025
RUNOFF COEFFICIENT = 0.363 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. | STANDHYD ( 0220)| Area (ha)= 5.63 |ID=1 DT= 5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00 IMPERVIOUS PERVIOUS (i)

```
ID = 3 ( 0002): 23.32 0.317 2.92 18.46
                                                                                                                                                                                                                                                                                                                                                                      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY
              Max.Eff.Inten.(mm/hr)= 126.08
             over (min) 5.00 15.00
Storage Coeff. (min)= 3.28 (ii) 12.87 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
                                                                                                                                                                                                                                                                                                                                                             Unit Hyd. Tpeak (min)= 5.00 15.00
Unit Hyd. peak (cms)= 0.27 0.08
*TOTALS*
             PEAK FLOW (cms)= 0.60 0.24 0.701 (iii)
TIME TO PEAK (hrs)= 1.42 1.58 1.42
RUNOFF VOLUME (mm)= 44.03 17.79 26.71
TOTAL RANFALL (mm)= 44.03 46.03
RUNOFF COEFFICIENT = 0.96 0.39 0.58
                                                                                                                                                                                                                                                                                                                                                                           ID = 1 ( 0002): 28.95 0.492 2.17 20.06
                                                                                                                                                                                                                                                                                                                                                                      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
      ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                                                                                                                                                                                                                         V V I SSSSS U U A L (V V V I SS U U AA L V V I SS U U AAAAA L V V I SS U U AAAAA L V V I SSSSS UUUUU A A LLLLL
                (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      (v 6.2.2015)
              CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
             THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                                                                                                         000 TITIT TITIT H H Y Y M M 000 TM
0 O T T H H H YY MM MM 0 O
0 O T T H H Y M M O O
000 T T H H Y M M 000
       RESERVOIR( 0050)| OVERFLOW IS OFF
       IN= 2---> OUT= 1
      | DT = 5.0 min | OUTFLOW STORAGE | OUTFLOW STORA
                                                                                                                                                                                                                                                                                                                                                              Developed and Distributed by Smart City Water Inc
Copyright 2007 - 2022 Smart City Water Inc
                                                                                                                                                                                                                                                                                                                                                              All rights reserved.
                                                                                                                                                                                                                                                                                                                                                                                              ***** DETAILED OUTPUT *****
                                                 0.4600 0.0822 | 0.7800
                                                                                                                                0.1400
         Input filename: C:VProgram Files (x86) Visual OTTHYMO 6.2 VO2 \ voin. dat Output filename: C:USers \ nyokich \ App Data \ Local \ Civical \ VH5 \ 3783a080-e662-4500-89be-26df \ e227620 \ 8354b6b5-e662-4500-89be-26df \ e227620 \ e354b6b5-e662-4500-89be-26df \ e354b6b5-e662-4500-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-2600-89b6-260
                                                                                                                                                                                                                                                                                                                                                              bb4d-4561-88f9-011292a4a2b9\scen
Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-
                                    PEAK FLOW REDUCTION [Qout/Qin](%)= 40.36
TIME SHIFT OF PEAK FLOW (min)= 20.00
MAXIMUM STORAGE USED (ha.m.)= 0.0547
                                                                                                                                                                                                                                                                                                                                                              26df3e227620\8354b6b5-bb4d-4561-88f9-011292a4a2b9\scen
                                                                                                                                                                                                                                                                                                                                                              DATE: 03/11/2024
                                                                                                                                                                                                                                                                                                                                                                                                                                                 TIME: 11:39:27
                                                                                                                                                                                                                                                                                                                                                              USER:
      (ha) (cms) (hrs) (mm)

ID1=1 ( 0225): 3.98 0.116 2.17 16.73

+ ID2=2 ( 0025): 19.34 0.256 3.25 18.81
                                                                                                                                                                                                                                                                                                                                                              COMMENTS:
file:///V...%20Updated%20E4%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] | file:///V...%20Updated%20E4%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] |
                                                                                                                                                                                                                                                                                                                                                                                         ** SIMULATION : Regional (HH_48hr)
                                                                                                                                                                                                                                                                                                                                                                                         10.50 2.00 22.50 2.00 34.50 2.00 46.50 38.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.00 | 34.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.00 | 46.75 38.00
                                                                                                                                                                                                                                                                                                                                                                                         11.00 2.00 23.00 2.00 35.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.00 | 47.00 13.00
```

READ STORM | Filename: C:\Users\nyokich\AppD 11.75 2.00 | 23.75 2.00 | 35.75 3.00 | 47.75 13.00 ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\36cc42a6 Ptotal=285.00 mm | Comments: Regional\_HH CALIB 2.00 | 12.75 | 2.00 | 24.75 | 2.00 | 36.75 | 2.00 | 13.00 | 2.00 | 25.00 | 2.00 | 37.00 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. 1.00 4.00 2.00 | 13.25 | 2.00 | 25.25 | 2.00 | 37.25 | 2.00 | 13.50 | 2.00 | 25.50 | 2.00 | 37.50 4.00 TRANSFORMED HYETOGRAPH 1.75 2.00 | 13.75 | 2.00 | 25.75 | 2.00 | 37.75 2.00 | 14.00 | 2.00 | 26.00 | 2.00 | 38.00 | 2.00 | 14.25 | 2.00 | 26.25 | 2.00 | 38.25 2.25 2.00 | 14.50 | 2.00 | 26.50 | 2.00 | 38.50 | 6.00 | 2.00 | 14.75 | 2.00 | 26.75 | 2.00 | 38.75 | 6.00 | 2.00 | 15.00 | 2.00 | 27.00 | 2.00 | 39.00 | 13.00 2.50 0.333 2.00 |12.333 2.00 |24.333 2.00 | 36.33 0.417 2.00 |12.417 2.00 |24.417 2.00 | 36.42 0.500 2.00 |12.500 2.00 |24.500 2.00 | 36.50 3.00 6.00 
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 3.25 3.50 6.00 0.583 2.00 | 12.583 2.00 | 24.583 2.00 | 36.58 0.667 2.00 | 12.667 2.00 | 24.667 2.00 | 36.67 3.75 4.00 2.00 | 16.25 | 2.00 | 28.25 | 2.00 | 40.25 | 17.00  $\begin{array}{ccccc} 0.750 & 2.00 & |12.750 & 2.00 & |24.750 & 2.00 & |36.75 \\ 0.833 & 2.00 & |12.833 & 2.00 & |24.833 & 2.00 & |36.83 \\ 0.917 & 2.00 & |12.917 & 2.00 & |24.917 & 2.00 & |36.92 \end{array}$ 6.00 2.00 | 16.50 2.00 | 28.50 2.00 | 40.50 17.00 2.00 | 40.75 17.00 4.75 2.00 | 17.00 | 2.00 | 29.00 | 2.00 | 41.00 | 13.00 | 2.00 | 17.25 | 2.00 | 29.25 | 2.00 | 41.25 | 13.00 1.000 2.00 13.000 2.00 25.000 2.00 37.00 2.00 | 13.083 | 2.00 | 25.083 | 2.00 | 37.08 | 2.00 | 13.167 | 2.00 | 25.167 | 2.00 | 37.17 2.00 | 17.50 | 2.00 | 29.50 | 2.00 | 41.50 | 13.00 | 2.00 | 17.75 | 2.00 | 29.75 | 2.00 | 41.75 | 13.00 5.50 1.167 4.00 2.00 | 13.250 2.00 |25.250 2.00 |25.333 
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 6.00 1.333 2.00 | 13.333 2.00 | 37.33 2.00 |13.417 2.00 |13.500 2.00 |13.583 2.00 |25.333 | 2.00 | 37.32 2.00 |25.500 | 2.00 | 37.50 2.00 |25.583 | 2.00 | 37.58 2.00 |25.667 | 2.00 | 37.67 2.00 |25.750 | 2.00 | 37.67 1.417 6.50 1.583 4.00 2.00 | 19.00 | 2.00 | 31.00 | 2.00 | 43.00 | 13.00 | 2.00 | 19.25 | 2.00 | 31.25 | 2.00 | 43.25 | 13.00 1.667 1.750 2.00 | 13.667 2.00 | 13.750 7.25 7.50 2.00 | 19.50 | 2.00 | 31.50 | 2.00 | 43.50 | 13.00 | 2.00 | 19.75 | 2.00 | 31.75 | 2.00 | 43.75 | 13.00 1.833 2.00 | 13.833 2.00 | 25.833 2.00 | 37.83 1.917 2.00 | 13.917 2.00 | 25.917 2.00 | 37.92 4.00 
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 2.00 | 20.00 | 2.00 | 32.00 | 2.00 | 44.00 | 13.00 | 2.00 | 20.25 | 2.00 | 32.25 | 2.00 | 44.25 | 13.00 8 00 2.000 4.00 2.00 | 20.25 | 2.00 | 32.25 | 2.00 | 44.25 | 13.00 | 2.00 | 20.50 | 2.00 | 32.50 | 2.00 | 44.50 | 13.00 2.083 8.50 2.167 6.00 2.00 |14.250 | 2.00 |26.250 | 2.00 | 38.25 | 6.00 | 2.00 |14.333 | 2.00 |26.333 | 2.00 |38.33 | 6.00 | 2.00 |14.417 | 2.00 |26.417 | 2.00 |38.42 | 6.00 8.75 9.00 2.00 | 20.75 | 2.00 | 32.75 | 2.00 | 44.75 | 13.00 | 2.00 | 21.00 | 2.00 | 33.00 | 2.00 | 45.00 | 53.00 2.250 9.25 2.00 21.25 2.00 33.25 2.00 45.25 53.00 9.50 2.00 21.50 2.00 33.50 2.00 45.50 53.00 2.417 2.00 |14.500 | 2.00 |26.500 | 2.00 | 38.50 2.583 2.00 | 14.583 2.00 | 26.583 2.00 | 38.58 9.75 2.00 | 21.75 2.00 | 33.75 2.00 | 45.75 53.00

```
2.00 |28.083
2.00 |28.167
2.00 |28.250
                                                      2.00 | 40.08
2.00 | 40.17
2.00 | 40.25
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17.00
                     2.00 | 16.167
                                                                                                                                                                   2.00 |20.667
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                                                                     17.00
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                                                                                                                                                                  2.00 | 20.833
                                                                                                                                                                                   2.00 | 32.833
                                                                                                                                                                                                  2.00 | 44.83 | 13.00
                      2.00 |16.417
                                      2.00 |28.417
                                                      2.00 | 40.42
                                                                                                                                                                   2.00 |20.917
                                                                                                                                                                                   2.00 |32.917
                                                                                                                                                                                                   2.00 | 44.92
             4.417
                                                                                                                                                           8.917
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             4.500
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                                                      2.00 | 40.50 | 17.00
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                                      2.00 |28.583
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2.00 |33.167
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                      2.00 | 16.667
                                     2.00 |28.667
                                                     2.00 | 40.67
                                                                    17.00
                                                                                                                                                          9.167
                                                                                                                                                                   2.00 |21.167
                                                                                                                                                                                                                  53.00
                      2.00 |16.750
2.00 |16.833
                                     2.00 |28.750
2.00 |28.833
                                                      2.00 | 40.75
                                                                                                                                                                                                  4.750
                                                                    17.00
17.00
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             4.833
                                                                                                                                                                   2.00 21.333
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                      2.00 | 16.917
                                     2.00 | 28.917
                                                      2.00 | 40.92 17.00
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                                                                                                                                                                                                   2.00 | 45.42
                                                                                                                                                                                                                  53.00
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2.00 | 41.08 | 13.00
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2.00 |21.583
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                                                                                                                                                                   2.00 |21.750
                                                                                                                                                          9.750
             5.250
                      2.00 | 17.250
                                     2.00 |29.333
2.00 |29.417
2.00 |29.500
                                                     2.00 | 41.33 | 13.00
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                     2.00 |17.333
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                                                                                                                                                                   2.00 |22.167
                                                                                                                                                                                    2.00 |34.167
                                                                                                                                                                                                    2.00 | 46.17
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                                     2.00 |29.750
                                                                                                                                                          10.250
                                                                                                                                                                   2.00 |22.250
                                                                                                                                                                                    2.00 |34.250
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                                                                                                                                                                                                                  38.00
                                                     2.00 | 41.83 | 13.00
2.00 | 41.92 | 13.00
                                                                                                                                                                   2.00 |22.333 | 2.00 |22.417
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             6.250
             6.333
                      2.00 | 18.333
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                                                                                                                                                          10.833
                                                                                                                                                                   2.00 |22.833 | 2.00 |34.833
                                                                                                                                                                                                   2.00 | 46.83
                                                                                                                                                                                                                  38.00
             6.417
                      2.00 |18.417
                                     2.00 |30.417
2.00 |30.500
                                                     2.00 | 42.42 23.00
2.00 | 42.50 23.00
                                                                                                                                                          10 917
                                                                                                                                                                   2 00 22 917
                                                                                                                                                                                   2.00 |34.917
                                                                                                                                                                                                   2 00 | 46 92 38 00
                                                                                                                                                                    2.00 |23.000
                                                                                                                                                                                    2.00 |35.000
                                                                                                                                                                                                                   38.00
                                                                                                                                                          11.000
                                                                                                                                                                                                    2.00 | 47.00
             6.500
             6.583
                      2.00 [18.583]
                                     2 00 130 583
                                                     2.00 | 42.58 23.00
                                                                                                                                                          11.083
                                                                                                                                                                   2.00 23.083
                                                                                                                                                                                    2.00 | 35.083
                                                                                                                                                                                                   3.00 | 47.08 13.04
                      2.00 | 18.667
                                      2.00 |30.667
                                                      2.00 | 42.67
                                                                                                                                                                    2.00 |23.167
                                                                                                                                                                                    2.00 |35.167
                                                                                                                                                                                                    3.00 | 47.17
             6.667
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                                                     2 00 | 42 75 23 00
                                                                                                                                                          11.250
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                                                                                                                                                                                    2.00 |35.250
                                                                                                                                                                                                   3.00 | 47.25 | 13.00
                                                                                                                                                                                    2.00 |35.333
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             6.833
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                                                      2.00 | 42.83 23.00
                                                                                                                                                          11 333
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2.00 |23,417
                                                                                                                                                                                                   3.00 | 47.33
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                                                      2.00 | 42.92 23.00
                                                                                                                                                          11.417
             6.917
                      2.00 | 18.917
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              7.000
                      2 00 119 000
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                                                     2.00 | 43.00 23.00
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                                                                                                                                                                                    2.00 [35.500]
                                                                                                                                                                                                   3.00 | 47.50
                                                                                                                                                                                                                   13.00
                     2.00 | 19.083 | 2.00 | 31.083 | 2.00 | 43.08 | 13.01
                                                                                                                                                          11.583 2.00 23.583 2.00 35.583 3.00 47.58 13.00
11.667 2.00 | 23.667 2.00 | 35.667 3.00 | 47.67 13.00 | 11.750 2.00 | 23.750 2.00 | 35.750 3.00 | 47.75 13.00
                                                                                                                                                                  2.00 |13.667
2.00 |13.750
                                                                                                                                                                                  2.00 | 25.667 | 2.00 | 37.67
2.00 | 25.750 | 2.00 | 37.75
                                                                                                                                                                                                                  4.00
                                                                                                                                                           1.667
                                                                                                                                                           1.750
                      2.00 |23.833 | 2.00 |35.833 | 3.00 | 47.83 | 13.00 | 2.00 |23.917 | 2.00 |35.917 | 3.00 | 47.92 | 13.00
            11 833
                                                                                                                                                          1.833
                                                                                                                                                                   2.00 113 833
                                                                                                                                                                                   2.00 |25.833
                                                                                                                                                                                                   2.00 ( 37.83
                                                                                                                                                                                                                   4.00
                                                                                                                                                                                   2.00 |25.917
                      2.00 |23.917
            11.917
            12.000 2.00 24.000 2.00 36.000 3.00 48.00 13.00
                                                                                                                                                          2.000
                                                                                                                                                                   2.00 | 14.000
                                                                                                                                                                                   2.00 |26.000
                                                                                                                                                                                                   2.00 | 38.00
                                                                                                                                                                                                                   4.00
                                                                                                                                                                                   2.00 | 26.083
2.00 | 26.167
                                                                                                                                                                                                   2.00 | 38.08
                                                                                                                                                           2.083
                                                                                                                                                                   2.00 |14.083
                                                                                                                                                                   2.00 14.167
      Unit Hyd Opeak (cms)= 0.483
                                                                                                                                                          2.167
                                                                                                                                                                                                                   6.00
                                                                                                                                                                                                   2.00 | 38.25
2.00 | 38.33
                                                                                                                                                          2.250
                                                                                                                                                                   2.00 114.250
                                                                                                                                                                                   2.00 | 26.250
                                                                                                                                                                                                                   6.00
     PEAK FLOW (cms)= 0.836 (i)
TIME TO PEAK (hrs)= 46.333
RUNOFF VOLUME (mm)= 236.119
TOTAL RAINFALL (mm)= 285.000
RUNOFF COEFFICIENT = 0.828
                                                                                                                                                                   2.00 14.333
                                                                                                                                                                                   2.00 |26.333
                                                                                                                                                          2.417
                                                                                                                                                                   2.00 | 14.417
                                                                                                                                                                                   2.00 | 26.417
                                                                                                                                                                                                   2.00 | 38.42
                                                                                                                                                                                                                   6.00
                                                                                                                                                                   2.00 |14.500
                                                                                                                                                                                   2.00 |26.500
                                                                                                                                                                                                   2.00 | 38.50
                                                                                                                                                                                                                   6.00
                                                                                                                                                          2.583
                                                                                                                                                                  2.00 |14.583
                                                                                                                                                                                   2.00 |26.583
                                                                                                                                                                                                  2.00 | 38.58
                                                                                                                                                                                                                   6.00
                                                                                                                                                          2.667
                                                                                                                                                                   2.00 | 14.667
                                                                                                                                                                                   2.00 |26.667
2.00 |26.750
                                                                                                                                                                                                   2.00 | 38.67
2.00 | 38.75
                                                                                                                                                                                                                   6.00
                                                                                                                                                                   2.00 14.750
                                                                                                                                                           2.750
                                                                                                                                                                                                                   6.00
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                          2 833
                                                                                                                                                                   2.00 114.833
                                                                                                                                                                                   2 00 26 833
                                                                                                                                                                                                   2.00 | 38.83
                                                                                                                                                                                                                   6.00
                                                                                                                                                                                   2.00 |26.917
2.00 |27.000
                                                                                                                                                                                                  2.00 | 38.92
                                                                                                                                                                   2.00 |14.917
                                                                                                                                                                   2.00 | 15.000
                                                                                                                                                          3.000
                                                                                                                                                                                                                  6.00
                                                                                                                                                          3.083
                                                                                                                                                                   2.00 15.083
                                                                                                                                                                                   2.00 |27.083
                                                                                                                                                                                                   2.00 | 39.08
                                                                                                                                                                                                                  13.00
                                                                                                                                                                                   2.00 |27.167
   CALIB
                                                                                                                                                          3.167
                                                                                                                                                                   2.00 |15.167
                                                                                                                                                                                                   2.00 | 39.17
                                                                                                                                                                                                                  13.00
  | STANDHYD ( 0205)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                                                                                                                                                          3.250
                                                                                                                                                                   2.00 | 15.250
                                                                                                                                                                                   2.00 |27.250
                                                                                                                                                                                                   2.00 | 39.25
                                                                                                                                                                                                                  13.00
                                                                                                                                                                   2.00 |15.333
                                                                                                                                                                                   2.00 27.333
                                                                                                                                                           3.333
                                                                                                                                                                                   2.00 |27,417
                                                                                                                                                                                                  2.00 | 39.42 | 13.00
                                                                                                                                                          3.417
                                                                                                                                                                   2.00 | 15,417
                                                                                                                                                                   2.00 |15.500
2.00 |15.583
                                                                                                                                                                                   2.00 |27.500
2.00 |27.583
                                                                                                                                                                                                   2.00 | 39.50
2.00 | 39.58
                       IMPERVIOUS PERVIOUS (i)
                                                                                                                                                           3.500
                                                                                                                                                                                                                  13.00
     3.583
                                            6.32
                                                                                                                                                                                                                  13.00
                                              5.00
                                                                                                                                                           3.667
                                                                                                                                                                   2.00 |15.667
2.00 |15.750
                                                                                                                                                                                   2.00 |27.667
2.00 |27.750
2.00 |27.833
                                                                                                                                                                                                   2.00 | 39.67
2.00 | 39.75
                                                                                                                                                                                                                  13.00
                                         250.00
                                                                                                                                                                   2.00 |15.833
                                                                                                                                                                                                  2.00 | 39.83
                                                                                                                                                          3.833
                                                                                                                                                                                                                  13.00
                                                                                                                                                          3 917
                                                                                                                                                                   2.00 | 15.917
                                                                                                                                                                                   2.00 |27.917
                                                                                                                                                                                                   2.00 | 39.92 | 13.00
2.00 | 40.00 | 13.00
                                          0.250
                                                                                                                                                                   2.00 | 16.000
                                                                                                                                                          4.000
        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                          4.083
                                                                                                                                                                  2.00 | 16.083
                                                                                                                                                                                   2.00 |28.083
                                                                                                                                                                                                   2.00 | 40.08
                                                                                                                                                                                                                  17.00
                                                                                                                                                                   2.00 |16.167
                                                                                                                                                                                   2.00 |28.167
                                                                                                                                                                                                   2.00 | 40.17
                                                                                                                                                          4.250
                                                                                                                                                                  2.00 |16.250
                                                                                                                                                                                   2.00 |28.250
                                                                                                                                                                                                  2.00 | 40.25
                                                                                                                                                                                                                  17.00
                                                                                                                                                          4 333
                                                                                                                                                                   2.00 |16.333
                                                                                                                                                                                   2.00 |28.333
2.00 |28.417
                                                                                                                                                                                                  2.00 | 40.33
2.00 | 40.42
                                                                                                                                                                                                                  17.00
                           - TRANSFORMED HYETOGRAPH
              TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                                   2.00 | 16.417
                                                                                                                                                          4.417
                                                                                                                                                                                                                  17.00
             hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs m
0.083 2.00 |12.083 2.00 |24.083 2.00 |36.08 0
0.167 2.00 |12.167 2.00 |24.167 2.00 |36.17
                                                                                                                                                          4.500
                                                                                                                                                                   2.00 [16.500]
                                                                                                                                                                                   2 00 28 500
                                                                                                                                                                                                  2.00 | 40.50
2.00 | 40.58
                                                                                                                                                                                                                  17.00
                                                                       m/h
                                                                                                                                                                   2.00 |16.583
                                                                                                                                                                                   2.00 |28.583
                                                                                                                                                           4.583
                                                                     6.00
                                                                                                                                                                                                   2.00 | 40.67
                                                                     6.00
                                                                                                                                                          4.667
                                                                                                                                                                   2.00 | 16.667
                                                                                                                                                                                   2.00 |28.667
                                                                                                                                                                                                                  17.00
                      2.00 | 12.250 | 2.00 | 24.250
                                                     2.00 | 36.25
                                                                                                                                                                   2.00 | 16.750
                                                                                                                                                                                   2.00 |28.750
                                                                                                                                                                                                   2.00 | 40.75
                                                                                                                                                          4.750
                                                                                                                                                                                                                  17.00
             0 333
                     2 00 112 333 2 00 124 333
                                                     2 00 | 36 33
                                                                     6.00
                                                                                                                                                          4.833
                                                                                                                                                                   2.00 | 16.833
                                                                                                                                                                                   2.00 |28.833
                                                                                                                                                                                                   2.00 | 40.83
                                                                                                                                                                                                                  17.00
                                                                                                                                                                                                   2.00 | 40.92
2.00 | 41.00
2.00 | 41.08
                                                                                                                                                                   2.00 |16.917
                                                                                                                                                                                   2.00 |28.917
2.00 |29.000
                                                                                                                                                                                                                  17.00
17.00
                      2.00 |12.417
                                     2.00 |24.417
                                                      2.00 | 36.42
                                                                                                                                                           4.917
                                                                                                                                                           5.000
             0.500
                     2.00 | 12.500 | 2.00 | 12.583
                                     2.00 |24.500 | 2.00 |24.583
                                                     2.00 | 36.50
                                                                     6.00
             0.583
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                                     2.00 |24.667
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2.00 |17.250
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2.00 |29.250
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2.00 | 41.25
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                      2.00 | 12.667
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             0.667
                                                                                                                                                           5.167
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             0.750
                      2.00 | 12.750
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                                                                     6.00
             0.833
                     2.00 12.833
                                     2.00 | 24.833 | 2.00 | 36.83
2.00 | 24.917 | 2.00 | 36.92
                                                                     6.00
                                                                                                                                                          5.333
                                                                                                                                                                  2.00 | 17.333
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                                                                                                                                                                                                   2.00 | 41.33 13.00
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                                                                                                                                                                                   2.00 |29.417
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                      2.00 12.917
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                                                                     6.00
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                      2.00 113.000
                                     2.00 |25.000
                                                     2.00 | 37.00
                                                                     6.00
                                                                                                                                                           5.500
                                                                                                                                                                   2.00 | 17.500
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                                                                                                                                                                                                   2.00 | 41.50 | 13.00
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                      2.00 |13.083
                                      2.00 |25.083
                                                      2.00 | 37.08
                                                                                                                                                           5.583
                                                                                                                                                                   2.00 |17.583
                                                                                                                                                                                   2.00 |29.583
                                                                                                                                                                                                   2.00 | 41.58
             1.167
                      2.00 | 13.167
                                      2.00 | 25.167
                                                      2.00 | 37.17
                                                                      4.00
                                                                                                                                                           5.667
                                                                                                                                                                   2.00 | 17.667
                                                                                                                                                                                   2.00 | 29.667
                                                                                                                                                                                                   2.00 | 41.67
                                                                                                                                                                                                                  13.00
                                     2.00 |25.250
2.00 |25.333
                                                                                                                                                                                   2.00 | 29.750 | 2.00 | 41.75
2.00 | 29.833 | 2.00 | 41.83
                      2.00 |13.250
                                                      2.00 | 37.25
                                                                                                                                                           5 750
                                                                                                                                                                   2.00 117.750
                                                                                                                                                                                                                  13.00
              1.250
                                                                                                                                                           5.833
                                                                                                                                                                   2.00 |17.833
             1.333
                      2.00 |13.333
                                                     2.00 | 37.33
                                                                                                                                                                                                                  13.00
                                                                     4.00
                                     2.00 | 25.417 | 2.00 | 37.42 | 2.00 | 25.500 | 2.00 | 37.50
                                                                    4.00
             1.417
                     2 00 113 417
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             1.583 2.00 | 13.583 2.00 | 25.583 2.00 | 37.58
                                                                                                                                                          6.083
                                                                                                                                                                  2.00 | 18.083 | 2.00 | 30.083 | 2.00 | 42.08 | 22.99
                                                                     4.00
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7.167 2.00 | 19.167

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2.00 | 19.333

2.00 19.417

2.00 | 19.500

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2.00 | 31.167 | 2.00 | 43.17 | 13.00

2.00 |31.250 | 2.00 | 43.25 | 13.00

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2.00 | 44.42 | 13.00 2.00 | 44.50 | 13.00

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6.167 2.00 | 18.167 2.00 | 30.167 2.00 | 42.17 23.00
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                                        2.00 |30.250
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              7.333
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2.00 | 43.50 | 13.00
                                                                                                                                                                    11.917 2.00 23.917 2.00 35.917 3.00 47.92 13.00 12.000 2.00 24.000 2.00 36.000 3.00 48.00 13.00
               7.417
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2.00 |31.750
                                                         2.00 | 43.58 | 13.00
2.00 | 43.67 | 13.00
2.00 | 43.75 | 13.00
               7 583
                                                                                                                                                                                                 .00 56.01
25.00

        Max.Eff.Inten.(mm/lar) – over (min)
        5.00
        25.00
        56.01

        Storage Coeff. (min) =
        4.40 (ii)
        24.70 (ii)

        Unit Hyd. Tpeak (min) =
        5.00
        25.00

               7.750
                                                         2.00 | 43.83 | 13.00
2.00 | 43.92 | 13.00
              7.833
                       2.00 119.833
                                        2.00 |31.833
                                                                                                                                                                                             5.00 25.00
0.23 0.05
*TOTALS*
                       2.00 |19.917
                                        2.00 |31.917
              8.000
                       2.00 | 20.000
                                        2.00 | 32.000
                                                         2.00 | 44.00 | 13.00
                                                                                                                                                             Unit Hyd. peak (cms)=
                       2.00 |20.083
                                                         2.00 | 44.08
                                                                                                                                                             PEAK FLOW (cms)= 0.12 0.89 0.985 (iii)
TIME TO PEAK (hrs)= 46.00 46.17 46.00
RUNOFF VOLUME (mm)= 283.00 223.70 229.63
TOTAL RAINFALL (mm)= 285.00 285.00 285.00
RUNOFF COEFFICIENT = 0.99 0.78 0.81
              8.167
                                        2.00 | 32.167
                                                                         13.00
                       2.00 |20.250
2.00 |20.333
                                        2.00 |32.250
2.00 |32.333
                                                         2.00 | 44.25 | 13.00
2.00 | 44.33 | 13.00
               8.250
              8.333
              8.417
                       2.00 | 20.417
                                        2.00 | 32.417
                                                         2.00 | 44.42 | 13.00
                      2.00 | 20.500 | 2.00 | 20.583
                                        2.00 |32.500
2.00 |32.583
                                                         2.00 | 44.50 | 13.00
2.00 | 44.58 | 13.00
              8.583
              8.667
                       2.00 |20.667
2.00 |20.750
                                        2.00 |32.667
2.00 |32.750
                                                         2.00 | 44.67 | 13.00
2.00 | 44.75 | 13.00
                                                                                                                                                          ***** WARNING: STORAGE COEFF, IS SMALLER THAN TIME STEP!
                                                                                                                                                          ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
              8.750
                      2.00 |20.833
2.00 |20.917
2.00 |21.000
                                        2.00 |32.833 | 2.00 | 44.83 | 13.00 | 2.00 |32.917 | 2.00 | 44.92 | 13.00 | 2.00 |33.000 | 2.00 | 45.00 | 13.00
              8 833
                                                                                                                                                                    YOU SHOULD CONSIDER SPLITTING THE AREA.
                                                                                                                                                              (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
              9.000
                       2.00 |21.083
                                        2.00 |33.083
                                                         2.00 | 45.08 52.95
                                                                                                                                                             CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
              9.083
              9.167
              9.250
                       2.00 21.250
                                        2.00 33.250
                                                         2.00 45.25 53.00
                                                                                                                                                                  THAN THE STORAGE COEFFICIENT.
                                                         2.00 | 45.33 | 53.00
2.00 | 45.42 | 53.00
                                        2.00 |33,333
                                                                                                                                                             (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
               9.333
              9.417
                       2.00 |21.417
                                        2.00 |33.417
                       2.00 |21.500
2.00 |21.583
                                        2.00 |33.500
2.00 |33.583
                                                         2.00 | 45.50 53.00
2.00 | 45.58 53.00
              9.500
              9.583
                                                         2.00 | 45.67 53.00
2.00 | 45.75 53.00
2.00 | 45.83 53.00
                       2.00 |21.667
2.00 |21.750
                                        2.00 |33.667
2.00 |33.750
              9.667
                                                                                                                                                         | ADD HYD ( 0003)|
                                                                                                                                                           1+2-3 | AREA QPEAK TPEAK R.V.
              9.833
                       2.00 |21.833
                                        2.00 |33.833
                       2.00 |21.917
                                        2.00 |33.917
2.00 |34.000
                                                         2.00 | 45.92 53.00
2.00 | 46.00 53.00
                                                                                                                                                             (ha) (cms) (hrs) (mm)

ID1=1 ( 0205): 7.90 0.985 46.00 229.63

+ ID2=2 ( 0210): 6.83 0.836 46.33 236.12
              0 017
              10.000
              10.083
                       2.00 |22.083
                                         2.00 | 34.083
                                                          2.00 | 46.08 38.02
                                         2.00 |34.167
                                                          2.00 | 46.17
                                                                          38.00
                        2.00 |22.167
              10.167
              10.250
                       2.00 |22.250
                                         2 00 34 250
                                                          2 00 | 46 25 38 00
                                                                                                                                                               ID = 3 ( 0003): 14.73 1.796 46.17 232.64
              10.333
                       2.00 |22.333
                                         2.00 |34.333
                                                          2.00 | 46.33 38.00
                                                                                                                                                             NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
              10.417
                        2.00 | 22.417
                                         2.00 | 34,417
                                                          2.00 | 46.42
                                                                          38.00
              10 500
                       2.00 | 22.500 | 2.00 | 34.500 | 2.00 | 46.50
              10.583 2.00 |22.583 2.00 |34.583 2.00 | 46.58 38.00
```

3.667 2.00 | 15.667 2.00 | 27.667 2.00 | 39.67 13.00 3.750 2.00 | 15.750 2.00 | 27.750 2.00 | 39.75 13.00 NASHYD ( 0200)| Area (ha)= 20.32 Curve Number (CN)= 80.0 |ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 ID= 1 DT= 5.0 min | Ia 3.833 2.00 | 15.833 | 2.00 | 27.833 2.00 | 39.83 | 13.00 ---- U.H. Tp(hrs)= 0.43 2.00 |27.917 4.000 2.00 | 16.000 2.00 |28.000 2.00 | 40.00 13.00 2.00 |28.083 2.00 |28.167 2.00 | 40.08 2.00 | 40.17 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. 2.00 |16.083 2.00 | 16.167 17.00 4.167 2.00 |28.250 2.00 |28.333 2.00 | 40.25 2.00 | 40.33 4 250 2.00 | 16.250 17.00 2.00 16.333 - TRANSFORMED HYETOGRAPH --TIME RAIN| TIME RAIN| 4.417 2.00 | 16.417 2.00 | 28.417 2.00 | 40.42 17.00 2.00 |28.500 2.00 | 16.500 2.00 | 40.50 4.583 2.00 | 16.583 2.00 | 40.58 17.00 4.667 2.00 | 16.667 2.00 |28.667 2.00 |28.750 2.00 | 40.67 17.00 2.00 16.750 4.750 17.00 0.333 2.00 |12.333 2.00 |12.417 2.00 |24.333 2.00 |24.417 2.00 | 36.33 2.00 | 36.42 2.00 | 40.83 2.00 | 40.92 2.00 | 41.00 4 833 2.00 116.833 2.00 |28,833 17.00 2.00 |28.917 | 2.00 |29.000 2.00 |16.917 2.00 |17.000 0.500 2.00 | 12.500 | 2.00 | 24.500 2.00 | 36.50 6.00 5.000 17.00 2.00 |24.583 2.00 |24.667 2.00 | 41.08 | 13.00 2.00 | 41.17 | 13.00 0.583 2.00 | 12.583 2.00 | 36.58 5.083 2.00 17.083 2.00 |29.083 2.00 |17.167 2.00 29.167 2.00 12.667 2.00 | 36.67 5.167 0.667 6.00 2.00 | 36.75 2.00 | 36.83 0.750 2.00 112.750 2.00 |24.750 5.250 2.00 117.250 2.00 | 29.250 2.00 | 41.25 13.00 2.00 |12.833 2.00 |24.833 5.333 2.00 17.333 2.00 29.333 2.00 | 41.23 | 13.00 2.00 | 41.42 | 13.00 2.00 | 36.92 2.00 | 37.00 2.00 |29.417 0.917 2.00 112.917 2.00 |24.917 6.00 5.417 2.00 17,417 2.00 |17.500 2.00 |17.583 2.00 |29.500 2.00 |29.583 2.00 | 41.50 | 13.00 2.00 | 41.58 | 13.00 2.00 | 13.000 2.00 |25.000 5.500 2.00 |25.083 5.583 1.083 2.00 | 13.083 2.00 | 37.08 4.00 2.00 |13.167 2.00 |13.250 2.00 |25.167 2.00 |25.250 2.00 | 37.17 2.00 | 37.25 2.00 | 37.33 2.00 |17.667 2.00 |17.750 2.00 |17.833 2.00 |29.667 2.00 |29.750 2.00 | 41.67 | 13.00 2.00 | 41.75 | 13.00 2.00 | 41.83 | 13.00 1.167 5 667 2.00 |29.833 1.333 2.00 113.333 2.00 |25.333 4.00 5.833 2.00 |13.417 2.00 |25.417 2.00 |25.500 2.00 | 37.42 | 2.00 | 37.50 5 917 2.00 17.917 2.00 |29.917 2.00 | 41.92 | 13.00 2.00 | 42.00 | 13.00 1.417 2.00 18.000 2.00 [13.500 6.000 1.500 4.00 2.00 |13.583 2.00 |25.583 2.00 | 37.58 2.00 | 42.08 22.99 2.00 | 42.17 23.00 1 583 4.00 6.083 2.00 | 18.083 2.00 | 30.083 2.00 |18.167 2.00 |30.167 1.667 4.00 1.750 2.00 [13.750 2.00 |25.750 | 2.00 | 37.75 4.00 6.250 2.00 | 18.250 2.00 30.250 2.00 42.25 23.00 2.00 |25.833 6 333 2.00 |18.333 2.00 |30.333 2.00 |30.417 2.00 | 42.33 23.00 2.00 | 42.42 23.00 1.833 2.00 |25.917 2.00 | 37.92 2.00 18.417 1.917 2.00 | 13.917 4.00 6.417 2.00 |14,000 2.00 |14,083 2.00 |26.000 2.00 |26.083 2.00 | 38.00 2.00 | 38.08 4.00 6.500 2 00 118 500 2.00 |30.500 | 2.00 | 42.50 | 23.00 | 2.00 | 30.583 | 2.00 | 42.58 | 23.00 2.000 2.00 |18.583 2.083 6.00 2.167 2.00 114.167 2.00 | 26.167 | 2.00 | 38.17 6.00 6.667 2.00 | 18.667 2.00 | 30.667 2.00 | 42.67 23.00 2.00 |14.250 2.00 |26.250 2.00 | 38.25 2.00 | 18.750 2.00 |30.750 2.00 | 42.75 23.00 2 333 2 00 114 333 2 00 26 333 2 00 | 38 33 6.00 6.833 2.00 18.833 2.00 |30.833 2.00 | 42.83 23.00 2.00 | 42.92 | 23.00 2.00 | 43.00 | 23.00 2.00 | 43.08 | 13.01 2.00 |18.917 2.00 |19.000 2.00 |30.917 2.00 |31.000 2.417 2.00 |14.417 2.00 |26.417 2.00 | 38.42 6.917 2.500 2.00 | 14.500 | 2.00 | 14.583 2.00 |26.500 | 2.00 |26.583 2.00 | 38.50 6.00 2.583 6.00 7.083 2.00 19.083 2.00 31.083 2.00 | 19.167 2.00 | 19.250 2.00 |31.167 2.00 |31.250 2.00 | 43.17 2.00 | 14.667 2.00 |26.667 2.00 | 38.67 2.667 7.167 7.250 2.750 2.00 | 14.750 2.00 |26.750 2.00 | 38.75 6.00 2.833 2.00 | 14.833 | 2.00 | 26.833 | 2.00 | 38.83 7.333 2.00 119.333 2.00 |31.333 | 2.00 | 43.33 | 13.00 | 2.00 |31.417 | 2.00 | 43.42 | 13.00 2.00 |26.917 2.00 | 38.92 2.00 | 19.417 2.917 2.00 |14.917 6.00 3 000 2.00 [15.000] 2.00 27.000 2.00 | 39.00 6.00 7.500 2.00 119.500 2 00 131 500 2 00 | 43 50 13 00 3.083 2.00 |15.083 2.00 |27.083 2.00 | 39.08 7.583 2.00 19.583 2.00 |31.583 2.00 | 43.58 3.167 2.00 | 15.167 2.00 | 27.167 2.00 | 39.17 13.00 7.667 2.00 119.667 2.00 | 31.667 2.00 | 43.67 13.00 2.00 |15.250 2.00 |15.333 2.00 |27.250 2.00 |27.333 2.00 |31.750 | 2.00 | 43.75 2.00 |31.833 | 2.00 | 43.83 2.00 | 39.25 7.750 2.00 119 750 13.00 2.00 |19.833 13.00 3.333 2.00 | 39.33 13.00 2.00 | 15.417 | 2.00 | 27.417 | 2.00 | 39.42 | 13.00 | 2.00 | 15.500 | 2.00 | 27.500 | 2.00 | 39.50 | 13.00 3.417 7.917 2.00 19.917 2.00 31.917 2.00 43.92 13.00

3.583 2.00 | 15.583 2.00 | 27.583 2.00 | 39.58 13.00

2.00 |32.000

8.083 2.00 | 20.083 2.00 | 32.083 2.00 | 44.08 13.00

```
8 167 2 00 20 167
                                   2.00 | 32.167 | 2.00 | 44.17 | 13.00
                                   2.00 |32.250
        8.250
                 2.00 |20.250
                                                      2.00 | 44.25
                                                                      13.00
        8.333
                 2.00 | 20.333
                                   2.00 32.333
                                                      2.00 | 44.33 | 13.00
                 2.00 |20.417
                                   2.00 |32.417
                                                      2.00 | 44.42 | 13.00
2.00 | 44.50 | 13.00
        8 583
                 2.00 | 20.583
                                   2 00 132 583
                                                     2 00 1 44 58 13 00
                  2.00 |20,667
                                   2.00 |32.667
        8.750
                 2.00 |20.750
                                   2.00 | 32.750
                                                      2.00 | 44.75
                                                                      13.00
                 2.00 |20.833
                                                     2.00 | 44.83 | 13.00
2.00 | 44.92 | 13.00
                                   2.00 |32.833
         8.833
        8.917
                                   2.00 32.917
        9.000
                 2.00 21.000
                                   2.00 |33.000
                                                     2.00 | 45.00 | 13.00
2.00 | 45.08 | 52.95
        9.083
                 2.00 21.083
                                   2.00 |33.083
        9.167
                 2.00 |21.167
                                   2.00 | 33.167
                                                      2.00 | 45.17
                                                                      53.00
                                   2.00 |33.250
                                                      2.00 | 45.25
                                                     2.00 45.33 53.00
        9.333
                 2.00 |21.333
                                   2.00 | 33.333
                 2.00 |21.417
2.00 |21.500
                                   2.00 |33.417
2.00 |33.500
                                                     2.00 | 45.42
2.00 | 45.50
                                                                      53.00
        9.417
        9.500
                                   2.00 |33.583
2.00 |33.667
2.00 |33.750
                                                     2.00 | 45.58
2.00 | 45.67
2.00 | 45.75
        9 583
                2.00 |21.583
2.00 |21.667
                                                                      53.00
                                                                      53.00
                 2.00 |21.750
        9.750
        9.833
                2.00 21 833
                                   2.00 |33.833
                                                     2.00 | 45.83 53.00
                  2.00 |21.917
                                   2.00 |33.917
                                                      2.00 | 45.92
                                                                      53.00
        9.917
        10.000
                  2.00 | 22.000
                                   2.00 | 34.000
                                                      2.00 | 46.00 53.00
                  2.00 |22.083
                                    2.00 |34.083 | 2.00 |34.167
        10.167
                  2.00 |22.167
                                                      2.00 | 46.17
                                                                      38.00
                 2.00 |22.250 |2.00 |22.333
                                    2.00 |34.250
2.00 |34.333
                                                      2.00 | 46.25 | 38.00
2.00 | 46.33 | 38.00
       10.250
10.333
        10.417
                  2.00 | 22.417
                                    2.00 |34.417
                                                      2.00 | 46.42 38.00
                                    2.00 |34.500 | 2.00 |34.583
                                                      2.00 | 46.50 38.00
2.00 | 46.58 38.00
                  2.00 |22.500
        10.583
                  2.00 |22.583
        10.667
                 2.00 |22.667 | 2.00 |22.750
                                    2.00 |34.667
2.00 |34.750
                                                      2.00 | 46.67 38.00
2.00 | 46.75 38.00
        10.750
                                   2.00 |34.833
2.00 |34.917
2.00 |35.000
                 2.00 |22.833
2.00 |22.917
                                                      2.00 | 46.83 38.00
2.00 | 46.92 38.00
        10 833
       11.000
                 2.00 |23.000
                                                      2.00 | 47.00 38.00
                 2.00 |23.083
                                    2.00 |35.083
                                                      3.00 | 47.08 | 13.04
3.00 | 47.17 | 13.00
       11.083
        11.167
       11.250
                  2.00 | 23.250
                                    2.00 | 35.250
                                                      3.00 | 47.25 | 13.00
                                    2.00 |35.333
2.00 |35.417
                  2.00 |23.333
                                                      3.00 | 47.33
                                                      3.00 | 47.42 | 13.00
       11.417
                  2.00 |23.417
                                    2.00 |35,500
2.00 |35,583
       11.500
                  2.00 |23,500
                                                      3.00 47.50 13.00
                  2.00 |23.583
       11.583
                                                      3.00 47.58 13.00
                                                      3.00 | 47.67 | 13.00
3.00 | 47.75 | 13.00
        11.667
                  2.00 |23.667
                                    2.00 |35.667
                  2.00 |23.750
                                    2.00 |35.750
       11.833
                 2.00 |23.833
                                   2.00 |35.833
                                                      3.00 | 47.83 | 13.00
       11.917 2.00 |23.917 2.00 |35.917 3.00 | 47.92 13.00 |12.000 2.00 |24.000 2.00 |36.000 3.00 | 48.00 13.00
Unit Hyd Qpeak (cms)= 1.805
PEAK FLOW (cms)= 2.595 (i)
TIME TO PEAK (hrs)= 46.167
RUNOFF VOLUME (mm)= 228.218
TOTAL RAINFALL (mm)= 285,000
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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                 | NASHYD ( 0201)| Area (ha)= 3.17 Curve Number (CN)=77.0
|ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res (N)=3.00
| U.H. Tp(hrs)= 0.16
                                                                                                                                       NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                       - TRANSFORMED HYETOGRAPH --
                                                                                                                                           TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
                                                                                                                                                  2.00 | 12.083 | 2.00 | 24.083 | 2.00 | 36.08
2.00 | 12.167 | 2.00 | 24.167 | 2.00 | 36.17
2.00 | 12.250 | 2.00 | 24.250 | 2.00 | 36.25
                                                                                                                                           0.083
                                                                                                                                                                                             6.00
                                                                                                                                           0.167
                                                                                                                                           0.333
                                                                                                                                                  2.00 | 12.333 | 2.00 | 24.333
                                                                                                                                                                               2.00 | 36.33
                                                                                                                                                                                              6.00
                                                                                                                                                  2.00 | 12.417
                                                                                                                                                                 2.00 |24.417
                                                                                                                                                                                2.00 | 36.42
                                                                                                                                           0.417
                                                                                                                                           0.500
                                                                                                                                                  2.00 | 12.500
                                                                                                                                                                 2.00 |24.500
                                                                                                                                                                                2.00 | 36.50
                                                                                                                                                                                              6.00
                                                                                                                                           0.583
                                                                                                                                                  2.00 | 12.583
2.00 | 12.667
                                                                                                                                                                 2.00 |24.583
2.00 |24.667
                                                                                                                                                                               2.00 | 36.58
                                                                                                                                                                                              6.00
                                                                                                                                           0.667
                                                                                                                                                                                              6.00
                                                                                                                                           0.750
                                                                                                                                                  2 00 112 750
                                                                                                                                                                 2 00 24 750
                                                                                                                                                                                2.00 | 36.75
                                                                                                                                                                                              6.00
                                                                                                                                                   2.00 12.833
                                                                                                                                                                 2.00 |24.833
                                                                                                                                           0.917
                                                                                                                                                  2.00 | 12.917
                                                                                                                                                                 2.00 |24.917
                                                                                                                                                                                2.00 | 36.92
                                                                                                                                                                                              6.00
                                                                                                                                                  2.00 |13.000
2.00 |13.083
                                                                                                                                                                 2.00 |25.000
2.00 |25.083
                                                                                                                                                                               2.00 | 37.00
                                                                                                                                            1.000
                                                                                                                                           1.083
                                                                                                                                                                                              4.00
                                                                                                                                           1.167
                                                                                                                                                  2.00 [13.167]
                                                                                                                                                                 2.00 |25.167
                                                                                                                                                                               2.00 | 37.17
                                                                                                                                                                                              4.00
                                                                                                                                                                 2.00 |25.250
                                                                                                                                                                                2.00 | 37.25
                                                                                                                                                   2.00 |13.250
                                                                                                                                           1.250
                                                                                                                                           1.333
                                                                                                                                                  2.00 | 13.333
                                                                                                                                                                 2.00 |25.333
                                                                                                                                                                                2.00 | 37.33
                                                                                                                                                                                              4.00
                                                                                                                                                  2.00 |13.417
2.00 |13.500
                                                                                                                                                                 2.00 |25.417
2.00 |25.500
                                                                                                                                                                               2.00 | 37.42 | 2.00 | 37.50
                                                                                                                                                                                             4.00
                                                                                                                                           1.583
                                                                                                                                                  2.00 [13.583
                                                                                                                                                                 2.00 |25.583
                                                                                                                                                                               2.00 | 37.58
                                                                                                                                                                                              4.00
                                                                                                                                                   2.00 |13.667
                                                                                                                                                                 2.00 |25.667
                                                                                                                                                                 2.00 | 25.750
                                                                                                                                                                                2.00 | 37.75
                                                                                                                                           1.750
                                                                                                                                                  2.00 | 13.750
                                                                                                                                                                                              4.00
                                                                                                                                                                 2.00 |25.833
                                                                                                                                                                               2.00 | 37.83
                                                                                                                                           1 833
                                                                                                                                                  2.00 |13.833
                                                                                                                                                                                              4.00
                                                                                                                                                  2.00 | 13.917
                                                                                                                                           1.917
                                                                                                                                                                                              4.00
                                                                                                                                                                               2.00 | 38.00
2.00 | 38.08
                                                                                                                                           2.000
                                                                                                                                                  2.00 14.000
                                                                                                                                                                 2.00 |26.000
                                                                                                                                                                                             4.00
                                                                                                                                                  2.00 |14.083
                                                                                                                                                                 2.00 |26.083
                                                                                                                                           2.083
                                                                                                                                                                                              6.00
                                                                                                                                           2.167
                                                                                                                                                  2.00 | 14.167
                                                                                                                                                                 2.00 | 26.167
                                                                                                                                                                                2.00 | 38.17
                                                                                                                                                                                              6.00
                                                                                                                                                   2.00 |14.250
                                                                                                                                                                 2.00 |26.250
                                                                                                                                                                                2.00 | 38.25
                                                                                                                                           2.333
                                                                                                                                                  2.00 | 14.333
                                                                                                                                                                 2.00 | 26.333
                                                                                                                                                                                2.00 | 38.33
                                                                                                                                                                                              6.00
                                                                                                                                           2 417
                                                                                                                                                  2 00 114 417
                                                                                                                                                                 2.00 |26.417
                                                                                                                                                                                2.00 | 38.42
                                                                                                                                                                                              6.00
                                                                                                                                                                 2.00 |26.500
                                                                                                                                                                                2.00 | 38.50
                                                                                                                                           2.500
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                                                                                                                                                  2.00 |14.833
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                                                                                                                                                  2.00 [15.000]
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                                                                                                                                                  2.00 | 15.083 | 2.00 | 27.083 | 2.00 | 39.08
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RUNOFF COEFFICIENT = 0.801

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3.167 2.00 | 15.167 2.00 | 27.167 2.00 | 39.17 13.00
3.250
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                                          2.00 | 39.25 | 13.00
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                                           2.00 | 39.75
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        2.00 |16.333
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                                           2.00 | 40.58
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        2.00 | 16.583
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                                          2.00 | 40.92 | 17.00
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                                           2.00 | 41.08
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                                           2.00 | 41.75 | 13.00
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                         2.00 | 31.417 | 2.00 | 43.42 | 13.00 | 2.00 | 31.500 | 2.00 | 43.50 | 13.00
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7.583 2.00 | 19.583 2.00 | 31.583 2.00 | 43.58 13.00
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file://V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Out
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```
Unit Hyd Qpeak (cms)= 0.757
       PEAK FLOW (cms)= 0.434 (i)
TIME TO PEAK (hrs)= 46.000
RUNOFF VOLUME (mm)= 219.312
TOTAL RAINFALL (mm)= 285.000
RUNOFF COEFFICIENT = 0.770
       (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
 CALIB
| STANDHYD ( 0202)| Area (ha)= 4.57
|ID=1 DT=5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
                                         IMPERVIOUS PERVIOUS (i)
     NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                 - TRANSFORMED HYETOGRAPH -
                       TIME RAIN | TIME R
                                      2.00 |12.333 | 2.00 |24.333 | 2.00 | 36.33 | 2.00 |12.417 | 2.00 |24.417 | 2.00 |36.42 | 2.00 |12.500 | 2.00 |24.500 | 2.00 |36.50
                       0.333
                                                                                                                                          6.00
                       0.500
                                                                                                                                          6.00
                                      2.00 | 12.583 | 2.00 | 24.583 | 2.00 | 12.667 | 2.00 | 24.667
                                                                                                         2.00 | 36.58
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                                       2.00 |13.000
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                                       2.00 |13.083
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                                      2.00 |14.083 | 2.00 |26.083 | 2.00 | 38.08 | 6.00
                       6.667 2.00 | 18.667 2.00 | 30.667 2.00 | 42.67 23.00 | 6.750 2.00 | 18.750 2.00 | 30.750 2.00 | 42.75 23.00
                                                                        2.00 |30.833 | 2.00 | 42.83 | 23.00 | 2.00 |30.917 | 2.00 | 42.92 | 23.00
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         2.00 | 17.083 | 2.00 | 29.083 | 2.00 | 41.08 | 13.00 | 2.00 | 17.167 | 2.00 | 29.167 | 2.00 | 41.17 | 13.00
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2.00 | 42.42 23.00
6.417
6.500
         2.00 [18.500
                            2.00 | 30.500 | 2.00 | 42.50 | 23.00
6.583 2.00 | 18.583 2.00 | 30.583 2.00 | 42.58 23.00
11.167 2.00 | 23.167 2.00 | 35.167 3.00 | 47.17 13.00 | 11.250 2.00 | 23.250 2.00 | 35.250 3.00 | 47.25 13.00
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2.00 | 43.42 | 13.00
2.00 | 43.50 | 13.00
          2.00 | 19.500
                             2.00 |31.500
7.583
         2.00 19.583
                            2.00 31.583 2.00 43.58 13.00
          2.00 |19.667
2.00 |19.750
                            2.00 |31.667
2.00 |31.750
                                                2.00 | 43.67
 7.750
                                                2.00 | 43.75
                                                                  13.00
 7.833
7.917
          2.00 |19.833
2.00 |19.917
                            2.00 |31.833
2.00 |31.917
                                                2.00 | 43.83
2.00 | 43.92
                                                2.00 | 44.00 | 13.00
8.000
          2.00 |20.000
                             2.00 |32.000
          2.00 |20.083
2.00 |20.167
                            2.00 |32.083
2.00 |32.167
                                                2.00 | 44.08 | 13.00
2.00 | 44.17 | 13.00
8.083
8.167
                            2.00 |32.250 | 2.00 | 44.25 | 13.00 | 2.00 |32.333 | 2.00 | 44.33 | 13.00
8 250
          2.00 | 20.250
          2.00 |20.333
8.333
                            2.00 |32.417 | 2.00 | 44.42 | 13.00 | 2.00 | 32.500 | 2.00 | 44.50 | 13.00
8.417
          2.00 | 20.417
          2.00 |20.500
8.583
          2.00 | 20.583
                             2.00 |32,583
                                                2.00 | 44.58 | 13.00
          2.00 |20,667
2.00 |20,750
                            2.00 |32.667
2.00 |32.750
                                               2.00 | 44.67 | 13.00
2.00 | 44.75 | 13.00
2.00 | 44.83 | 13.00
 8.667
         2.00 | 20.833
8.833
                             2.00 32.833
          2.00 |20.917
                            2.00 |32.917
2.00 |33.000
                                                2.00 | 44.92 | 13.00
2.00 | 45.00 | 13.00
8.917
9.000
         2.00 |21.083
2.00 |21.167
                            2.00 |33.083
2.00 |33.167
                                               2.00 | 45.08 52.95
2.00 | 45.17 53.00
9.083
9.167
9.250
         2.00 |21.250
                             2.00 | 33.250 | 2.00 | 45.25 | 53.00
9.333
          2.00 |21,333
                             2.00 |33.333
                                                2.00 | 45.42
                                                                  53.00
9.417
          2.00 |21.417
                             2.00 | 33.417
         2.00 |21.500
2.00 |21.583
                            2.00 |33.500
2.00 |33.583
                                               2.00 | 45.50 | 53.00
2.00 | 45.58 | 53.00
9.500
9.583
9.667
          2.00 | 21.667
                             2.00 | 33.667 | 2.00 | 45.67 | 53.00
          2.00 |21.750
                             2.00 |33.750
                                                2.00 | 45.75 53.00
9 833
         2 00 |21 833
                             2 00 33 833
                                                2 00 | 45 83 53 00
                            2.00 |33.917 | 2.00 | 45.92 | 53.00 | 2.00 |34.000 | 2.00 | 46.00 | 53.00 | 2.00 |34.083 | 2.00 | 46.08 | 38.02
          2.00 |21.917
9.917
10,000
          2.00 |22.000 | 2.00 |22.083
10.083
           2.00 |22.167
                              2.00 |34.167
                                                 2.00 | 46.17
                                                                  38.00
10.250
           2.00 |22.250
                              2.00 |34.250
                                                2.00 | 46.25 38.00
10.333
          2.00 | 22.333 | 2.00 | 34.333 | 2.00 | 46.33 | 38.00 | 2.00 | 22.417 | 2.00 | 34.417 | 2.00 | 46.42 | 38.00
10.417
10.500
          2.00 22 500
                             2.00 34 500
                                                2 00 | 46 50 38 00
10.583
           2.00 |22.583
                              2.00 |34.583
                                                 2.00 | 46.58
                                                                  38.00
10.667
           2.00 |22.667
                              2.00 | 34.667
                                                2.00 | 46.67
                                                                  38.00
          2.00 | 22.750 | 2.00 | 34.750 | 2.00 | 46.75 | 38.00 | 2.00 | 22.833 | 2.00 | 34.833 | 2.00 | 46.83 | 38.00
10.750
10.833
10.917
          2.00 | 22.917 | 2.00 | 34.917 | 2.00 | 46.92 | 38.00
           2.00 |23.000
                              2.00 |35.000
                                                2.00 | 47.00 38.00
11.000
11.083 2.00 23.083 2.00 35.083 3.00 47.08 13.04
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file://V1...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                                                                                                                                                                                                                                                                                                                                          11 333
                                                                                                                                                                                                                                                                                                                                                              2 00 |23 333 | 2 00 |35 333
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                                                                                                                                                                                                                                                                                                                                                               2.00 |23.417
                                                                                                                                                                                                                                                                                                                                                                                                  2.00 |35.417
                                                                                                                                                                                                                                                                                                                                          11.500
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                                                                                                                                                                                                                                                                                                                                                                                                2.00 |35.500
                                                                                                                                                                                                                                                                                                                                                                                                                                    3.00 | 47.50 | 13.00
                                                                                                                                                                                                                                                                                                                                            11.583 2.00 |23.583 2.00 |35.583 3.00 | 47.58
11.667 2.00 |23.667 2.00 |35.667 3.00 | 47.67
                                                                                                                                                                                                                                                                                                                                           11.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    13.00
                                                                                                                                                                                                                                                                                                                                          11.750 2.00 | 23.750 2.00 | 35.750 3.00 | 47.75 13.00 | 11.833 2.00 | 23.833 2.00 | 35.833 3.00 | 47.83 13.00
                                                                                                                                                                                                                                                                                                                                           11.917
                                                                                                                                                                                                                                                                                                                                                              2.00 |23.917
                                                                                                                                                                                                                                                                                                                                                                                                2.00 | 35.917 | 3.00 | 47.92 | 13.00
                                                                                                                                                                                                                                                                                                                                          12.000 2.00 24.000 2.00 36.000 3.00 48.00 13.00

    Max.Eff.Inten.(mm/hr)=
    53.00
    55.38

    over (min)
    5.00
    40.00

    Storage Coeff. (min)=
    5.34 (ii)
    36.25 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    40.00

                                                                                                                                                                                                                                                                                                                                                                                                                   40.00
                                                                                                                                                                                                                                                                                                                                                                                          0.21 0.03
*TOTALS*
                                                                                                                                                                                                                                                                                                                            Unit Hyd. peak (cms)=
                                                                                                                                                                                                                                                                                                                            PEAK FLOW (cms)= 0.22 0.35 0.524 (iii)
TIME TO PEAK (hrs)= 46.00 46.42 46.00
RUNOFF VOLUME (mm)= 283.00 216.60 237.84
TOTAL RAINFALL (mm)= 285.00 285.00 285.00
RUNOFF COEFFICIENT = 0.99 0.76 0.83
                                                                                                                                                                                                                                                                                                                               (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                                                                                                                                                                                                                                                                                             CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                                                                                                                                                                            (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
                                                                                                                                                                                                                                                                                                                      ADD HYD ( 0040)
                                                                                                                                                                                                                                                                                                                         1+2=3 | AREA QPEAK TPEAK R.V.
                                                                                                                                                                                                                                                                                                                             (ha) (cms) (hrs) (mm)

ID1=1 ( 0201): 3.17 0.434 46.00 219.31

+ ID2= 2 ( 0202): 4.57 0.524 46.00 237.84
                                                                                                                                                                                                                                                                                                                               ID = 3 ( 0040): 7.74 0.957 46.00 230.25
                                                                                                                                                                                                                                                                                                                            NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                                                                                                                       RESERVOIR( 0032)| OVERFLOW IS OFF
                                                                                                                                                                                                                                                                                                                      | IN= 2---> OUT= 1 |
| DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                                                                                                                                                                                                                                                                                                                                                         0.0640 0.1775 0.1330
                                                                                                                                                                                                                                                                                                                                                                                                                                    0.3659
                                                                                                                                                                                                                                                                                                                                                           0.0790 0.2218 | 0.0000
                                                                                                                                                                                                                                                                                                                                                                                                                                   0.0000
                                                                                                                                                                                                                                                                                                                        //V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Pro
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PEAK FLOW REDUCTION [Qout/Qin](%)= 38.32
                         TIME SHIFT OF PEAK FLOW
                                                                                                     (min)=110.00
                        TIME SHIFT OF PEAK FLOW (min)=110.00
MAXIMUM STORAGE USED (ha.m.)= 0.9037
ID = 3 ( 0001): 28.06 2.879 46.17 228.75
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
| NASHYD ( 0215) | Area (ha)= 15.80 Curve Number (CN)= 83.0 | | ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | U.H. Tp(hrs)= 0.70
           NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                            -- TRANSFORMED HYETOGRAPH --
                   TIME RAIN | TIME R
                     0.333 2.00 12.333 2.00 24.333
                                                                                                2.00 | 36.33
                                                                                                                              6.00
                                                                  2.00 |24.417
                                   2.00 | 12.500 | 2.00 | 24.500 | 2.00 | 36.50
                     0.500
                                                                                                                              6.00
                                   2.00 |12.583
2.00 |12.667
                                                                  2.00 |24.583
2.00 |24.667
                     0.583
                                                                                                2.00 | 36.58
                     0.667
                                                                                                  2.00 | 36.67
                                                                                                                               6.00
                                   2.00 |12.750
2.00 |12.833
                                                                  2.00 | 24.750 | 2.00 | 36.75
2.00 | 24.833 | 2.00 | 36.83
                     0.750
                     0.833
                     0.917
                                    2.00 | 12.917
                                                                  2.00 |24.917
                                                                                                2.00 | 36.92
                                    2.00 |13.000
2.00 |13.083
                                                                  2.00 |25.000
2.00 |25.083
                                                                                                2.00 | 37.00
2.00 | 37.08
                     1.000
                     1.083
                                                                                                                               4.00
                     1.167
                                    2.00 [13.167]
                                                                  2.00 |25.167
                                                                                                2.00 | 37.17
                                                                                                                              4.00
                                    2.00 |13.250
                                                                  2.00 |25.250
                                                                                                 2.00 | 37.25
                     1.333
                                    2.00 | 13.333
                                                                  2.00 | 25.333 | 2.00 | 37.33
                                                                                                                              4.00
                                    2.00 |13.417
                                                                  2.00 |25.417
                                                                                                2.00 | 37.42
                                                                  2.00 |25.500
                                                                                                 2.00 | 37.50
                     1.500
                                    2.00 | 13.500
                                                                                                                              4.00
                     1 583
                                    2.00 | 13.583
                                                                  2.00 25.583 2.00 37.58
                                   2.00 | 13.667 | 2.00 | 25.667 | 2.00 | 37.67 | 4.00
                     6.250 2.00 | 18.250 2.00 | 30.250 2.00 | 42.25 23.00
                                   2.00 | 18.333 | 2.00 | 30.333 | 2.00 | 42.33 | 23.00
                     6.333
                                                                  2.00 |30.417 | 2.00 | 42.42 | 23.00 | 2.00 |30.500 | 2.00 | 42.50 | 23.00
                     6.417
                                    2.00 | 18.417
                                    2.00 | 18.500
                     6.500
                     6.583
                                    2.00 | 18.583
                                                                  2.00 |30.583
                                                                                                2.00 | 42.58 23.00
                                     2.00 |18.667
                                                                   2.00 |30.667
                                                                                                 2.00 | 42.67
                     6.750
                                    2.00 | 18.750
                                                                  2.00 | 30.750
                                                                                                2.00 | 42.75 23.00
                                    2.00 |18.833 | 2.00 |18.917
                                                                  2.00 |30.833
                                                                                                2.00 | 42.83 | 23.00
2.00 | 42.92 | 23.00
                     6.833
                     6.917
                                                                  2.00 |31.000 | 2.00 | 43.00 | 23.00 | 2.00 | 31.083 | 2.00 | 43.08 | 13.01
                     7.000
                                   2.00 119.000
                                    2.00 |19.083
                     7.167
                                    2.00 19.167
                                                                  2.00 31.167 2.00 43.17 13.00
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1.750 2.00 | 13.750 2.00 | 25.750 2.00 | 37.75
1.833 2.00 | 13.833 2.00 | 25.833 2.00 | 37.83
                           2.00 | 25.917
1.917
         2.00 | 13.917
                                             2.00 | 37.92
                                                              4.00
         2.00 14.000
                           2.00 | 26.000
                           2.00 |26.083
2.167
        2.00 14.167
                           2.00 | 26.167
                                            2.00 | 38.17
                                                              6.00
         2.00 |14.250
                           2.00 |26.250
                           2.00 |26,333
2.333
         2.00 | 14.333
                                             2.00 | 38.33
                                                              6.00
                          2.00 |26.417
2.00 |26.500
                                            2.00 | 38.42
         2.00 |14.417
2.417
         2.00 14.500
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2.583
        2.00 114.583
                           2.00 |26.583
                                            2.00 | 38.58
                                                              6.00
                          2.00 |26.667
2.00 |26.750
         2.00 |14.667
         2.00 114.750
                                             2.00 | 38.75
2.750
                                                              6.00
2.833
        2.00 |14.833
2.00 |14.917
                          2.00 | 26.833
2.00 | 26.917
                                            2,00 | 38.83
2.00 | 38.92
2.917
                          2.00 | 27.000 | 2.00 | 39.00
2.00 | 27.083 | 2.00 | 39.08
3.000
        2.00 | 15.000
                                                             6.00
         2.00 |15.083
3.167
         2.00 | 15.167
                           2.00 | 27.167
                                             2.00 | 39.17
                                                             13.00
         2.00 |15.250 | 2.00 |15.333
                          2.00 |27.250
2.00 |27.333
                                            2.00 | 39.25
3.417
         2.00 | 15.417
                           2.00 |27.417
                                            2.00 | 39.42 | 13.00
                          2.00 |27.500
2.00 |27.583
         2.00 | 15.500
                                             2.00 | 39.50
        2.00 | 15.583
3.583
                                            2.00 | 39.58
                                                             13.00
        2.00 |15.667
2.00 |15.750
                          2.00 |27.667
2.00 |27.750
                                            2.00 | 39.67
2.00 | 39.75
3,750
                                                             13.00
                          2.00 |27.833
2.00 |27.917
                                            2.00 | 39.83 | 13.00
2.00 | 39.92 | 13.00
3 833
        2.00 | 15.833
3.917
         2.00 |15.917
4.000
         2.00 16.000
                           2.00 |28.000
                                            2.00 | 40.00
                                                             13.00
        2.00 |16.083
2.00 |16.167
                          2.00 |28.083
2.00 |28.167
                                            2.00 | 40.08
4.083
4.167
                                                             17.00
4.250
        2.00 16.250
                          2.00 | 28.250 | 2.00 | 40.25 | 17.00 | 2.00 | 28.333 | 2.00 | 40.33 | 17.00
         2.00 |16.333
4.417
         2.00 16.417
                           2.00 |28.417
                                             2.00 | 40.42
                                                             17.00
4.500
4.583
        2.00 | 16.500
2.00 | 16.583
                          2.00 |28.500
2.00 |28.583
                                            2.00 | 40.50
                          2.00 | 28.667 | 2.00 | 40.67 | 17.00 | 2.00 | 28.750 | 2.00 | 40.75 | 17.00
4.667
        2.00 | 16.667
         2.00 16.750
4.833
        2.00 | 16.833
                           2.00 | 28.833
                                            2.00 | 40.83
                                                             17.00
        2.00 |16.917
                          2.00 |28.917 | 2.00 | 40.92 | 17.00 |
2.00 |29.000 | 2.00 | 41.00 | 17.00
4.917
5.000
        2.00 | 17.083 | 2.00 | 29.083 | 2.00 | 41.08 | 13.00 | 2.00 | 17.167 | 2.00 | 29.167 | 2.00 | 41.17 | 13.00
5.083
5.167
5.250
        2.00 17.250
                           2.00 | 29.250
                                            2.00 | 41.25
                                                             13.00
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         2.00 |17.333
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                                            2.00 | 41.42 | 13.00
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                                            2.00 | 41.50 | 13.00
         2.00 |17.583
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                                             2.00 | 41.67
                                                             13.00
         2.00 | 17.750
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5.833
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                           2.00 |29.833
                                            2.00 | 41.83 | 13.00
         2.00 |17.917
2.00 |18.000
                                            2.00 | 41.92 | 13.00
2.00 | 42.00 | 13.00
                          2.00 |29.917
2.00 |30.000
5.917
6.000
6.083
        2.00 | 18.083 | 2.00 | 30.083 | 2.00 | 42.08 | 22.99
        2.00 | 18.167 | 2.00 | 30.167 | 2.00 | 42.17 | 23.00
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2.00 |19.250
                               2.00 |31.250
                                                  2.00 | 43.25 | 13.00
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7.333
           2.00 | 19.333
                              2.00 | 31.333
 7.417
7.500
           2.00 | 19.417
2.00 | 19.500
                              2.00 |31.417
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2.00 |31.583
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          2.00 19.583
                                                  2.00 | 43.58 13.00
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7.667
 7.750
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                                                 2.00 | 43.83 | 13.00
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                              2.00 | 32.000
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                                                  2.00 | 44.17 | 13.00
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 8.333
          2.00 | 20.417
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                              2.00 32.417
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                                                  2.00 | 44.50 | 13.00
2.00 | 44.58 | 13.00
8.583
          2.00 |20.667
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                              2.00 |32.667
2.00 |32.750
                                                  2.00 | 44.67 | 13.00
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8.833
          2.00 | 20.833
                              2.00 |32.833
                                                  2.00 | 44.83 | 13.00
          2.00 |20.917
                               2.00 |32.917
                                                  2.00 | 44.92 | 2.00 | 45.00
                              2.00 |33.000
                                                                    13.00
9.000
9.083
          2.00 |21.083
2.00 |21.167
                              2.00 |33.083
2.00 |33.167
                                                  2.00 | 45.08
2.00 | 45.17
                                                 2.00 | 45.25 | 53.00
2.00 | 45.33 | 53.00
9.250
          2.00 |21.250
                              2.00 | 33.250
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           2.00 |21.500
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          2.00 |21.583 | 2.00 |21.667
                              2.00 |33.583 | 2.00 |33.667
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          2.00 |21.917 | 2.00 |33.917 | 2.00 | 45.92 | 53.00 | 2.00 |22.000 | 2.00 |34.000 | 2.00 | 46.00 | 53.00
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10.583 2.00 |22.583 2.00 |34.583 2.00 | 46.58 38.00
10.667 2.00 22.667 2.00 34.667 2.00 46.67 38.00
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3.00 | 47.42 | 13.00
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11.833 2.00 23.833
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2.00 |35.833 | 3.00 | 47.83 | 13.00
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                                                                                                                                                                                                                                                                                                                                                                                                                                                          12,000 2.00 |24,000 2.00 |36,000 3.00 | 48.00 13.00
                                                                                                                                                                                                                                                                                                                                                                                                                                     Unit Hyd Qpeak (cms)= 0.862
                                                                                                                                                                                                                                                                                                                                                                                                                                    PEAK FLOW (cms)= 1.801 (i)
TIME TO PEAK (hrs)= 46.583
RUNOFF VOLUME (mm)= 236.124
TOTAL RAINFALL (mm)= 285.000
RUNOFF COEFFICIENT = 0.829
                                                                                                                                                                                                                                                                                                                                                                                                                                     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                                                                                                                                                              CALIB
                                                                                                                                                                                                                                                                                                                                                                                                                            NOTE: RAINFALL WAS TRANSFORMED TO 50 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  - TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                                                                                                                                                                                                             TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                                                                                                                                                                                                                                                                                                                           1881 hrs mm/hr | h
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.00 | 12.250 | 2.00 | 24.250 | 2.00 | 36.25 | 2.00 | 12.333 | 2.00 | 24.333 | 2.00 | 36.33
                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.00 | 12.417 | 2.00 | 24.417 | 2.00 | 36.42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.00 | 12.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.00 |24.500 | 2.00 | 36.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             6.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.00 | 24.583 | 2.00 | 36.58
2.00 | 24.667 | 2.00 | 36.67
2.00 | 24.750 | 2.00 | 36.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.583 2.00 112.583
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.00 | 12.833 | 2.00 | 24.833 | 2.00 | 36.83 | 2.00 | 12.917 | 2.00 | 24.917 | 2.00 | 36.92
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2.00 | 38.67
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                          2.00 |14.833
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                          2.00 | 17.667 | 2.00 | 29.667 | 2.00 | 41.67 | 13.00
                                                                                                                                                                                            10.167 2.00 22.167 2.00 34.167 2.00 46.17 38.00
[ile://V1...%2010pdated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%2
                                                                                                                                                                                            10.250 2.00 |22.250 2.00 |34.250 2.00 | 46.25 38.00
                                                                                                                                                                                                                                                                 6.00
                          2.00 | 22.333 | 2.00 | 34.333 | 2.00 | 46.33 | 38.00
               10.333
               10 417
                           2 00 22 417
                                               2.00 |34.417
                                                                  2.00 | 46.42 38.00
                                                                                                                                                                                            0.417
                                                                                                                                                                                                      2.00 112.417
                                                                                                                                                                                                                          2.00 24.417
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                                                                  2.00 | 46.50
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                                               2.00 |34.500
                                                                                                                                                                                                       2.00 | 12.500
                           2.00 |22.500
                                                                                    38.00
               10.500
                10.583
                           2.00 | 22.583
                                               2.00 | 34.583
                                                                  2.00 | 46.58 38.00
                                                                                                                                                                                            0.583
                                                                                                                                                                                                      2.00 | 12.583
                                                                                                                                                                                                                          2.00 |24.583
                                                                                                                                                                                                                                              2.00 | 36.58
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                                     2.00 | 12.667
2.00 | 12.750
                                                                                                                                                                                                                          2.00 |24.667
2.00 |24.750
                                                                                                                                                                                                                                             2.00 | 36.67
2.00 | 36.75
                           2.00 |22.667
                                               2.00 |34.667
                                                                   2.00 | 46.67
               10.750
                          2.00 | 22.750 2.00 | 34.750
                                                                  2.00 | 46.75 | 38.00
                                                                                                                                                                                            0.750
                                                                                                                                                                                                                                                                 6.00
                          2.00 |22.833 | 2.00 |22.917
                                               2.00 |34.833 | 2.00 |34.917
                                                                  2.00 | 46.83 38.00
2.00 | 46.92 38.00
                                                                                                                                                                                                      2.00 |12.833
2.00 |12.917
                                                                                                                                                                                                                          2.00 |24.833
2.00 |24.917
                                                                                                                                                                                                                                              2.00 | 36.83
2.00 | 36.92
               10.833
                                                                                                                                                                                            0.833
                                                                                                                                                                                                                                                                 6.00
                10.917
               11.000
                          2.00 |23.000
                                               2.00 | 35.000 | 2.00 | 47.00 | 38.00
                                                                                                                                                                                            1.000
                                                                                                                                                                                                      2.00 | 13.000
                                                                                                                                                                                                                          2.00 | 25.000
                                                                                                                                                                                                                                              2.00 | 37.00
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                                                          2.00 |25.083
                                                                                                                                                                                                                                              2.00 | 37.08
                                               2.00 |35.083
                                                                  3.00 | 47.08
                                                                                                                                                                                                      2.00 | 13.083
                           2.00 |23.083
               11.167
                          2.00 | 23.167 | 2.00 | 35.167 | 3.00 | 47.17 | 13.00
                                                                                                                                                                                            1.167
                                                                                                                                                                                                      2.00 | 13.167
                                                                                                                                                                                                                                              2.00 | 37.17
                                                                                                                                                                                                                                                                 4.00
                                               2.00 |35.250
2.00 |35.333
                                                                  3.00 | 47.25
                                                                                                                                                                                             1.250
                                                                                                                                                                                                      2.00 |13.250
                                                                                                                                                                                                                          2.00 |25.250
2.00 |25.333
                                                                                                                                                                                                                                              2.00 | 37.25
                           2.00 |23.250
                                                                                                                                                                                                                                                                 4.00
                                                                                                                                                                                                      2.00 13.333
                                                                                                                                                                                             1.333
                                                                                                                                                                                                                                              2.00 | 37.33
                           2.00 |23.333
                                                                  3.00 | 47.33
               11.333
                                                                                    13.00
                                                                                                                                                                                                                                                                 4.00
                11.417
11.500
                          2.00 |23.417
2.00 |23.500
                                              2.00 |35.417
2.00 |35.500
2.00 |35.583
                                                                  3.00 | 47.42
3.00 | 47.50
                                                                                                                                                                                             1.417
                                                                                                                                                                                                       2 00 113 417
                                                                                                                                                                                                                          2.00 |25.417
                                                                                                                                                                                                                                              2.00 | 37.42
                                                                                                                                                                                                                                                                 4.00
                                                                                                                                                                                                     2.00 | 13.500
2.00 | 13.583
                                                                                                                                                                                                                          2.00 |25.500 | 25.583
                                                                                                                                                                                                                                             2.00 | 37.50 | 2.00 | 37.58
                          2.00 |23.583
                                                                                                                                                                                             1.583
               11.583
                                                                  3.00 | 47.58 13.00
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                                               2.00 |35.667
2.00 |35.750
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                           2.00 23.667
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               11.667
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               11,750
                          2.00 |23,750
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                                                                                                                                                                                                      2.00 | 13.750
                                                                                                                                                                                                                                                                 4.00
                                                                                    13.00
                          2.00 |23.833
2.00 |23.917
                                              2.00 |35.833 | 3.00 | 47.83 | 13.00 | 2.00 |35.917 | 3.00 | 47.92 | 13.00
                11.833
                                                                                                                                                                                             1 833
                                                                                                                                                                                                      2 00 113 833
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                                                                                                                                                                                                                                              2.00 | 37.83
                                                                                                                                                                                                                                                                 4 00
                                                                                                                                                                                                                          2.00 |25.917
                11.917
               12.000 2.00 24.000 2.00 36.000 3.00 48.00 13.00
                                                                                                                                                                                            2.000
                                                                                                                                                                                                      2.00 | 14.000 | 2.00 | 26.000 | 2.00 | 38.00
                                                                                                                                                                                                                                                                4.00
                                                                                                                                                                                                                          2.00 |26.083
2.00 |26.167
                                                                                                                                                                                                                                              2.00 | 38.08
                                                                                                                                                                                                      2.00 |14.083
                                                                                                                                                                                            2.083
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                                       2.00 | 14.167
       Unit Hyd Qpeak (cms)= 0.256
                                                                                                                                                                                            2.167
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                                      2.00 |14.250
2.00 |14.333
                                                                                                                                                                                                                          2.00 |26.250
2.00 |26.333
                                                                                                                                                                                                                                              2.00 | 38.25
2.00 | 38.33
                                                                                                                                                                                             2 250
                                                                                                                                                                                                                                                                 6.00
       PEAK FLOW (cms)= 0.218 (i)
TIME TO PEAK (hrs)= 46.000
                                                                                                                                                                                                                          2.00 | 26,417
                                                                                                                                                                                            2.417
                                                                                                                                                                                                      2.00 14.417
                                                                                                                                                                                                                                              2.00 | 38.42
                                                                                                                                                                                                                                                                 6.00
       RUNOFF VOLUME (mm)= 217.447
TOTAL RAINFALL (mm)= 285.000
RUNOFF COEFFICIENT = 0.763
                                                                                                                                                                                            2.500
                                                                                                                                                                                                      2.00 |14.500
2.00 |14.583
                                                                                                                                                                                                                          2.00 |26.500
2.00 |26.583
                                                                                                                                                                                                                                             2.00 | 38.50
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                             2.583
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                            2.667
                                                                                                                                                                                                      2.00 114.667
                                                                                                                                                                                                                          2.00 | 26.667
                                                                                                                                                                                                                                              2.00 | 38.67
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                                       2.00 |14.750
                                                                                                                                                                                                                          2.00 |26.750
                                                                                                                                                                                                                                              2.00 | 38.75
       (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                            2.833
                                                                                                                                                                                                      2.00 |14.833
                                                                                                                                                                                                                          2.00 | 26.833
                                                                                                                                                                                                                                             2.00 | 38.83
                                                                                                                                                                                                                                                                6.00
                                                                                                                                                                                                       2.00 |14.917
                                                                                                                                                                                                                          2.00 |26.917
2.00 |27.000
                                                                                                                                                                                                                                              2.00 | 38.92
                                                                                                                                                                                            2.917
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                                      2.00 | 15.000
                                                                                                                                                                                                                                              2.00 | 39.00
                                                                                                                                                                                             3.000
                                                                                                                                                                                                                                                                 6.00
                                                                                                                                                                                            3 083
                                                                                                                                                                                                      2 00 115 083
                                                                                                                                                                                                                          2.00 |27.083
                                                                                                                                                                                                                                              2.00 | 39.08
                                                                                                                                                                                                                                                                13.00
                                                                                                                                                                                                       2.00 |15.167
                                                                                                                                                                                                                          2.00 |27.167
                                                                                                                                                                                                                                              2.00 | 39.17
                                                                                                                                                                                             3.167
   CALIB
   | STANDHYD ( 0204)| Area (ha)= 1.93
|ID=1 DT=5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
                                                                                                                                                                                            3.250
                                                                                                                                                                                                      2.00 | 15.250
                                                                                                                                                                                                                          2.00 |27.250
                                                                                                                                                                                                                                             2.00 | 39.25
                                                                                                                                                                                                                                                                13.00
                                                                                                                                                                                             3.333
                                                                                                                                                                                                      2.00 | 15.333
                                                                                                                                                                                                                          2.00 |27.333
                                                                                                                                                                                                                                              2.00 | 39.33
                                                                                                                                                                                            3.417
                                                                                                                                                                                                      2.00 | 15.417
                                                                                                                                                                                                                          2.00 | 27.417
                                                                                                                                                                                                                                              2.00 | 39.42
                                                                                                                                                                                                                                                                13.00
                                                                                                                                                                                                      2.00 |15.500
2.00 |15.583
                                                                                                                                                                                                                          2.00 |27.500
2.00 |27.583
                                                                                                                                                                                                                                              2.00 | 39.50
                           IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                                                                                                                13.00
                                                                                                                                                                                             3.500
      3.583
                                                                                                                                                                                                                                                                13.00
                                                   0.77
5.00
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                                                                                                                                                                                                                                              2.00 | 39.67
                                                                                                                                                                                                                                                                13.00
                                                                                                                                                                                                      2.00 |15.750
2.00 |15.833
                                                                                                                                                                                                                          2.00 |27.750
2.00 |27.833
                                                                                                                                                                                                                                              2.00 | 39.75
2.00 | 39.83
                                                                                                                                                                                                                                                                13.00
                                                                                                                                                                                             3 750
                                                                                                                                                                                            3.833
                                                                                                                                                                                            3.917
                                                                                                                                                                                                      2.00 | 15.917
                                                                                                                                                                                                                          2.00 | 27.917
                                                                                                                                                                                                                                              2.00 | 39.92 13.00
                                                                                                                                                                                                       2.00 |16.000
                                                                                                                                                                                                                          2.00 |28.000
                                                                                                                                                                                                                                             2.00 | 40.00
                                                                                                                                                                                                                                                                13.00
                                                                                                                                                                                             4.000
          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                            4.083
                                                                                                                                                                                                      2.00 | 16.083
                                                                                                                                                                                                                          2.00 | 28.083
                                                                                                                                                                                                                                             2.00 | 40.08
                                                                                                                                                                                                                                                                17.00
                                                                                                                                                                                                       2.00 | 16.167
                                                                                                                                                                                                                          2.00 |28.167
                                                                                                                                                                                                                                              2.00 | 40.17
                                                                                                                                                                                            4.250
                                                                                                                                                                                                       2.00 | 16.250
                                                                                                                                                                                                                          2.00 | 28.250
                                                                                                                                                                                                                                              2.00 | 40.25
                                                                                                                                                                                                                                                                17.00
                                                                                                                                                                                                                                             2.00 | 40.33
2.00 | 40.42
                                                                                                                                                                                            4 333
                                                                                                                                                                                                      2.00 [16 333
                                                                                                                                                                                                                          2 00 28 333
                                                                                                                                                                                                                                                                17.00
                                - TRANSFORMED HYETOGRAPH -
                TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.083 | 2.00 | 12.083 | 2.00 | 24.083 | 2.00 | 36.08 | 6.00
                                                                                                                                                                                                       2.00 | 16.417
                                                                                                                                                                                                                          2.00 |28.417
                                                                                                                                                                                            4.417
                                                                                                                                                                                                                                                                17.00
                                                                                                                                                                                            4.500
                                                                                                                                                                                                      2.00 16.500 2.00 28.500 2.00 40.50 17.00
                                                                                                                                                                                            4.583
                                                                                                                                                                                                      2.00 |16.583
                                                                                                                                                                                                                          2.00 |28.583
                                                                                                                                                                                                                                              2.00 | 40.58
                0.167 2.00 | 12.167 2.00 | 24.167 2.00 | 36.17 6.00
                                                                                                                                                                                            4.667
                                                                                                                                                                                                      2.00 | 16.667 | 2.00 | 28.667 | 2.00 | 40.67 | 17.00
                                                                                   0VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                                                                                                                                                                                                                                                           ut%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM
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2.00 | 29.750 | 2.00 | 41.75 | 13.00 | 2.00 | 29.833 | 2.00 | 41.83 | 13.00

2.00 31.000 2.00 43.00 23.00 2.00 31.083 2.00 43.08 13.01

2.00 | 43.17

2.00 | 41.92 | 13.00

2.00 | 42.17 23.00

2.00 | 42.25 23.00 2.00 | 42.33 23.00

2.00 | 42.42 23.00 2.00 | 42.50 23.00

2.00 | 42.58 23.00

2.00 | 42.67 23.00 2.00 | 42.75 23.00

2.00 | 42.83 23.00 2.00 | 42.92 23.00

13.00

2.00 | 42.00

2.00 | 29.917

2.00 30.000

2.00 |30.083

2.00 | 30.167

2.00 |30.250

2.00 | 30.333

2.00 |30.417 2.00 |30.500

2.00 |30.583

2.00 |30.667 2.00 |30.750

2.00 |30.833 2.00 |30.917

2.00 31.167

5 750 2 00 117 750 2.00 |17.833

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2.00 |18.833 2.00 |18.917

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1.250 2.00 | 13.250 2.00 | 25.250 2.00 | 37.25 4.00 1.333 2.00 | 13.333 2.00 | 25.333 2.00 | 37.33 4.00

2.00 |25.417

2.00 |25.500 | 25.583

2 00 25 667

2.00 |25.750

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2.00 | 26.000

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2.00 |26.250

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2.00 |26.500 2.00 |26.583

2.00 |26.667

2.00 | 37.42

2.00 | 37.50 | 37.58

2 00 | 37 67

2.00 | 37.83

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2.00 | 38.00

2.00 | 38.08 2.00 | 38.17

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2 667

2.00 | 13.417

2.00 |13.500 | 2.00 |13.583

2.00 [13.667]

2.00 |13.750

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2.00 |14.500 2.00 |14.583

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4.750 2.00 | 16.750 2.00 | 28.750 2.00 | 40.75 17.00
4.833 2.00 | 16.833 2.00 | 28.833 2.00 | 40.83 17.00
                        4.917
                                       2.00 16.917
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                                       2.00 |17.000 | 17.083
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2.00 |18.083
                                                                     2.00 |30.000
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2.00 | 42.08 | 22.99
                        6.000
                        6.083
                                                                                                  2.00 | 42.17 | 23.00
2.00 | 42.25 | 23.00
2.00 | 42.25 | 23.00
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                                                                      2.00 |30.667
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                                       2.00 | 18.750
                                                                     2.00 | 30.750 | 2.00 | 42.75 | 23.00
                        6,833
                                       2.00 |18.833 | 2.00 |18.917
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2.00 | 43.17 | 13.00
                                        2.00 |19.083
                                                                      2.00 |31.083
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2.00 |31.333
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2.00 | 43.33 | 13.00
                                      2.00 | 19.417
2.00 | 19.500
2.00 | 19.583
                                                                     2.00 |31.417 | 2.00 | 43.42 | 13.00 | 2.00 |31.500 | 2.00 | 43.50 | 13.00 | 2.00 |31.583 | 2.00 | 43.58 | 13.00
                        7.417
7.500
                        7.583
                                       2.00 | 19.667
                                                                     2.00 |31.667 | 2.00 | 43.67 | 13.00 | 2.00 |31.750 | 2.00 | 43.75 | 13.00
                        7.667
                         7.750
                        7.833
                                       2.00 19.833
                                                                     2.00 31.833
                                                                                                   2.00 43.83 13.00
                                                                                                  2.00 | 43.92 | 13.00
2.00 | 44.00 | 13.00
                                        2.00 |19.917
                                                                      2.00 |31.917
                        8.000
                                       2.00 |20.000
                                                                     2.00 | 32.000
                                                                     2.00 |32.083
2.00 |32.167
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                                                                                                   2.00 | 44.25 | 13.00
2.00 | 44.33 | 13.00
2.00 | 44.42 | 13.00
                        8.250
                                       2.00 |20.250
                                                                     2.00 |32.250
                        8.333
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                                                                                                   2.00 | 45.08
                                       2.00 21.167
                                                                     2.00 |33.167 | 2.00 | 45.17 | 53.00
file:///V...%20Update#%20EA%20Analysis/VOTDetailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Detailed%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Proposed%20V9%20Output/Prop
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9.250 2.00 |21.250 2.00 |33.250 2.00 | 45.25 53.00
9.333 2.00 |21.333 2.00 |33.333 2.00 | 45.33 53.00
          9,417
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                                                            2.00 | 46.58
         10.667
                    2.00 | 22.667
                                        2.00 | 34.667
                                                           2.00 | 46.67
                                                                             38.00
                    2.00 |22.750
2.00 |22.833
                                       2.00 |34.750 | 2.00 |34.833
                                                           2.00 | 46.75
          10.750
          10.833
         10.917
                    2.00 | 22.917
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                    2.00 23.000
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                                                            2.00 | 47.00 38.00
         11.083
                    2.00 |23.083
                                        2.00 |35.083
                                                           3.00 | 47.08 | 13.04
                    2.00 |23.167
2.00 |23.250
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2.00 |35.250
                                                           3.00 | 47.17
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         11.250
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         11 333
                    2.00 |23.333
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                                                           3.00 | 47.33 | 13.00
         11.417
                     2.00 |23.417
                                        2.00 |35.417
                                                            3.00 | 47.42
         11.500
                    2.00 |23,500
                                        2.00 | 35,500
                                                           3.00 | 47.50 | 13.00
         11.583
                    2.00 |23.583
2.00 |23.667
                                       2.00 |35.583 | 3.00 | 47.58
2.00 |35.667 | 3.00 | 47.67
         11.667
                                                                              13.00
                    2.00 | 23.750 | 2.00 | 35.750 | 3.00 | 47.75 | 13.00 | 2.00 | 23.833 | 2.00 | 35.833 | 3.00 | 47.83 | 13.00 | 2.00 | 23.917 | 2.00 | 35.917 | 3.00 | 47.92 | 13.00 |
         11.750
         11.833
         11.917
          12.000 2.00 | 24.000 2.00 | 36.000 3.00 | 48.00 13.00
Max.Eff.Inten.(mm/hr)= 53.00 64.18
over (min) 5.00 45.00
Storage Coeff. (min)= 63.7 (ii) 41.12 (ii)
Unit Hyd. Tpeak (min)= 5.00 45.00
Unit Hyd. peak (cms)= 0.18 0.03
Unit Hyd. Tpeak (mm)-
Unit Hyd. peak (cms)=

0.18
0.03
*TOTALS*
PEAK FLOW (cms)= 0.14 0.11 0.2
TIME TO PEAK (hrs)= 46.00 46.58 4
RUNOFF VOLUME (mm)= 283.00 221.33
TOTAL RAINFALL (mm)= 285.00 285.00
RUNOFF COEFFICIENT = 0.99 0.78
                                                                   0.229 (iii)
                                                                     46.00
3 250.92
                                                                           285.00
                                                                        0.88
  (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
 CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
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ADD HYD ( 0042) | 1+ 2 = 3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | (D1 = 1 (O203): 1.61 (O218 46.00 217.45 + 1D2 = 2 (O204): 1.93 (O229 46.00 250.92 ) ID = 3 ( 0042): 3.54 0.447 46.00 235.70 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. ADD HYD ( 0042) 3 + 2 = 1 | AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) ID1=3 ( 0042): 3.54 0.447 46.00 235.70 + ID2=2 ( 0215): 15.80 1.801 46.58 236.12 ID = 1 ( 0042): 19.34 2.174 46.58 236.05 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. RESERVOIR( 0025)| OVERFLOW IS OFF | IN= 2---> OUT= 1 | | DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE - (cms) (ha.m.) | (cms) (ha.m.) 0.0000 0.0000 | 0.6300 0.4548 0.2600 0.1908 | 0.7100 0.5242 0.3900 0.2842 0.8100 0.5932 0.4900 0.3533 | 1.4000 1.1965 AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) INFLOW: ID= 2 ( 0042) 19.340 2.174 46.58 236.05 OUTFLOW: ID= 1 ( 0025) 19.340 1.397 47.75 236.04 PEAK FLOW REDUCTION [Oout/Oin](%)= 64.27 TIME SHIFT OF PEAK FLOW (min) = 70.00MAXIMUM STORAGE USED (ha.m.)= 1.1938 CALIR NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

---- TRANSFORMED HYETOGRAPH ---TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
Irrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
0.083 2.00 | 12.083 2.00 | 24.083 2.00 | 36.08 6.00
0.167 2.00 | 12.167 2.00 | 24.167 2.00 | 36.17 6.00 0.167 2.00 | 12.250 | 2.00 | 24.250 | 2.00 | 36.25 2.00 | 12.333 | 2.00 | 24.333 | 2.00 | 36.33 0.333 6.00 2.00 |24.417 2.00 |24.500 2.00 | 36.42 2.00 | 36.50 0.417 2.00 112.417 6.00 2.00 |12.500 0.583 2.00 | 12.583 2.00 | 24.583 2.00 | 36.58 6.00 2.00 |12.667 2.00 |24.667 0.667 2.00 | 36.67 0.750 2.00 | 36.75 6.00 0.833 2.00 |12.833 2.00 |24.833 2.00 |24.917 2.00 | 36.83 2.00 | 36.92 6.00 2.00 |12.917 0.917 6.00 1.000 2.00 13.000 2.00 |25,000 2.00 | 37.00 6.00 2.00 |25.083 2.00 | 37.08 2.00 |13.083 2.00 | 13.167 1.167 4.00 2.00 |13.250 2.00 |13.333 2.00 | 37.25 2.00 | 37.33 1.250 2.00 |25.250 4.00 2.00 |25.333 1.333 1 417 2.00 113 417 2 00 25 417 2.00 | 37.42 4 00 2.00 | 13.500 2.00 | 13.583 2.00 |25.500 | 25.583 1.583 2.00 | 37.58 4.00 2.00 |13.667 2.00 |13.750 2.00 |25.667 2.00 |25.750 2.00 | 37.67 2.00 | 37.75 1.667 1.750 4.00 2.00 |13.833 2.00 |13.917 2.00 |25.833 2.00 |25.917 2.00 | 37.83 2.00 | 37.92 4.00 1.833 2.00 | 26.000 | 2.00 | 38.00 2.000 2.00 14.000 4.00 2.083 2.00 |14.083 2.00 |14.167 2.00 | 26.083 | 2.00 | 26.167 2.00 | 38.08 6.00 2.167 6.00 2.250 2.00 114.250 2.00 |26.250 2.00 | 38.25 6.00 2.333 2.00 |14.333 2.00 |26.333 2.00 | 38.33 2.417 2.00 14.417 2.00 | 26.417 2.00 | 38.42 6.00 2.500 2.00 |14.500 2.00 |26.500 2.00 |26.583 2.00 | 38.50 6.00 2.583 2.00 |14.583 2.00 | 38.58 6.00 2.667 2.00 114 667 2.00 |26,667 2.00 | 38.67 6.00 2.00 |14.750 2.00 |26.750 2.00 | 38.75 2.833 2.00 | 14.833 2.00 | 26.833 2.00 | 38.83 6.00 2.00 |14.917 2.00 |26.917 2.00 | 38,92 3.000 2.00 | 15.000 2.00 |27.000 2.00 | 39.00 6.00 2.00 | 27.000 2.00 | 27.167 2.00 | 27.250 2.00 |15.083 2.00 | 39.08 13.00 3.083 3.250 2.00 15.250 2.00 | 39.25 13.00 2.00 |15.333 | 2.00 |15.417 2.00 |27.333 | 2.00 |27.417 2.00 | 39.33 2.00 | 39.42 13.00 3.333 3.417 3.500 2.00 | 15.500 2.00 | 27.500 2.00 | 39.50 13.00 2.00 |15.583 2.00 |27.583 2.00 | 39.58 2.00 |27.667 2.00 |27.750 2.00 |27.833 3.667 2.00 | 15.667 2.00 | 39.67 13.00 3.750 2.00 |15.750 2.00 | 39.75 3.833 2.00 | 15.833 2.00 | 39.83 13.00 2.00 | 39.92 2.00 | 40.00 3 917 2.00 | 15.917 2.00 |27.917 13.00 2.00 |16.000 2.00 |28.000 13.00 4.000 4.083 2.00 | 16.083 | 2.00 | 28.083 | 2.00 | 40.08 | 17.00 2.00 |28.167 4.250 2.00 | 16.250 2.00 | 28.250 2.00 | 40.25 17.00

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4.333 2.00 | 16.333 2.00 | 28.333 2.00 | 40.33 17.00
4.417 2.00 | 16.417 2.00 | 28.417 2.00 | 40.42 17.00
                                                                                                                                                                                                    2.00 |32.833 | 2.00 | 44.83 | 13.00 | 2.00 |32.917 | 2.00 | 44.92 | 13.00
                                                                                                                                                                          8 833 2 00 20 833
                                                                                                                                                                                    2.00 |20.917
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                        2.00 |16.583
                                         2.00 |28.583
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               4.750
                       2.00 [16.750]
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                        2.00 |16.833
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                                         2.00 |29.000 | 2.00 |29.083
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                                                                                                                                                                                   2.00 |21.917 | 2.00 |33.917 | 2.00 |22.000 | 2.00 |34.000
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2.00 |30.917
                                                           2.00 | 42.83 23.00
2.00 | 42.92 23.00
                                                                                                                                                                         11.333
                                                                                                                                                                                    2.00 |23.333
                                                                                                                                                                                                     2.00 |35.333
                                                                                                                                                                                                                       3.00 | 47.33 | 13.00
                                                                                                                                                                                    2.00 |23.417
                                                                                                                                                                                                      2.00 |35.417
                                                                                                                                                                                                                        3.00 | 47.42
                                                                                                                                                                                                                                        13.00
                                                                                                                                                                          11.417
               6.917
                                                           2.00 | 43.00 23.00
2.00 | 43.08 13.01
2.00 | 43.17 13.00
                       2.00 | 19.000
2.00 | 19.083
                                         2.00 |31.000
2.00 |31.083
               7.000
                                                                                                                                                                          11.500
                                                                                                                                                                                    2.00 23.500
                                                                                                                                                                                                      2.00 |35.500
                                                                                                                                                                                                                       3.00 | 47.50 13.00
                                                                                                                                                                         11.583
11.667
                                                                                                                                                                                    2.00 |23.583 | 2.00 |23.667
                                                                                                                                                                                                      2.00 |35.583
2.00 |35.667
                                                                                                                                                                                                                       3.00 | 47.58
3.00 | 47.67
               7.167
                       2.00 | 19.167
                                          2.00 | 31.167
                                                                                                                                                                                                                                        13.00
                       2.00 | 19.250 | 2.00 | 19.333
                                         2.00 |31.250
                                                           2.00 | 43.25 | 13.00
2.00 | 43.33 | 13.00
               7 250
                                                                                                                                                                         11.750
                                                                                                                                                                                   2.00 |23.750 | 2.00 |35.750
                                                                                                                                                                                                                       3.00 | 47.75 | 13.00
               7.333
                                                                                                                                                                          11.833
                                                                                                                                                                                    2.00 |23.833
                                                                                                                                                                                                      2.00 |35.833
                                                                                                                                                                                                                       3.00 | 47.83
               7.417
                        2.00 19.417
                                         2.00 31.417
                                                           2.00 43.42 13.00
                                                                                                                                                                          11.917
                                                                                                                                                                                    2.00 23.917
                                                                                                                                                                                                      2.00 | 35.917 | 3.00 | 47.92 | 13.00
                                                           2.00 | 43.50 | 13.00
2.00 | 43.58 | 13.00
                        2.00 | 19.500
                                          2.00 |31.500
                                                                                                                                                                          12.000 2.00 | 24.000 2.00 | 36.000 3.00 | 48.00 13.00
                                         2.00 | 31.583
               7.583
                       2.00 | 19.583
               7.667
                        2.00 19.667
                                         2.00 |31.667
                                                           2.00 43.67 13.00
                                                                                                                                                                  Unit Hyd Qpeak (cms)= 0.245
               7.750
                        2.00 | 19.750
                                          2.00 |31.750
                                                            2.00 | 43.75
                                                                            13.00
                                                                                                                                                                  PEAK FLOW (cms)= 0.464 (i)
TIME TO PEAK (hrs)= 46.417
RUNOFF VOLUME (mm)-230.868
TOTAL RAINFALL (mm)= 285.000
RUNOFF COEFFICIENT = 0.810
                                                           2.00 | 43.83 | 13.00
2.00 | 43.92 | 13.00
2.00 | 44.00 | 13.00
                       2.00 |19.833
2.00 |19.917
               7.833
                                         2.00 |31.833
               7.917
                                          2.00 |31.917
               8.000
                        2.00 |20.000
                                          2.00 32.000
                        2.00 |20.083
                                         2.00 |32.083
2.00 |32.167
                                                           2.00 | 44.08
2.00 | 44.17
                                                                           13.00
               8 083
               8.167
               8 250
                        2.00 | 20.250
                                          2 00 32 250
                                                            2.00 | 44.25 | 13.00
                                          2.00 |32.333
                        2.00 |20.333
                                                           2.00 | 44.33
               8.333
                                                                                                                                                                  (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
               8.417
                        2 00 20 417
                                          2 00 32 417
                                                           2 00 | 44 42 13 00
                        2.00 |20.500
                                          2.00 |32.500
                                                            2.00 | 44.50
                                                                           13.00
                                          2.00 32.583
               8.583
                       2.00 | 20.583
                                                            2.00 | 44.58
                                                                            13.00
               8 667
                        2.00 | 20.667
                                          2.00 32.667
                                                           2.00 | 44.67
                                                                            13 00
                                                                                                                                                               CALIB
                       2.00 |20.750 | 2.00 |32.750 | 2.00 | 44.75 | 13.00
                                                                                                                                                              STANDHYD ( 0220)| Area (ha)= 5.63
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                                                                                                                          file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                                                                                                                                          3.333 2.00 | 15.333
3.417 2.00 | 15.417
                                                                                                                                                                                                    2.00 |27.333 | 2.00 | 39.33 | 13.00 | 2.00 |27.417 | 2.00 | 39.42 | 13.00
   |ID= 1 DT= 5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00
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IMPERVIOUS PERVIOUS (i)
                                                                                                                                                    3.500
                                                                                                                                                           2.00 | 15.500
                                                                                                                                                                            2.00 |27.500
                                                                                                                                                                                           2 00 | 39 50 13 00
2.00 |27.583
                                                                                                                                                            2.00 |15.583
                                        5.00
                                                                                                                                                    3.667
                                                                                                                                                            2.00 | 15.667
                                                                                                                                                                            2.00 | 27.667
                                                                                                                                                                                             2.00 | 39.67
                                                                                                                                                                                                           13.00
                                                                                                                                                            2.00 |15.750
                                                                                                                                                                            2.00 |27.750
2.00 |27.833
                                        2.00
                                                                                                                                                                                             2.00 | 39.75
                                                                                                                                                    3 833
                                                                                                                                                            2.00 | 15.833
                                                                                                                                                                                           2.00 | 39.83 | 13.00
                                                                                                                                                                            2.00 |27.917
2.00 |28.000
                                                                                                                                                                                            2.00 | 39.92 | 13.00
2.00 | 40.00 | 13.00
                                                                                                                                                    3 917
                                                                                                                                                            2.00 | 15.917
                                                                                                                                                            2.00 16.000
  NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                    4.083
                                                                                                                                                            2.00 16.083
                                                                                                                                                                            2.00 | 28.083
                                                                                                                                                                                            2.00 | 40.08
                                                                                                                                                                                                           17.00
                                                                                                                                                            2.00 16.167
                                                                                                                                                                            2.00 |28.167
                                                                                                                                                                                            2.00 | 40.17
                                                                                                                                                    4.250
                                                                                                                                                            2.00 | 16.250
                                                                                                                                                                            2.00 |28.250
                                                                                                                                                                                           2.00 | 40.25 17.00
                                                                                                                                                    4 333
                                                                                                                                                            2.00 |16.333
                                                                                                                                                                            2.00 |28.333
2.00 |28.417
                                                                                                                                                                                            2.00 | 40.33
2.00 | 40.42
                                                                                                                                                                                                           17.00
                    - TRANSFORMED HYETOGRAPH
                                                                                                                                                            2.00 16.417
        TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                    4.417
       4.500
                                                                                                                                                            2 00 116 500
                                                                                                                                                                            2 00 28 500
                                                                                                                                                                                            2.00 | 40.50
                                                                                                                                                                                                           17.00
                                                                                                                                                                            2.00 |28.583 | 2.00 |28.667
                                                                                                                                                                                            2.00 | 40.58
                                                                                                                                                    4.583
                                                                                                                                                            2.00 |16.583
                                                                                                                                                            2.00 | 16.667
                                                               6.00
                                                                                                                                                    4.667
                                                                                                                                                                                                           17.00
               2.00 | 12.250 | 2.00 | 24.250 | 2.00 | 36.25 | 2.00 | 12.333 | 2.00 | 24.333 | 2.00 | 36.33
                                                                                                                                                                                           2.00 | 40.75
2.00 | 40.83
                                                               6.00
                                                                                                                                                    4.750
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               2.00 |12.417
2.00 |12.500
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               2.00 112.583
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                                               2.00 | 36.58
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                                                                                                                                                                                                           13.00
                                                                                                                                                            2.00 |17.167
2.00 |17.250
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2.00 |29.250
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                2.00 | 12.667
                               2.00 |24.667
                                                2.00 | 36.67
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       0.833
               2.00 |12.833
2.00 |12.917
                               2.00 |24.833
2.00 |24.917
                                               2.00 | 36.83
2.00 | 36.92
2.00 | 37.00
                                                                                                                                                            2.00 |17.333
2.00 |17.417
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2.00 |29.417
                                                                                                                                                                                           2.00 | 41.33 | 13.00
2.00 | 41.42 | 13.00
2.00 | 41.50 | 13.00
                                                                                                                                                    5 333
       0.917
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2.00 | 41.67 | 13.00
        1.083
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                2.00 | 13.167
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2.00 | 37.33
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                                                               4.00
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                2.00 [13.417
                               2.00 |25,417
                                               2.00 | 37.42
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                                                                                                                                                            2.00 | 17.917
                                                                                                                                                                            2.00 |29.917
                                                                                                                                                                                           2.00 | 41.92 | 13.00
                2.00 |13.500
                               2.00 |25.500
2.00 |25.583
                                                2.00 | 37.50 | 2.00 | 37.58
                                                                                                                                                    6.000
                                                                                                                                                            2.00 |18.000
                                                                                                                                                                            2.00 |30.000
2.00 |30.083
                                                                                                                                                                                           2.00 | 42.00 | 13.00
2.00 | 42.08 | 22.99
                2.00 | 13.583
                                                                                                                                                            2.00 | 18.083
       1.583
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        1.667
1.750
               2.00 | 13.667
2.00 | 13.750
                               2.00 |25.667
2.00 |25.750
                                               2.00 | 37.67
2.00 | 37.75
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                                                                                                                                                            2.00 | 18.167
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                                                                                                                                                                                           2.00 | 42.17 23.00
2.00 | 42.25 23.00
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                                                                                                                                                                                           2.00 | 42.33 23.00
                2.00 | 13.917
                                2.00 |25.917
                                                2.00 | 37.92
                                                                                                                                                            2.00 | 18.417
                                                                                                                                                                            2.00 |30.417
                                                                                                                                                                                            2.00 | 42.42 23.00
2.00 | 42.50 23.00
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                                                                                                                                                                                           2.00 | 42.58 23.00
2.00 | 42.67 23.00
2.00 | 42.75 23.00
                                                                                                                                                           2.00 |18.583
                                                                                                                                                                            2.00 |30.583
2.00 |30.667
       2.083
                2.00 |14.083
                                2.00 |26.083
                                                2.00 | 38.08
                                                                                                                                                    6.583
                                                                                                                                                    6.667
       2.167
                2.00 | 14.167 | 2.00 | 14.250
                                2.00 | 26.167
                                                2.00 | 38.17 2.00 | 38.25
                                                               6.00
       2.250
                                2.00 | 26.250
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                                                                                                                                                            2.00 |18.833
2.00 |18.917
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2.00 | 42.92 23.00
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                                2.00 |26.333
                                                2.00 | 38.33
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                                                                                                                                                    6.917
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                2.00 | 14.833
                                2.00 | 26.833
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                                                                                                                                                                            2.00 |31.417 | 2.00 | 43.42 | 2.00 |31.500 | 2.00 | 43.50
                2.00 |14.917
                                2.00 |26.917
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       3.000
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2.00 | 27.167
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               2.00 [15.083
                                               2.00 | 39.08
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                2.00 15.167
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                                                                                                                                                    7.750 2.00 119.750 2.00 31.750 2.00 43.75 13.00
       3.250 2.00 | 15.250 2.00 | 27.250 2.00 | 39.25 13.00
                                                                                   out%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
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2.00 | 32.917 | 2.00 | 44.92 | 13.00 | 2.00 | 33.000 | 2.00 | 45.00 | 13.00
                                      2.00 |21.000
                        9.000
                                       2.00 |21.083
2.00 |21.167
                                                                    2.00 |33.083
2.00 |33.167
                                                                                                 2.00 | 45.08 52.95
2.00 | 45.17 53.00
                        9.083
                        9.167
                                                                    2.00 | 33.250 | 2.00 | 45.25 | 53.00 | 2.00 | 33.250 | 2.00 | 45.25 | 53.00 | 2.00 | 33.333 | 2.00 | 45.33 | 53.00 | 2.00 | 33.417 | 2.00 | 45.42 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 53.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 45.58 | 33.00 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 33.583 | 2.00 | 3
                                       2.00 |21.250
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                                                                                                 2.00 | 45.67 53.00
                                                                    2.00 |33.750 | 2.00 | 45.75 | 53.00 | 2.00 |33.833 | 2.00 | 45.83 | 53.00
                        9.833
                                      2.00 | 21.833
                                        2.00 |21.917
                                                                    2.00 |33.917
2.00 |34.000
                                                                                                 2.00 | 45.92 53.00
2.00 | 46.00 53.00
                        9.917
                        10.000
                                                                    2.00 | 34.083 | 2.00 | 46.08 | 38.02 | 2.00 | 34.167 | 2.00 | 46.17 | 38.00 | 2.00 | 34.250 | 2.00 | 46.25 | 38.00
                        10.083
                                        2.00 | 22.083
                       10.250
                                        2.00 |22.250
                        10.333
                                        2.00 |22.333
2.00 |22.417
                                                                      2.00 |34.333
2.00 |34.417
                                                                                                   2.00 | 46.33 38.00
2.00 | 46.42 38.00
                       10.417
                                                                     2.00 |34.500
2.00 |34.583
2.00 |34.667
                                       2.00 |22.500
2.00 |22.583
                                                                                                  2.00 | 46.50 38.00
2.00 | 46.58 38.00
                        10.500
                       10.667
                                        2.00 |22.667
                                                                                                   2.00 | 46.67 38.00
                       10.750 2.00 22.750
10.833 2.00 22.833
                                                                     2.00 |34.750
                                                                                                   2.00 | 46.75 38.00
2.00 | 46.83 38.00
                       10.917
                                        2.00 | 22.917
                                                                      2 00 34 917 2 00 46 92 38 00
                                        2.00 | 23.000 | 2.00 | 35.000 | 2.00 | 47.00 | 38.00 | 2.00 | 23.083 | 2.00 | 35.083 | 3.00 | 47.08 | 13.04
                       11.083
                                       2.00 |23.167 | 2.00 |35.167 | 2.00 |23.250 | 23.250 | 35.250
                                                                                                 3.00 | 47.17 13.00
                       11.250
                                                                                                   3.00 | 47.25
                                                                                                                             13.00
                                        2.00 |23.333 | 2.00 |35.333 | 3.00 | 47.33 | 13.00 | 2.00 |23.417 | 2.00 |35.417 | 3.00 | 47.42 | 13.00
                        11.333
                        11.417
                       11.500
                                        2.00 |23.500
                                                                    2.00 |35,500
                                                                                                   3.00 47.50 13.00
                                        2.00 |23.583
2.00 |23.667
                                                                    2.00 |35.583 | 3.00 | 47.58 | 13.00 | 2.00 |35.667 | 3.00 | 47.67 | 13.00
                       11.583
                       11.667
                       11.750 2.00 |23.750 2.00 |35.750 3.00 | 47.75 13.00
11.833 2.00 |23.833 2.00 |35.833 3.00 |47.83 13.00
11.917 2.00 |23.917 2.00 |35.917 3.00 |47.92 13.00
                                                                      .00 57.93
15.00
          Max.Eff.Inten.(mm/hr)= 53.00
over (min) 5.00 15.0
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/920-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
     3 + 2 = 1 | AREA QPEAK TPEAK R.V.
            (ha) (cms) (hrs) (mm)

ID1=3 ( 0002): 23.32 1.755 47.25 235.16

+ ID2=2 ( 0050): 5.63 0.681 46.17 250.69
              ID = 1 (0002): 28.95 2.347 47.08 238.18
          NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
            OOO TTTTT TTTTT H H Y Y M M OOO TM
    O O T T H H YY MM MM O O O O T T H H Y Y M M O O OOO T T H H Y M M OOO Developed and Distributed by Smart City Water Inc
     Copyright 2007 - 2022 Smart City Water Inc
     All rights reserved.
                        ***** DETAILED OUTPUT *****
       Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
       Output filename; C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\f6006141-
     f7c1-467c-9bdb-412a2d9d1fdf\scen
        Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-
     26df3e227620\f6006141-f7c1-467c-9bdb-412a2d9d1fdf\scen
     DATE: 03/11/2024
                                                                        TIME: 11:39:28
     USER:
     COMMENTS:
       READ STORM | Filename: C:\Users\nyokich\AppD
```

7.833 2.00 | 19.833 2.00 | 31.833 2.00 | 43.83 13.00 7.917 2.00 | 19.917 2.00 | 31.917 2.00 | 43.92 13.00

2.00 32.000

2.00 |32.083 | 2.00 |32.167

2 00 132 250

2.00 |32,333

2.00 | 32.417

2.00 |32.500

2.00 32.667

2.00 32.750

2.00 |32.833

2.00 | 44.00 | 13.00

2 00 | 44 25 | 13 00

2.00 | 44.42 | 13.00

2.00 | 44.50 | 13.00 2.00 | 44.58 | 13.00

2.00 | 44.67 | 13.00 2.00 | 44.75 | 13.00

2.00 | 44.83 | 13.00

2.00 | 44.08

8.000

8 250

8.333

8.417

8.583 8.667

8.750

8.833

2.00 |20.000

2.00 |20.083

2.00 | 20.250

2.00 |20,333

2.00 | 20.417

2.00 |20.500

2.00 |20.667

2.00 |20.750

2.00 |20.833

2.00 |20.917

```
Storage Coeff. (min)= 4.64 (ii) 13.42 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
                                                                                    0.22 0.08
*TOTALS*
               Unit Hyd. peak (cms)=
                PEAK FLOW (cms)= 0.28 0.52
TIME TO PEAK (hrs)= 46.00 46.00
                                                                                                                                                 46.00
               RUNOFF VOLUME (mm)= 283.00 234.06 250.70

TOTAL RAINFALL (mm)= 285.00 285.00 285.00

RUNOFF COEFFICIENT = 0.99 0.82 0.88
         ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                   (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                 CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                          THAN THE STORAGE COEFFICIENT.
                (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
          RESERVOIR( 0050) OVERFLOW IS OFF
         DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                                               | Construction | Cons
                                                 0.4600 0.0822 | 0.7800
                                                                                                                            0.1400
                                                          AREA QPEAK TPEAK R.V.
            (ha) (cuis) (hrs) (mm)
INFLOW: ID= 2 ( 0220) 5.630 0.798 46.00 250.70
OUTFLOW: ID= 1 ( 0050) 5.630 0.681 46.17 250.69
                                      PEAK FLOW REDUCTION [Qout/Qin](%)= 85.33
                                     TIME SHIFT OF PEAK FLOW (min)= 10.00
MAXIMUM STORAGE USED (ha.m.)= 0.1229
            1+ 2 = 3 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1-1 (0225): 3.98 0.464 46.42 230.87

+ ID2= 2 (0025): 19.34 1.397 47.75 236.04
                    ID = 3 ( 0002): 23.32 1.755 47.25 235.16
               NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
        | ADD HYD ( 0002)|
file:////...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                            ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\ef8dc614
         Ptotal=127.20 mm | Comments: SCS_100yr
```

```
TIME RAIN TIME RAIN TIME RAIN TIME RAIN
                                                                              | History | Hist
                                                                                                                              1.40 6.75 2.54 | 12.75 9.41 | 18.75 2.29 | 1.40 | 7.05 2.54 | 13.05 6.87 | 19.00 2.29 | 1.40 | 7.25 2.54 | 13.25 6.87 | 19.25 2.29 | 1.40 | 7.25 2.54 | 13.55 5.34 | 19.55 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.54 | 13.75 5.34 | 19.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 | 7.75 2.29 | 1.40 
                                                                                 0.75
                                                                                   1.25
                                                                                 1.50
                                                                                                                                 1.65 | 8.00 | 3.43 | 14.00 | 3.82 | 20.00 | 1.65 | 8.25 | 3.43 | 14.25 | 3.82 | 20.25 | 1.65 | 8.50 | 3.43 | 14.50 | 3.82 | 20.50
                                                                                 2.00
                                                                                 2.25
                                                                                                                                 1.65 | 8.75 | 3.43 | 14.75 | 3.82 | 20.75 | 1.65 | 9.00 | 4.07 | 15.00 | 3.82 | 21.00
                                                                                 2.75
                                                                                 3.00
                                                                                 3 25
                                                                                                                                   1.65 | 9.25 | 4.07 | 15.25 | 3.82 | 21.25
                                                                                                                                 1.65 | 9.50 | 4.58 | 15.50 | 3.82 | 21.50 | 1.65 | 9.75 | 4.58 | 15.75 | 3.82 | 21.75
                                                                                 3.75
                                                                                                                                 2.04 | 10.00 | 5.85 | 16.00 | 2.29 | 22.00 | 2.04 | 10.25 | 5.85 | 16.25 | 2.29 | 22.25
                                                                                 4.50 2.04 | 10.50 7.89 | 16.50
4.75 2.04 | 10.75 7.89 | 16.75
5.00 2.04 | 11.00 12.21 | 17.00
                                                                                                                                                                                                                                                                                                                                                     2.29 | 22.50
2.29 | 22.75
                                                                                                                                                                                                                                                                                                                                                             2.29 | 23.00
                                                                                 5.25 2.04 | 11.25 | 12.21 | 17.25 | 2.29 | 23.25 | 5.50 | 2.04 | 11.50 | 52.91 | 17.50 | 2.29 | 23.50
                                                                                 5.75 2.04 | 11.75 140.43 | 17.75 2.29 | 23.75 1.53
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                 ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                      TIME RAIN | TIME RAIN | TIME RAIN | TIME hrs mm/hr | h
                                                                           0.750 1.40 6.750 2.54 12.750 9.41 18.75 2.29
```

```
1.40 | 6.833 | 2.54 | 12.833 | 9.41 | 18.83
1.40 | 6.917 | 2.54 | 12.917 | 9.41 | 18.92
                                                                                                                                                                                                                                                                                                                            5.333 2.04 |11.333 12.21 |17.333 2.29 | 23.33
5.417 2.04 |11.417 12.21 |17.417 2.29 | 23.42
                            0.833
                            0.917
                                                                                                                                             2.29
                                                                                                                                                                                                                                                                                                                                           2.04 |11.500 | 12.21 |17.500 | 2.04 |11.583 | 52.91 |17.583 | 2.04 |11.667 | 52.91 |17.667
                            1.000
                                             1.40 7.000
                                                                           2.54 | 13.000
                                                                                                             9.41 19.00
                                                                                                                                            2.29
                                                                                                                                                                                                                                                                                                                             5.500
                                                                                                                                                                                                                                                                                                                                                                                                                2.29 | 23.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                1.53
                                            1.40 | 7.083
                                                                           2.54 |13.083
2.54 |13.167
                                                                                                             6.87 | 19.08
6.87 | 19.17
                                                                                                                                                                                                                                                                                                                                                                                                                2.29 | 23.58
                            1.250
                                            1.40 | 7.250
                                                                           2.54 113 250
                                                                                                             687 | 19 25
                                                                                                                                                                                                                                                                                                                             5.750 2.04 111.750 52.91 117.750 2.29 23.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                1.53
                            1.333
                                             1.40 | 7.333
                                                                            2.54 |13.333
                                                                                                                                                                                                                                                                                                                                           2.04 |11.833 | 140.42 | 17.833 | 2.29 | 23.83 | 2.04 |11.917 | 140.43 | 17.917 | 2.29 | 23.92
                            1.417
                                             1.40 | 7.417
                                                                           2.54 13.417
                                                                                                             6.87 | 19.42
                                                                                                                                             2.29
                                                                                                                                                                                                                                                                                                                            5.917
                                            1.40 | 7.500
1.40 | 7.583
                                                                           2.54 | 13.500
2.54 | 13.583
                                                                                                             6.87 | 19.50
5.34 | 19.58
                                                                                                                                                                                                                                                                                                                            6.000 2.04 | 12.000 140.43 | 18.000 2.29 | 24.00
                            1.583
                                                                                                                                             2.29
                            1.667
                                            1.40 | 7.667
1.40 | 7.750
                                                                           2.54 13.667
                                                                                                             5.34 | 19.67
                                                                                                                                                                                                                                                                                                            Unit Hyd Qpeak (cms)= 0.483
                                                                             2.54 |13.750
                                                                                                                                                                                                                                                                                                            PEAK FLOW (cms)= 0.756 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 85.707
TOTAL RAINFALL (mm)= 127.199
RUNOFF COEFFICIENT = 0.674
                            1.833
                                            1.40 | 7.833
                                                                           2.54 113.833
                                                                                                             5.34 | 19.83
                                             1.40 7.917
                                                                            2.54 |13.917
                                                                           2.54 | 14.000
                                                                                                           5.34 | 20.00
                            2.000
                                            1.40 | 8.000
                                            1.65 | 8.083
1.65 | 8.167
                                                                           3.43 | 14.083
3.43 | 14.167
                                                                                                             3.82 | 20.08
3.82 | 20.17
                            2.083
                            2.167
                            2.250
                                             1.65 | 8.250
                                                                            3.43 114.250
                                                                                                             3.82 | 20.25
                                            1.65 | 8.333
1.65 | 8.417
                                                                           3.43 | 14.333
3.43 | 14.417
                            2.333
                                                                                                                                                                                                                                                                                                            (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                             3.82 | 20.42
                            2.417
                            2.500
                                            1.65 | 8.500
                                                                           3.43 14.500
                                                                                                             3.82 | 20.50
                                                                                                                                             1.53
                                             1.65 | 8.583
                                                                            3.43 |14.583
                                                                                                             3.82 | 20.58
                            2.667
                                             1.65 | 8.667
                                                                            3.43 14.667
                                                                                                             3.82 | 20.67
                                                                                                                                              1.53
                                                                                                                                                                                                                                                                                                      CALIB
                                              1.65 | 8.750
                                                                                                                                                                                                                                                                                                         STANDHYD ( 0205)| Area (ha)= 7.90
                                                                                                                                                                                                                                                                                                      |ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                            2.833
                                            1.65 | 8.833
                                                                           3.43 | 14.833
                                                                                                           3.82 | 20.83
                                            1.65 | 8.917
1.65 | 9.000
                                                                           3.43 |14.917
3.43 |15.000
                                                                                                             3.82 | 20.92
3.82 | 21.00
                            2.917
                                                                                                                                                                                                                                                                                                                                               IMPERVIOUS PERVIOUS (i)
                            3.000
                                                                                                                                                                                                                                                                                                            Surface Area (ha)= 1.58
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
                            3.083
                                            1.65 | 9.083
                                                                           4.07 | 15.083
                                                                                                             3.82 | 21.08
                                                                                                                                             1.53
                                                                                                                                                                                                                                                                                                                                                                                           6.32
                                                                                                                                                                                                                                                                                                                                                                                               5.00
                                                                           4.07 | 15.167
4.07 | 15.250
                            3.250
                                            1.65 9.250
                                                                                                             3.82 | 21.25
                                                                                                                                            1.53
                                                                                                                                                                                                                                                                                                                                                                                                5.00
                                                                                                                                                                                                                                                                                                            Length (m)= 229.49 250.00
Mannings n = 0.013 0.250
                            3.333
                                            1.65 | 9.333
1.65 | 9.417
                                                                           4.07 | 15.333
4.07 | 15.417
                                                                                                            3.82 | 21.33
3.82 | 21.42
                                                                                                                                                                                                                                                                                                                                                                                     250.00
                            3.417
                                            1.65 | 9.500
1.65 | 9.583
1.65 | 9.667
                                                                           4.07 |15.500
4.58 |15.583
4.58 |15.667
                                                                                                            3.82 | 21.50
3.82 | 21.58
                            3 500
                                                                                                                                                                                                                                                                                                                  NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                            3.667
                                                                                                             3.82 | 21.67
                                            1.65 | 9.750
1.65 | 9.833
                                                                           4.58 | 15.750
4.58 | 15.833
                                                                                                            3.82 | 21.75
3.82 | 21.83
                            3 750
                            3.833
                                                                                                                                                                                                                                                                                                                                                        - TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                                                                           TIME RAIN| 
                            3.917
                                             1.65 9.917 4.58 15.917
                                                                                                           3.82 | 21.92
                                             1.65 |10.000
                                                                              4.58 | 16.000
                                            4.083
                                            2.04 | 10.167 | 5.85 | 16.167 | 2.29 | 22.17 | 2.04 | 10.250 | 5.85 | 16.250 | 2.29 | 22.25
                            4.167
                                                                                                                                                                                                                                                                                                                                             1.40 | 6.250
                                                                                                                                                                                                                                                                                                                                                                            2.54 | 12.250 | 18.32 | 18.25
                            4.250
                                                                                                                                               1.53
                                                                                                                                                                                                                                                                                                                            0.250
                                                                                                                                                                                                                                                                                                                                                                                                                                               2.29
                                                                            5.85 | 16.333 | 2.29 | 22.33
5.85 | 16.417 | 2.29 | 22.42
5.85 | 16.500 | 2.29 | 22.50
                                                                                                                                                                                                                                                                                                                            0.333 1.40 6.333 2.54 12.333 18.32 18.33
0.417 1.40 6.417 2.54 12.417 18.32 18.42
0.500 1.40 6.500 2.54 12.500 18.32 18.50
                            4.333
                                            2.04 | 10.333
                                             2.04 |10.417
                            4.417
                            4.500
                                            2.04 10.500
                                                                             7.89 |16.583
7.89 |16.667
                                                                                                             2.29 | 22.58
                                                                                                                                                                                                                                                                                                                                                                           2.54 | 12.583 | 9.41 | 18.58
2.54 | 12.667 | 9.41 | 18.67
                            4.583
                                            2.04 10.583
                                                                                                                                                                                                                                                                                                                            0.583
                                                                                                                                                                                                                                                                                                                                            1.40 | 6.583
                                            2.04 |10.667
                                                                                                                                                                                                                                                                                                                                              1.40 | 6.667
                                                                                                                                                                                                                                                                                                                            0.667
                            4.667
                                                                              7.89 | 16.750
                                                                                                                                                                                                                                                                                                                                              1.40 | 6.750
                            4.750
                                            2.04 [10.750]
                                                                                                             2.29 | 22.75
                                                                                                                                                                                                                                                                                                                            0.750
                                                                                                                                                                                                                                                                                                                                                                             2.54 112.750
                                                                                                                                                                                                                                                                                                                                                                                                              9.41 | 18.75
                                                                             7.89 |16.833
                                                                                                                                                                                                                                                                                                                                              1.40 | 6.833
                                                                                                                                                                                                                                                                                                                                                                             2.54 | 12.833
                                            2.04 | 10.833
                                                                            7.89 | 16.917 | 2.29 | 22.92
7.89 | 17.000 | 2.29 | 23.00
                            4.917
                                            2.04 10.917
                                                                                                                                                                                                                                                                                                                            0.917
                                                                                                                                                                                                                                                                                                                                              1.40 | 6.917
                                                                                                                                                                                                                                                                                                                                                                             2.54 12.917
                                                                                                                                                                                                                                                                                                                                                                                                              9.41 | 18.92
                                                                                                                                                                                                                                                                                                                                                                                                                                             2.29
                                                                                                                                                                                                                                                                                                                                             1.40 | 7.000
1.40 | 7.083
                                                                                                                                                                                                                                                                                                                                                                           2.54 | 13.000 | 9.41 | 19.00
2.54 | 13.083 | 6.87 | 19.08
                                            2.04 11.000
                                                                                                             2.29 | 23.00
2.29 | 23.08
                                                                                                                                                                                                                                                                                                                             1 000
                                                                                                                                                                                                                                                                                                                             1.083
                            5.083
                                            2.04 | 11.083 | 12.21 | 17.083
                                                                                                                                               1.53
                                           2.04 |11.167 | 12.21 |17.167 | 2.29 | 23.17 | 1.53 | 2.04 |11.250 | 12.21 |17.250 | 2.29 | 23.25 | 1.53
                            5 167
                                                                                                                                                                                                                                                                                                                             1.167
                                                                                                                                                                                                                                                                                                                                              1.40 7.167
                                                                                                                                                                                                                                                                                                                                                                            2.54 | 13.167 | 6.87 | 19.17
                                                                                                                                                                                                                                                                                                                                            1.40 | 7.250 | 2.54 | 13.250 | 6.87 | 19.25 | 2.29
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%2
                                                                                                                                                                                                                                                                                                                            5.833 2.04 | 11.833 140.42 | 17.833 2.29 | 23.83 1.53 5.917 2.04 | 11.917 140.43 | 17.917 2.29 | 23.92 1.53
                            1.333
                                           1.40 | 7.333 | 2.54 | 13.333 | 6.87 | 19.33
                                            1.40 | 7.417
                                                                           2.54 13.417 6.87 19.42 2.29
                            1.417
                                            1.40 | 7.500
1.40 | 7.583
                            1.500
                                                                           2.54 13.500 6.87 19.50
                                                                                                                                                                                                                                                                                                                            6.000 2.04 12.000 140.43 18.000 2.29 24.00 1.53
                                                                           2.54 13.583
                            1.583
                                                                                                             5.34 | 19.58
                            1.667
                                                                           2.54 13.667
                                                                                                             5.34 | 19.67
                                                                                                                                                                                                                                                                                                            Max.Eff.Inten.(mm/hr)=
                                                                                                                                                                                                                                                                                                                                                                      140.43
                                                                                                                                                                                                                                                                                                                                                                                                  93.21
```

```
1.40 | 7.667
1.40 | 7.750
                                                                                                                                                                                                                                Max.EH.Inten.(mm/mr)= 140.43 93.21 over (min) 5.00 20.00 Storage Coeff. (min)= 2.98 (ii) 19.54 (ii) Unit Hyd. Tpeak (min)= 5.00 20.00 Unit Hyd. peak (cms)= 0.28 0.06 **TOTALS*
                                        2.54 | 13.750
             1.40 | 7.833
1.833
                                       2.54 113.833
                                                                   5.34 | 19.83
                                                                                             2.29
                                       2.54 | 13.917
2.54 | 14.000
1.917
              1.40 7.917
                                                                   5.34 | 19.92
                                                                   5.34 | 20.00
              1.40 | 8.000
2.000
2.083
              1.65 | 8.083
                                       3.43 14.083
                                                                   3.82 | 20.08
                                                                                                                                                                                                                                PEAK FLOW (cms)= 0.31 1.04 1.092 (iii)
TIME TO PEAK (lurs)= 12.00 12.17 12.17
RUNOFF VOLUME (mm)= 125.20 77.65 82.41
TOTAL RAINFALL (mm)= 127.20 127.20 127.20
RUNOFF COEFFICIENT = 0.98 0.61 0.65
               1.65 | 8.167
                                        3.43 |14.167
2.250
             1.65 | 8.250
                                      3.43 14.250
                                                                  3.82 | 20.25
                                                                                             1.53
2.333
               1.65 | 8.333
                                        3.43 14.333
                                        3.43 | 14.417
2.417
              1.65 | 8.417
                                                                   3.82 | 20.42
                                                                                              1.53
              1.65 | 8.500
1.65 | 8.583
                                        3.43 |14.500
3.43 |14.583
                                                                   3.82 | 20.50
3.82 | 20.58
                                                                                                                                                                                                                            ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
2.667
             1.65 | 8.667
                                       3.43 14.667
                                                                   3.82 | 20.67
                                                                                             1.53
2.750
              1.65 8.750
                                        3.43 14.750
                                                                   3.82 | 20.75
                                                                                                                                                                                                                           ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                                                                                                                                                                                                                                           YOU SHOULD CONSIDER SPLITTING THE AREA.
2.833
             1.65 | 8.833
                                       3.43 | 14.833
                                                                  3.82 | 20.83
             1.65 | 8.917
1.65 | 9.000
                                      3.43 |14.917
3.43 |15.000
                                                                  3.82 | 20.92
3.82 | 21.00
2 917
                                                                                                                                                                                                                                  (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                                                                                                                                                                                                  CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
3.083
             1.65 | 9.083
                                       4.07 [15.083
                                                                 3.82 | 21.08
                                                                                            1.53
               1.65 9.167
                                        4.07 15.167
                                       4.07 | 15.250
3,250
              1.65 | 9.250
                                                                   3.82 | 21.25
                                                                                             1.53
                                                                                                                                                                                                                                        THAN THE STORAGE COEFFICIENT.
             1.65 | 9.333
1.65 | 9.417
1.65 | 9.500
                                      4.07 |15.333
4.07 |15.417
4.07 |15.500
3.333
                                                                   3.82 | 21.33
                                                                                                                                                                                                                                (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                   3.82 21.42
3.500
                                                                  3.82 | 21.50
3.583
              1.65 | 9.583
                                      4.58 | 15.583
4.58 | 15.667
                                                                   3.82 21.58
              1.65 | 9.667
3.667
                                                                   3.82 | 21.67
                                                                                                                                                                                                                           | ADD HYD ( 0003)|
| 1 + 2 = 3 | AREA QPEAK TPEAK R.V.
             1.65 | 9.750 | 4.58 | 15.750 | 1.65 | 9.833 | 4.58 | 15.833
3.750
                                                                  3.82 21.75
3.833
                                                                  3.82 21.83
3.917
             1.65 | 9.917 | 4.58 | 15.917
                                                                  3.82 | 21.92
                                                                                             1.53
                                                                                                                                                                                                                                  (ha) (cms) (hrs) (mm)

ID1=1 ( 0205): 7.90 1.092 12.17 82.41

+ ID2=2 ( 0210): 6.83 0.756 12.42 85.71
              1.65 |10.000
                                        4.58 |16.000
5.85 |16.083
                                                                   2.29 | 22.08
4.083
             2.03 |10.083
                                                                                               1.53
             2.04 | 10.167
2.04 | 10.250
                                        5.85 | 16.167 | 2.29 | 22.17
5.85 | 16.250 | 2.29 | 22.25
4.167
                                                                                                                                                                                                                                    ID = 3 ( 0003): 14.73 1.757 12.25 83.94
4.250
                                        5.85 | 16.333 | 2.29 | 22.33
5.85 | 16.417 | 2.29 | 22.42
4.333
             2.04 | 10.333
                                                                                                                                                                                                                                NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
              2.04 10.417
4 500
             2 04 110 500
                                        5.85 |16.500
7.89 |16.583
                                                                   2 29 | 22 50
4.583
             2.04 |10.583
                                                                   2.29 | 22.58
4.667
             2.04 | 10.667
                                        7.89 | 16.667 | 2.29 | 22.67
7.89 | 16.750 | 2.29 | 22.75
                                                                                                                                                                                                                           4.750
             2.04 10.750
4.833
              2.04 |10.833
                                         7.89 16.833
                                                                   2.29 | 22.83
4.917
             2.04 | 10.917
                                         7.89 16.917
                                                                   2.29 | 22.92
                                                                                               1.53
5.000
            2.04 | 11.000 | 7.89 | 17.000 | 2.29 | 23.00 | 2.04 | 11.083 | 12.21 | 17.083 | 2.29 | 23.08
                                                                                                                                                                                                                                     NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
5.083
5 167
             2.04 11.167 12.21 17.167 2.29 23.17
                                                                                               1.53
              2.04 11.250
                                        12.21 |17.250
                                                                     2.29 | 23.25
5.333
             2.04 | 11.333 | 12.21 | 17.333
                                                                    2.29 | 23.33
                                                                                               1.53
                                                                                                                                                                                                                                                                    - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                                                                                            TIME RAIN | TIME R
            2.04 |11.417 | 12.21 |17.417
2.04 |11.500 | 12.21 |17.500
                                                                    2.29 | 23.42
2.29 | 23.50
5.417
5.500
                                                                                               1.53
            2.04 | 11.583 | 52.91 | 17.583 | 2.29 | 23.58 | 2.04 | 11.667 | 52.91 | 17.667 | 2.29 | 23.67
5.583
                                                                                               1.53
5.750 2.04 111.750 52.91 117.750 2.29 1 23.75
                                                                                                                                                                                                                                             0.250 1.40 | 6.250 2.54 | 12.250 18.32 | 18.25 2.29
                                                                                              1.53
```

```
0.333 | 1.40 | 6.333 | 2.54 | 12.333 | 18.32 | 18.33 | 2.29 | 0.417 | 1.40 | 6.417 | 2.54 | 12.417 | 18.32 | 18.42 | 2.29

    4.833
    2.04 | 10.833
    7.89 | 16.833
    2.29 | 22.83

    4.917
    2.04 | 10.917
    7.89 | 16.917
    2.29 | 22.92

    5.000
    2.04 | 11.000
    7.89 | 17.000
    2.29 | 23.00

                              0.500
                                                1.40 | 6.500
                                                                                 2.54 12.500 18.32 18.50
                                                                                                                                                       2.29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.53
                                                1.40 | 6.583
                                                                                 2.54 |12.583
2.54 |12.667
                                                                                                                    9.41 | 18.58
9.41 | 18.67
                                                                                                                                                                                                                                                                                                                                                                                                                                            2.29 | 23.08
                              0.583
                                                                                                                                                                                                                                                                                                                                                    5.083
                                                                                                                                                                                                                                                                                                                                                                     2.04 | 11.083 | 12.21 | 17.083
                                                                                                                                                                                                                                                                                                                                                                     2.04 |11.167 | 12.21 |17.167
                              0.667
                              0.750
                                                1.40 | 6.750
                                                                                 2.54 112 750
                                                                                                                    9.41 | 18.75
                                                                                                                                                      2.29
                                                                                                                                                                                                                                                                                                                                                   5.250 2.04 11.250 12.21 117.250
                                                                                                                                                                                                                                                                                                                                                                                                                                            2.29 | 23.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.53
                                                1.40 | 6.833
                                                                                  2.54 |12.833
                                                                                                                                                                                                                                                                                                                                                   5.333
                                                                                                                                                                                                                                                                                                                                                                   2.04 |11.333 | 12.21 |17.333 | 2.29 | 23.33 | 2.04 |11.417 | 12.21 |17.417 | 2.29 | 23.42
                              0.833
                              0.917
                                                1.40 | 6.917
                                                                                 2.54 12.917
                                                                                                                     9.41 | 18.92
                                                                                                                                                       2.29
                                                                                                                                                                                                                                                                                                                                                   5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.53
                                                                                                                                                                                                                                                                                                                                                                   2.04 | 11.500 | 12.21 | 17.500 | 2.29 | 23.50
2.04 | 11.583 | 52.91 | 17.583 | 2.29 | 23.58
2.04 | 11.667 | 52.91 | 17.667 | 2.29 | 23.67
                                                1.40 | 7.000
1.40 | 7.083
                                                                                2.54 | 13.000 | 9.41 | 19.00
2.54 | 13.083 | 6.87 | 19.08
                                                                                                                                                                                                                                                                                                                                                    5.583
                              1.083
                                                                                                                                                       2.29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.53
                              1.167
                                                1.40 | 7.167
1.40 | 7.250
                                                                                2.54 | 13.167
2.54 | 13.250
                                                                                                                    6.87 | 19.17
6.87 | 19.25
                                                                                                                                                                                                                                                                                                                                                  5.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1.53
                                                                                                                                                       2.29
                                                                                                                                                                                                                                                                                                                                                 5.750 2.04 | 11.750 52.91 | 17.750 2.29 | 23.75 1.53 5.833 2.04 | 11.833 | 140.42 | 17.833 | 2.29 | 23.83 | 1.53 5.917 2.04 | 11.917 | 140.43 | 18.000 | 2.29 | 24.00 | 1.53 6.000 | 2.04 | 12.000 | 140.43 | 18.000 | 2.29 | 24.00 | 1.53
                                                1.40 | 7.333
1.40 | 7.417
1.40 | 7.500
                              1.333
                                                                                 2.54 | 13.333
                                                                                                                    6.87 | 19.33
                                                                                                                                                       2.29
                                                                                2.54 | 13.417 | 6.87 | 19.42 | 2.54 | 13.500 | 6.87 | 19.50
                              1.500
                                                                                                                                                      2.29
                                                1.40 | 7.583
1.40 | 7.667
                                                                                 2.54 |13.583
2.54 |13.667
                                                                                                                    5.34 | 19.58
5.34 | 19.67
                              1.583
                                                                                                                                                                                                                                                                                                                                  Unit Hyd Qpeak (cms)= 1.805
                              1.667
                                                1.40 | 7.750
1.40 | 7.833
1.40 | 7.917
                                                                                                                    5.34 | 19.75
5.34 | 19.83
5.34 | 19.92
                              1 750
                                                                                 2.54 113.750
                                                                                                                                                       2 29
                                                                                 2.54 | 13.833
2.54 | 13.917
                                                                                                                                                                                                                                                                                                                                  PEAK FLOW
                                                                                                                                                                                                                                                                                                                                   PEAK FLOW (cms)- 2.467 (i)
TIME TO PEAK (hrs)= 12.250
                              1.917
                                                                                                                                                       2.29
                                                                                                                                                                                                                                                                                                                                  RUNOFF VOLUME (mm)= 80.406
TOTAL RAINFALL (mm)= 127.199
RUNOFF COEFFICIENT = 0.632
                              2.000
                                                1.40 | 8.000 | 2.54 | 14.000 | 1.65 | 8.083 | 3.43 | 14.083
                                                                                                                     5.34 | 20.00
                                                                                                                                                      2.29
                                                                                                                     3.82 | 20.08
                              2.083
                              2.167
                                                1.65 | 8.167
                                                                                 3.43 14.167
                                                                                                                     3.82 | 20.17
                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                                                                  (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                              2.333
                                                1.65 | 8.333
                                                                                 3.43 | 14.333
                                                                                                                    3.82 | 20.33
                                                                                                                                                       1.53
                                                1.65 | 8.417
1.65 | 8.500
                                                                                3.43 |14.417
3.43 |14.500
                                                                                                                    3.82 | 20.42
3.82 | 20.50
                              2.417
                              2.500
                                                1.65 | 8.583
1.65 | 8.667
1.65 | 8.750
                              2.583
                                                                                 3.43 |14.583
                                                                                                                    3.82 | 20.58
                                                                                                                                                       1.53
                                                                                  3.43 14.667
                                                                                                                                                                                                                                                                                                                           3.82 | 20.75
                              2.750
                                                                                3.43 [14.750]
                                                                                                                                                       1.53
                              2.833
                                                1.65 | 8.833
1.65 | 8.917
                                                                                 3.43 |14.833
3.43 |14.917
                                                                                                                    3.82 | 20.83
3.82 | 20.92
                              2.917
                                                1.65 | 9.000
1.65 | 9.083
1.65 | 9.167
                                                                                3.43 |15.000
4.07 |15.083
4.07 |15.167
                                                                                                                    3.82 | 21.00
3.82 | 21.08
                              3.000
                                                                                                                                                                                                                                                                                                                                        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                              3.167
                                                                                                                    3.82 | 21.17
                                                1.65 | 9.250
1.65 | 9.333
                                                                                4.07 | 15.250
4.07 | 15.333
                                                                                                                    3.82 | 21.25
3.82 | 21.33
                              3.250
                                                                                                                                                        1 53
                              3.333
                                                                                                                                                                                                                                                                                                                                                                                - TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                                                                                                  TIME RAIN | TIME R
                                                                                                                     3.82 | 21.42
                              3.417
                                                1.65 9.417
                                                                                4.07 [15.417]
                                                                                                                                                       1.53
                                                1.65 | 9.500
1.65 | 9.583
                                                                                 4.07 |15.500
                                                                                4.58 | 15.583
                              3.583
                                                                                                                    3.82 | 21.58
                                                                                                                                                       1.53
                                                                                4.58 | 15.667
4.58 | 15.750
                              3,667
                                                1.65 9.667
                                                                                                                     3.82 | 21.67
                              3.750
                                                1.65 | 9.750
                                                                                                                     3.82 | 21.75
                                                                                                                                                        1.53
                                                1.65 | 9.833
1.65 | 9.917
1.65 | 10.000
                                                                                                                                                                                                                                                                                                                                                  0.333 1.40 6.333 2.54 12.333 18.32 18.33
0.417 1.40 6.417 2.54 12.417 18.32 18.42
0.500 1.40 6.500 2.54 12.500 18.32 18.50
                                                                                4.58 | 15.833
4.58 | 15.917
                                                                                                                    3.82 | 21.83
3.82 | 21.92
                              3.833
                              3.917
                              4.000
                                                                                   4.58 | 16.000
                                                                                                                     3.82 | 22.00
                                                2.03 |10.083
2.04 |10.167
                                                                                  5.85 | 16.083
5.85 | 16.167
                                                                                                                    2.29 | 22.08
                                                                                                                                                                                                                                                                                                                                                                   1.40 | 6.583
1.40 | 6.667
1.40 | 6.750
                                                                                                                                                                                                                                                                                                                                                                                                     2.54 | 12.583 | 9.41 | 18.58
2.54 | 12.667 | 9.41 | 18.67
                              4.083
                                                                                                                                                                                                                                                                                                                                                  0.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.29
                                                                                                                                                                                                                                                                                                                                                  0.667
                              4.167
                                                                                                                                                          1.53
                              4.250
                                                2.04 [10.250]
                                                                                   5.85 | 16.250
                                                                                                                     2.29 | 22.25
                                                                                                                                                                                                                                                                                                                                                  0.750
                                                                                                                                                                                                                                                                                                                                                                                                      2.54 112.750
                                                                                                                                                                                                                                                                                                                                                                                                                                          9.41 | 18.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2.29
                                                2.04 |10.333
                                                                                  5.85 |16.333
                                                                                                                     2.29 | 22.33
                                                                                                                                                                                                                                                                                                                                                                     1.40 | 6,833
                                                                                                                                                                                                                                                                                                                                                                                                      2.54 12.833
                              4.333
                                                                                                                                                                                                                                                                                                                                                   0.833
                                                                                  5.85 | 16.417 | 2.29 | 22.42
5.85 | 16.500 | 2.29 | 22.50
                                                                                                                                                                                                                                                                                                                                                                                                      2.54 12.917
                                                                                                                                                                                                                                                                                                                                                                                                                                          9.41 18.92
                              4.417
                                                2 04 10 417
                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                                                                                  0.917
                                                                                                                                                                                                                                                                                                                                                                     1.40 | 6.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                            2.29
                                                                                                                                                                                                                                                                                                                                                                                                     2.54 | 13.000 | 9.41 | 19.00
2.54 | 13.083 | 6.87 | 19.08
                              4.500
                                                2.04 |10.500
                                                                                                                                                                                                                                                                                                                                                   1 000
                                                                                                                                                                                                                                                                                                                                                                     1.40 | 7.000
1.40 | 7.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.29
                                                                                  7.89 16.583
                                                                                                                     2.29 | 22.58
                                                                                                                                                                                                                                                                                                                                                   1.083
                              4.583
                                               2.04 | 10.583
                                                                                                                                                          1.53
                              4 667
                                                2 04 10 667
                                                                                   7.89 16.667
                                                                                                                     2.29 | 22.67
                                                                                                                                                                                                                                                                                                                                                   1.167
                                                                                                                                                                                                                                                                                                                                                                     1.40 7.167
                                                                                                                                                                                                                                                                                                                                                                                                      2.54 | 13.167 | 6.87 | 19.17
                                              2.04 |10.750 7.89 |16.750 2.29 | 22.75
                                                                                                                                                                                                                                                                                                                                                                   1.40 7.250 2.54 13.250 6.87 19.25 2.29
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20Output/Proposed%20VO%20Detailed%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20-%20Output/%20
                                                                               2.54 | 13.333 | 6.87 | 19.33 | 2.29 | 2.54 | 13.417 | 6.87 | 19.42 | 2.29
                                                                                                                                                                                                                                                                                                                                                  5.833 2.04 | 11.833 140.42 | 17.833 2.29 | 23.83 1.53
5.917 2.04 | 11.917 140.43 | 17.917 2.29 | 23.92 1.53
                              1.333
                                              1.40 | 7.333
                                               1.40 | 7.417
1.40 | 7.500
1.40 | 7.583
                              1.417
                                                                                2.54 | 13.500 | 6.87 | 19.50 | 2.54 | 13.583 | 5.34 | 19.58
                              1.500
                                                                                                                                                     2 29
                                                                                                                                                                                                                                                                                                                                                  6.000 2.04 | 12.000 140.43 | 18.000 2.29 | 24.00 1.53
                              1.583
                                                                                                                                                      2.29
                                                1.40 | 7.667
1.40 | 7.750
1.40 | 7.833
                              1.667
                                                                                 2.54 13.667
                                                                                                                     5.34 | 19.67
                                                                                                                                                                                                                                                                                                                                  Unit Hyd Qpeak (cms)= 0.757
                                                                                 2.54 | 13.750
                              1.833
                                                                                 2.54 113.833
                                                                                                                                                       2.29
                              1.917
                              2.000
```

```
PEAK FLOW (cms)= 0.670 (i)
TIME TO PEAK (hrs)= 12.000
RUNOFF VOLUME (mm)= 75.051
TOTAL RAINFALL (mm)= 127.199
RUNOFF COEFFICIENT = 0.590
                                                                          5.34 | 19.83
5.34 | 19.92
5.34 | 20.00
               1.40 | 7.917
1.40 | 8.000
                                            2.54 | 13.917
2.54 | 14.000
2.083
               1.65 | 8.083
                                            3.43 | 14.083
                                                                           3.82 | 20.08
                                                                                                        1.53
                1.65 | 8.167
                                            3.43 |14.167
                                                                           3.82 | 20.17
2.250
               1.65 | 8.250
                                           3.43 14.250
                                                                          3.82 | 20.25
                                                                                                        1.53
2.333
               1.65 | 8.333
1.65 | 8.417
                                            3.43 | 14.333
3.43 | 14.417
                                                                                                                                                                                                                                                          (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                           3.82 20.42
2.417
                                                                                                        1.53
               1.65 | 8.500
1.65 | 8.583
                                            3.43 |14.500
3.43 |14.583
                                                                           3.82 | 20.50
3.82 | 20.58
2.500
               1.65 | 8.667
                                                                                                                                                                                                                                                     CALIB
2.667
                                            3.43 14.667
                                                                           3.82 | 20.67
                                                                                                        1.53
                                           3.43 | 14.750
3.43 | 14.833
                                                                                                                                                                                                                                                    | STANDHYD ( 0202)| Area (ha)= 4.57
|ID=1 DT=5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
2.750
                1.65 8.750
                                                                           3.82 20.75
2.833
               1.65 | 8.833
                                                                          3.82 | 20.83
                                                                                                        1.53
               1.65 | 8.917
1.65 | 9.000
                                           3.43 |14.917
3.43 |15.000
                                                                          3.82 | 20.92
3.82 | 21.00
2 917
                                                                                                                                                                                                                                                                                         IMPERVIOUS PERVIOUS (i)
3.000
                                                                                                                                                                                                                                                          | Surface Area (ha) = 1.83
| Dep. Storage (mm) = 2.00
| Average Slope (%) = 5.00
| Length (m) = 500.00
| Mannings n = 0.013
               1.65 | 9.083
1.65 | 9.167
3.083
                                           4.07 [15.083]
                                                                          3.82 | 21.08
                                                                                                        1.53
                                                                                                                                                                                                                                                                                                                                   2.74
                                            4.07 | 15.167
                                                                                                                                                                                                                                                                                                                                     5.00
                                                                                                                                                                                                                                                                                                                                       5.00
                                            4.07 | 15.250
3,250
               1.65 | 9.250
                                                                           3.82 | 21.25
                                                                                                        1.53
               1.65 | 9.333
1.65 | 9.417
1.65 | 9.500
                                           4.07 |15.333
4.07 |15.417
4.07 |15.500
3.333
                                                                           3.82 | 21.33
                                                                                                                                                                                                                                                                                                                               500.00
                                                                                                                                                                                                                                                                                                                                0.250
                                                                           3.82 21.42
3.500
                                                                          3.82 | 21.50
                                                                                                        1.53
3.583
               1.65 | 9.583
1.65 | 9.667
                                           4.58 | 15.583
4.58 | 15.667
                                                                           3.82 21.58
                                                                                                                                                                                                                                                               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
3.667
                                                                           3.82 | 21.67
               1.65 | 9.750 | 4.58 | 15.750
1.65 | 9.833 | 4.58 | 15.833
1.65 | 9.917 | 4.58 | 15.917
3.750
                                                                           3.82 21.75
                                                                                                                                                                                                                                                                                                  - TRANSFORMED HYETOGRAPH
3.833
                                                                          3.82 21.83
                                                                                                                                                                                                                                                                        TIME RAIN | TIME R
3.917
                                                                          3.82 | 21.92
                                                                                                        1.53
                1.65 |10.000
                                            4.58 |16.000
5.85 |16.083
                                                                           3.82 | 22.00
2.29 | 22.08
4.083
               2.03 |10.083
                                                                                                          1.53
4.167
              2.04 | 10.167
2.04 | 10.250
                                             5.85 |16.167
5.85 |16.250
                                                                          2.29 | 22.17
2.29 | 22.25
                                                                                                                                                                                                                                                                                       1.40 | 6.250 | 2.54 | 12.250 | 18.32 | 18.25
4.250
                                            5.85 | 16.333 | 2.29 | 22.33
5.85 | 16.417 | 2.29 | 22.42
                                                                                                                                                                                                                                                                                       1.40 | 6.333 | 2.54 | 12.333 | 18.32 | 18.33
4.333
              2.04 | 10.333
                                                                                                         1.53
                                                                                                                                                                                                                                                                        0.333
                                                                                                                                                                                                                                                                                                                                                                                 2.29
               2.04 10.417
                                                                                                                                                                                                                                                                                         1.40 | 6.417
                                                                                                                                                                                                                                                                                                                    2.54 | 12.417 | 18.32 | 18.42 | 2.54 | 12.500 | 18.32 | 18.50
                                                                                                                                                                                                                                                                        0.417
4 500
               2 04 10 500
                                            5.85 |16.500
7.89 |16.583
                                                                           2 29 | 22 50
                                                                                                          1.53
                                                                                                                                                                                                                                                                        0.500
                                                                                                                                                                                                                                                                                         1.40 | 6.500
                                                                                                                                                                                                                                                                                                                                                                                 2.29
                                                                                                                                                                                                                                                                                       1.40 | 6.583
1.40 | 6.667
1.40 | 6.750
                                                                                                                                                                                                                                                                                                                    2.54 | 12.583 | 9.41 | 18.58
2.54 | 12.667 | 9.41 | 18.67
2.54 | 12.750 | 9.41 | 18.75
4.583
               2.04 |10.583
                                                                           2.29 | 22.58
                                                                                                                                                                                                                                                                        0.583
                                                                                                                                                                                                                                                                        0.667
                                                                           2.29 | 22.67
4.667
               2.04 | 10.667
                                             7.89 | 16.667 | 7.89 | 16.750
4.750
              2.04 10.750
                                                                                                                                                                                                                                                                        0.750
4.833
               2.04 |10.833
                                                                                                                                                                                                                                                                                        1.40 | 6.833
1.40 | 6.917
                                                                                                                                                                                                                                                                                                                     2.54 |12.833
2.54 |12.917
                                                                                                                                                                                                                                                                                                                                                   9.41 | 18.83
9.41 | 18.92
                                                                                                                                                                                                                                                                                                                                                                                 2.29
                                              7.89 16.833
                                                                           2.29 | 22.83
                                                                                                                                                                                                                                                                        0.833
4.917
                                              7.89 16.917
                                                                           2.29 | 22.92
                                                                                                          1.53
                                                                                                                                                                                                                                                                        0.917
5.000
             2.04 | 11.000 | 7.89 | 17.000 | 2.29 | 23.00 | 2.04 | 11.083 | 12.21 | 17.083 | 2.29 | 23.08
                                                                                                                                                                                                                                                                         1.000
                                                                                                                                                                                                                                                                                        1.40 | 7.000
1.40 | 7.083
                                                                                                                                                                                                                                                                                                                    2.54 13.000
                                                                                                                                                                                                                                                                                                                                                   9.41 19.00
                                                                                                                                                                                                                                                                          1.083
                                                                                                                                                                                                                                                                                                                     2.54 13.083
                                                                                                                                                                                                                                                                                                                                                   6.87 | 19.08
5.083
                                                                                                          1.53
                                                                                                                                                                                                                                                                                        1.40 | 7.167
1.40 | 7.250
1.40 | 7.333
5 167
               2.04 11.167 12.21 17.167 2.29 23.17
                                                                                                          1.53
                                                                                                                                                                                                                                                                         1.167
                                                                                                                                                                                                                                                                                                                    2.54 | 13.167
                                                                                                                                                                                                                                                                                                                                                   6.87 | 19.17
                                                                                                                                                                                                                                                                                                                    2.54 |13.250
2.54 |13.333
                2.04 11.250
                                             12.21 |17.250
                                                                             2.29 | 23.25
                                                                                                                                                                                                                                                                                                                                                   6.87 | 19.25
5.333
               2.04 | 11.333 | 12.21 | 17.333
                                                                            2.29 | 23.33
                                                                                                          1.53
                                                                                                                                                                                                                                                                         1.333
                                                                                                                                                                                                                                                                                                                                                   6.87 | 19.33
                                                                                                                                                                                                                                                                                                                                                                                 2.29
              2.04 |11.417 | 12.21 |17.417
2.04 |11.500 | 12.21 |17.500
                                                                            2.29 | 23.42
2.29 | 23.50
                                                                                                                                                                                                                                                                                        1.40 | 7.417
1.40 | 7.500
                                                                                                                                                                                                                                                                         1 417
                                                                                                                                                                                                                                                                                                                    2.54 13.417
                                                                                                                                                                                                                                                                                                                                                   6.87 | 19.42
5.417
                                                                                                                                                                                                                                                                        1.500 1.40 | 7.502 2.54 | 13.503 6.87 | 19.52
1.583 1.40 | 7.583 2.54 | 13.583 5.34 | 19.58
1.667 1.40 | 7.667 2.54 | 13.667 5.34 | 19.67
5.500
                                                                                                          1.53
              2.04 | 11.583 | 52.91 | 17.583 | 2.29 | 23.58 | 2.04 | 11.667 | 52.91 | 17.667 | 2.29 | 23.67
5.583
                                                                                                          1.53
                                                                                                                                                                                                                                                                                                                                                                               2.29
5.750 2.04 111.750 52.91 117.750 2.29 1 23.75
                                                                                                                                                                                                                                                                        1.750 1.40 | 7.750 2.54 | 13.750 5.34 | 19.75 2.29
                                                                                                          1.53
```

```
1.40 | 7.833 | 2.54 | 13.833
1.40 | 7.917 | 2.54 | 13.917
                                                                                                                                                               Storage Coeff. (min)= 3.61 (ii) 31.89 (ii)
Unit Hyd. Tpeak (min)= 5.00 35.00
              1.833
                                                         5.34 | 19.83
5.34 | 19.92
              1.917
                                                                                                                                                                                              0.25 0.03
*TOTALS*
              2.000
                        1.40 | 8.000
                                        2.54 14.000
                                                          5.34 | 20.00
                                                                                                                                                              Unit Hyd. peak (cms)=
                       1.65 | 8.083
                                        3.43 |14.083
                                                          3.82 | 20.08
3.82 | 20.17
                                                                                                                                                               PEAK FLOW (cms)= 0.56 0.31
TIME TO PEAK (hrs)= 12.00 12.42
              2.250
                        1.65 18 250
                                        3 43 114 250
                                                          3 82 | 20 25
                                                                                                                                                              RUNOFF VOLUME (mm)= 125.20 125.20 73.30 89.90
TOTAL RAINFALL (mm)= 127.20 127.20 127.20
RUNOFF COEFFICIENT = 0.98 0.58 0.71
              2.333
                        1.65 | 8.333
                                        3.43 |14.333
              2.417
                        1.65 | 8.417
                                        3.43 14.417
                                                          3.82 | 20.42
                       1.65 | 8.500
1.65 | 8.583
                                        3.43 |14.500
3.43 |14.583
              2.583
                                                          3.82 | 20.58
              2.667
                       1.65 | 8.667
1.65 | 8.750
                                        3.43 | 14.667
3.43 | 14.750
                                                          3.82 | 20.67
                                                                                                                                                           ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
              2.833
                        1.65 | 8.833
                                        3.43 114.833
                                                          3.82 | 20.83
                        1.65 | 8.917
                                        3.43 |14.917
                                                                                                                                                               CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
              3.000
                        1.65 9.000
                                        3.43 | 15.000
                                                         3.82 | 21.00
                       1.65 | 9.083
1.65 | 9.167
                                        4.07 |15.083
4.07 |15.167
                                                         3.82 | 21.08
3.82 | 21.17
              3.083
                                                                                                                                                                   THAN THE STORAGE COEFFICIENT.
              3.167
                                                                                                                                                               (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
              3 250
                        1.65 | 9.250
                                        4.07 [15.250]
                                                          3.82 | 21.25
                       1.65 | 9.333
1.65 | 9.417
                                        4.07 |15.230
4.07 |15.333
4.07 |15.417
               3.333
                                                          3.82 | 21.42
              3.417
              3.500
                        1.65 | 9.500
                                        4.07 | 15.500
                                                         3.82 | 21.50
3.82 | 21.58
                        1.65 | 9.583
                                        4.58 |15.583
                                                                                                                                                            3.667
                        1.65 | 9.667
                                        4.58 | 15.667
                                                          3.82 | 21.67
              3.833
                       1.65 | 9.833
                                        4.58 115.833
                                                        3.82 | 21.83
                       1.65 | 9.917
1.65 | 10.000
                                        4.58 |15.917
4.58 |16.000
                                                         3.82 | 21.92
3.82 | 22.00
              3.917
              4.083
                       2.03 | 10.083
                                        5.85 |16.083
5.85 |16.167
                                                          2.29 | 22.08
2.29 | 22.17
                                                                                                                                                                ID = 3 ( 0040): 7.74 1.382 12.00 83.82
                                                                                                                                                              NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
              4.250
                       2.04 10.250
                                        5.85 16.250 2.29 22.25
              4.333
                       2.04 | 10.333
                                        5.85 |16.333
5.85 |16.417
                                                          2.29 | 22.33
2.29 | 22.42
              4.417
                        2.04 10.417
                                        5.85 | 16.500
7.89 | 16.583
7.89 | 16.667
                       2.04 |10.500
2.04 |10.583
                                                          2.29 | 22.50
2.29 | 22.58
              4 500
                                                                                                                                                           | RESERVOIR( 0032)| OVERFLOW IS OFF
                                                                                                                                                                       >OUT=1|
pmin | OUTFLOW STORAGE | OUTFLOW STORAGE
                                                                                                                                                           IN= 2---> OUT= 1
DT= 5.0 min
              4.667
                       2.04 | 10.667
                                                          2.29 | 22.67
                                                                                                                                                                             - (cms) (ha.m.) | (cms)

0.0000 0.0000 | 0.1020

0.0400 0.1208 | 0.1160

0.0640 0.1775 | 0.1330

0.0790 0.2218 | 0.0000
                       2.04 |10.750
2.04 |10.833
                                        7.89 | 16.750
7.89 | 16.833
                                                         2.29 | 22.75
              4 750
              4.917
                       2 04 10 917
                                         7.89 16.917
                                                          2.29 22.92
                                         7.89 | 17.000
              5.083
                       2.04 | 11.083 | 12.21 | 17.083
                                                          2.29 | 23.08
                       2.04 |11.167 | 12.21 |17.167 | 2.04 |11.250 | 12.21 |17.250
                                                          2.29 | 23.17
2.29 | 23.25
              5.167
                                                                                                                                                                                  AREA QPEAK TPEAK
              5.250
                                                                                                                                                             (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0040) 7.740 1.382 12.00 83.82
OUTFLOW: ID= 1 ( 0032) 7.740 0.133 13.83 83.72
                       2.04 |11.333 | 12.21 |17.333 | 2.04 |11.417 | 12.21 |17.417
              5.333
                                                          2.29 | 23.33
                       2.04 111.500 12.21 17.500
                       2.04 |11.583 | 52.91 |17.583
2.04 |11.667 | 52.91 |17.667
                                                          2.29 | 23.58 2.29 | 23.67
               5 592
                                                                                                                                                                         PEAK FLOW REDUCTION [Qout/Qin](%)= 9.62
               5.667
                      2.04 | 11.750 | 52.91 | 17.750 | 2.29 | 23.75 | 2.04 | 11.833 | 140.42 | 17.833 | 2.29 | 23.83 | 2.04 | 11.917 | 140.43 | 17.917 | 2.29 | 23.92
              5.750
                                                                           1.53
                                                                                                                                                                         TIME SHIFT OF PEAK FLOW
                                                                                                                                                                         MAXIMUM STORAGE USED (ha.m.)= 0.3656
              5.917
      Max.Eff.Inten.(mm/hr)= 140.43
over (min) 5.00 35.0
                                                                                                                                                           | ADD HYD ( 0001)|
file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
                                                                                                                                                                               1.65 | 8.833
1.65 | 8.917
   | 1+2=3 | AREA QPEAK TPEAK R.V.
       3.000
                                                                                                                                                                               1.65 | 9.000
```

```
3.43 |14.833
3.43 |14.917
                                                                3.82 | 20.83
3.82 | 20.92
                                            3.43 115 000
                                                                3.82 | 21.00
                                                                                   1.53
                                             4.07 |15.083
                 3.167
                           1.65 | 9.167
                                             4.07 | 15.167
                                                                3.82 | 21.17
                           1.65 | 9.250
1.65 | 9.333
                                            4.07 |15.250
4.07 |15.333
                 3.333
                                                                3.82 | 21.33
                           1.65 | 9.417
1.65 | 9.500
                                            4.07 |15.417
4.07 |15.500
                                                                3.82 | 21.42
3.82 | 21.50
                 3.417
                 3.583
                           1.65 | 9.583
                                             4.58 | 15.583
                                                                3.82 | 21.58
                 3.667
3.750
                           1.65 | 9.667
                                            4.58 | 15.667
4.58 | 15.750
                                                               3.82 | 21.75
                 3.833
                           1.65 | 9.833
1.65 | 9.917
                                            4.58 | 15.833
4.58 | 15.917
                 3.917
                                                                3.82 | 21.92
                                              4.58 |16.000
5.85 |16.083
5.85 |16.167
                                                                3.82 | 22.00
2.29 | 22.08
                 4.000
                           1.65 110 000
                           2.03 10.083
                           2.04 10.167
                                                                2.29 | 22.17
                 4.167
                                             5.85 | 16.250 | 2.29 | 22.25
5.85 | 16.333 | 2.29 | 22.33
                 4.250
                          2.04 10.250
                 4.333
                           2.04 10.333
                 4 417
                           2.04 [10.417
                                              5 85 116 417
                                                                2.29 | 22.42
                 4.583
                          2.04 10.583
                                              7.89 | 16.583 | 2.29 | 22.58
                           2.04 | 10.667
2.04 | 10.750
                                             7.89 | 16.667 | 2.29 | 22.67
7.89 | 16.750 | 2.29 | 22.75
                 4.667
                 4.750
                           2.04 |10.833
2.04 |10.917
                                             7.89 | 16.833 | 2.29 | 22.83
7.89 | 16.917 | 2.29 | 22.92
                 4.833
                                              7.89 17.000 2.29 23.00
                 5.000
                           2.04 11.000
                 5.083
                          2.04 |11.083 | 12.21 |17.083 | 2.04 |11.167 | 12.21 |17.167
                                                                 2.29 | 23.08
                 5.167
                 5.250
                           2.04 11.250 12.21 17.250 2.29 23.25
                           2.04 | 11.333 | 12.21 | 17.333 | 2.29 | 23.33
                 5.417
                           2.04 | 11.417 | 12.21 | 17.417 | 2.29 | 23.42
                                                                                    1.53
                          2.04 | 11.500 | 12.21 | 17.500 | 2.29 | 23.50
2.04 | 11.583 | 52.91 | 17.583 | 2.29 | 23.58
2.04 | 11.667 | 52.91 | 17.667 | 2.29 | 23.67
                 5.583
                 5 667
                                                                                    1.53
                           2.04 |11.750 | 52.91 |17.750

    5.833
    2.04
    | 11.833
    | 140.42
    | 17.833
    | 2.29
    | 23.83

    5.917
    2.04
    | 11.917
    | 140.43
    | 17.917
    | 2.29
    | 23.92

    6.000
    2.04
    | 12.000
    | 140.43
    | 18.000
    | 2.29
    | 24.00

        Unit Hyd Qpeak (cms)= 0.862
        PEAK FLOW (cms)= 1.454 (i)
TIME TO PEAK (hrs)= 12.583
        RUNOFF VOLUME (mm)= 85.709
TOTAL RAINFALL (mm)= 127.199
        RUNOFF COFFFICIENT = 0.674
        (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
    NASHYD ( 0203)| Area (ha)= 1.61 Curve Number (CN)= 76.0
```

35.00

12.00

(ha.m.)

0.3268

0.0000

0.3659

(min)=110.00

```
ID = 3 ( 0001): 28.06 2.560 12.25 81.32
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
| ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
               ---- U.H. Tp(hrs)= 0.70
      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                          - TRANSFORMED HYETOGRAPH -
            TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
                    1.40 | 6.083 | 2.54 | 12.083 | 18.33 | 18.08 | 1.40 | 6.167 | 2.54 | 12.167 | 18.32 | 18.17
            0.083
            0.250
                     1.40 | 6.250 | 2.54 | 12.250 | 18.32 | 18.25
                     1.40 | 6.333
1.40 | 6.417
1.40 | 6.500
                                     2.54 | 12.333 | 18.32 | 18.33
2.54 | 12.417 | 18.32 | 18.42
2.54 | 12.500 | 18.32 | 18.50
            0.333
            0.500
            0.583
                     1.40 | 6.583
                                      2.54 | 12.583
2.54 | 12.667
                                                       9.41 | 18.58
9.41 | 18.67
            0.667
                     1.40 | 6.750
1.40 | 6.833
                                     2.54 | 12.750
2.54 | 12.833
            0.750
                                                        9.41 | 18.75
            0.833
                                                        9.41 18.83
            0.917
                     1.40 | 6.917
                                      2.54 12.917
                                                        9.41 | 18.92
                     1.40 | 7.000
1.40 | 7.083
                                      2.54 |13.000
2.54 |13.083
            1.083
                                                        6.87 | 19.08
            1.167
                     1.40 | 7.167
1.40 | 7.250
                                      2.54 | 13.167
2.54 | 13.250
                                                        6.87 | 19.17
6.87 | 19.25
                     1.40 | 7.333
1.40 | 7.417
                                                       6.87 | 19.33
6.87 | 19.42
            1.333
                                      2.54 113.333
                                      2.54 13.417
                     1.40 | 7.500
1.40 | 7.583
1.40 | 7.667
1.40 | 7.750
            1.500
                                      2 54 113 500
                                                        6.87 | 19.50
            1.583
                                      2.54 |13.583
                                      2.54 13.667 2.54 13.750
            1.667
                                                        5.34 | 19.67
5.34 | 19.75
            1.750
                     1.40 | 7.833
            1.833
                                      2.54 13.833
            1.917
                                      2.54 | 13.917
                                                        5.34 | 19.92
            2.000
                     1.40 | 8.000
1.65 | 8.083
                                     2.54 | 14.000
3.43 | 14.083
                                                        5.34 20.00
            2.083
                                                        3.82 | 20.08
            2.167
                     1.65 | 8.167
                                      3.43 14.167
                                                        3 82 | 20 17
                                                                          1.53
                      1.65 | 8.250
                                      3.43 |14.250
                                                        3.82 | 20.25
            2.333
                     1.65 | 8.333
                                      3.43 14.333
                                                        3.82 | 20.33
                                                                          1.53
                      1.65 | 8.417
                                      3.43 |14.417
            2.417
                     1.65 | 8.500
                                      3.43 | 14.500
                                                        3.82 20.50
            2.500
                                     3.43 | 14.583
3.43 | 14.667
                                                       3.82 | 20.58
3.82 | 20.67
            2.583
                     1.65 | 8.583
                                                                         1.53
                     1.65 8.667
            2.750
                    1.65 | 8.750 | 3.43 | 14.750 | 3.82 | 20.75 | 1.53
```

```
4.58 |16.000
5.85 |16.083
5.85 |16.167
                                                                                                                                                                                                                       3.82 | 22.00
2.29 | 22.08
2.29 | 22.17
                                                                                                                                                                          4.000
                                                                                                                                                                                    1.65 | 10.000
                                                                                                                                                                                                                                         1.53
         NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                    2.03 110.083
                                                                                                                                                                          4.250
                                                                                                                                                                                   2.04 10.250
                                                                                                                                                                                                      5.85 [16.250 2.29 ] 22.25
                                                                                                                                                                                                                                         1.53
                                                                                                                                                                           4.333
                                                                                                                                                                                    2.04 | 10.333
                                                                                                                                                                                                      5.85 16.333
                             - TRANSFORMED HYETOGRAPH
              TIME RAIN | hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr | 0.083 | 1.40 | 6.083 | 2.54 | 12.083 | 18.33 | 18.08 | 2.29
                                                                                                                                                                                                      5.85 | 16,417
                                                                                                                                                                                                                        2.29 | 22.42
                                                                                                                                                                          4.417
                                                                                                                                                                                    2.04 110,417
                                                                                                                                                                                                                                         1.53
                                                                                                                                                                                   2.04 |10.500
2.04 |10.583
                                                                                                                                                                                                     5.85 | 16.500 | 2.29 | 22.50
7.89 | 16.583 | 2.29 | 22.58
                                                                                                                                                                          4.500
4.583
              0.167
                       1.40 | 6.167 | 2.54 | 12.167 | 18.32 | 18.17 | 1.40 | 6.250 | 2.54 | 12.250 | 18.32 | 18.25
                                                                                                                                                                          4.667
                                                                                                                                                                                   2.04 10.667
                                                                                                                                                                                                      7.89 16.667
                                                                                                                                                                                                                       2.29 | 22.67
                                                                                                                                                                                                                                         1.53
                                                                                                                                                                                                     7.89 | 16.750 | 2.29 | 22.75
7.89 | 16.833 | 2.29 | 22.83
                                                                                                                                                                                    2.04 | 10.750
              0.333
                       1.40 | 6.333 | 2.54 | 12.333 | 18.32 | 18.33
                                                                                                                                                                          4.833
                                                                                                                                                                                   2.04 | 10.833
                                                                                                                                                                                                                                         1.53
                       1.40 | 6.417
1.40 | 6.500
                                        2.54 | 12.417 | 18.32 | 18.42 | 2.54 | 12.500 | 18.32 | 18.50
                                                                                                                                                                                   2.04 | 10.917
2.04 | 11.000
                                                                                                                                                                                                     7.89 |16.917 | 2.29 | 22.92
7.89 |17.000 | 2.29 | 23.00
                                                                                                                                                                           4.917
                                                                                                                                                                           5.000
                                                                                                                                                                                                                                         1.53
              0.500
                                                                            2.29
                       1.40 | 6.583
1.40 | 6.667
                                        2.54 | 12.583 | 9.41 | 18.58 | 2.54 | 12.667 | 9.41 | 18.67
                                                                                                                                                                                   2.04 | 11.083 | 12.21 | 17.083 | 2.29 | 23.08 | 2.04 | 11.167 | 12.21 | 17.167 | 2.29 | 23.17
                                                                                                                                                                                                                                          1.53
              0.583
                                                                                                                                                                           5 083
                                                                                                                                                                           5.167
              0.667
                       1.40 | 6.667

1.40 | 6.750

1.40 | 6.833

1.40 | 6.917

1.40 | 7.000

1.40 | 7.083

1.40 | 7.167

1.40 | 7.250

1.40 | 7.333
                                        2.54 |12.750
2.54 |12.833
2.54 |12.917
                                                          9.41 | 18.75
9.41 | 18.83
9.41 | 18.92
              0.750
                                                                                                                                                                           5.250
                                                                                                                                                                                    2.04 111.250 12.21 17.250
                                                                                                                                                                                                                        2.29 | 23.25
                                                                                                                                                                                                                                          1.53
                                                                                                                                                                                   2.04 |11.333 | 12.21 |17.333 |
2.04 |11.417 | 12.21 |17.417
                                                                                                                                                                                                                        2.29 | 23.33
                                                                                                                                                                           5.333
              0.917
              1.000
                                        2.54 |13.000
2.54 |13.083
                                                          9.41 | 19.00
                                                                           2 29
                                                                                                                                                                           5.500
                                                                                                                                                                                   2.04 | 11.500 | 12.21 | 17.500
                                                                                                                                                                                                                        2.29 | 23.50
                                                                                                                                                                                                                                         1.53
                                                                                                                                                                                   2.04 |11.583 | 52.91 |17.583 |
2.04 |11.667 | 52.91 |17.667
                                                                                                                                                                                                                        2.29 | 23.58
                                                           6.87 | 19.08
                                                                                                                                                                           5.583
              1.083
              1.167
                                        2.54 13.167
                                                           6.87 | 19.17
                                                                                                                                                                          5.667
                                                                                                                                                                                                                                          1.53
                                                                                                                                                                                   2.04 |11.950 |52.91 |17.750 |2.29 |23.75 |
2.04 |11.833 |140.42 |17.833 |2.29 |23.83 |
2.04 |11.917 |140.43 |17.917 |2.29 |23.92 |
                                        2.54 |13.250 | 6.87 | 19.25
2.54 |13.333 | 6.87 | 19.33
                                                                                                                                                                           5.750
                                                                                                                                                                                                                                         1.53
              1.333
                                                                                                                                                                           5.833
                                                                                                                                                                                                                                         1.53
              1.417
1.500
                       1.40 | 7.417
1.40 | 7.500
                                        2.54 |13.417
2.54 |13.500
                                                          6.87 | 19.42
6.87 | 19.50
                                                                                                                                                                          6.000 2.04 | 12.000 140.43 | 18.000 2.29 | 24.00
                       1.40 | 7.583
1.40 | 7.667
1.40 | 7.750
                                                          5.34 | 19.58
5.34 | 19.67
5.34 | 19.75
              1.583
                                        2.54 113.583
                                        2.54 | 13.667
2.54 | 13.750
                                                                                                                                                                  Unit Hyd Qpeak (cms)= 0.256
              1.750
                                                                           2.29
                                                                                                                                                                  PEAK FLOW (cms)= 0.266 (i)
TIME TO PEAK (hrs)= 12.083
RUNOFF VOLUME (mm)= 73.705
TOTAL RAINFALL (mm)= 127.199
RUNOFF COEFFICIENT = 0.579
               1.833
                       1.40 | 7.833
1.40 | 7.917
                                        2.54 |13.833
2.54 |13.917
                                                          5.34 | 19.83
5.34 | 19.92
              1.917
                                                                            2.29
                       1.40 | 8.000
1.65 | 8.083
1.65 | 8.167
                                                          5.34 | 20.00
3.82 | 20.08
3.82 | 20.17
                                        2.54 | 14.000
3.43 | 14.083
              2.000
              2.167
                                        3.43 | 14.167
                       1.65 | 8.250
                                        3.43 | 14.250
3.43 | 14.333
                                                          3.82 | 20.25
3.82 | 20.33
              2 250
                                                                            1 53
              2.333
                                                                                                                                                                  (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
              2.417
                        1.65 | 8.417
                                        3.43 | 14.417
                                                           3.82 | 20.42
                                                                            1.53
                       1.65 | 8.500
1.65 | 8.583
                                         3.43 |14.500
                                        3.43 | 14.583
              2.583
                                                           3.82 | 20.58
              2.667
                        1.65 | 8.667
                                         3.43 14.667
                                                           3.82 | 20.67
                                                                                                                                                               CALIB
                                                                                                                                                               STANDHYD ( 0204)| Area (ha)= 1.93
              2.750
                        1.65 | 8.750
                                         3.43 | 14.750
                                                           3.82 | 20.75
                                                                            1.53
                       1.65 | 8.833
1.65 | 8.917
1.65 | 9.000
                                        3.43 |14.833
3.43 |14.917
                                                          3.82 | 20.83
3.82 | 20.92
              2.833
                                                                                                                                                               ID= 1 DT= 5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
              2.917
                                                                                                                                                                                    IMPERVIOUS PERVIOUS (i)
              3.000
                                        3.43 15.000
                                                           3.82 21.00
                                                                                                                                                                  1.65 | 9.083
                                        4.07 |15.083
4.07 |15.167
                                                          3.82 | 21.08
3.82 | 21.17
              3.083
                                                                                                                                                                                                             0.77
              3.167
              3.250
                        1.65 | 9.250
                                         4.07 [15.250]
                                                           3.82 | 21.25
                                                                                                                                                                                                               1.00
                        1.65 9.333
                                         4.07 |15.333
                                                           3.82 21.33
              3.333
              3.417
                       1.65 | 9.417
                                        4 07 115 417
                                                           3.82 | 21.42
                                                                            1.53
                                                                                                                                                                                                           0.250
                                        4.07 |15.500
4.58 |15.583
                        1.65 | 9.500
                                                           3.82 21.50
                                                                                                                                                                     NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                           3.82 | 21.58
              3.583
                       1.65 | 9.583
                                                                            1.53
              3 667
                        1.65 9.667
                                         4.58 115.667
                                                           3 82 | 21 67
                       1.65 | 9.750 | 4.58 | 15.750 | 3.82 | 21.75 | 1.53
4.333
4.417
                                                                                                                                                                                   2.04 |10.333
2.04 |10.417
                                                                                                                                                                                                     5.85 | 16.333 | 2.29 | 22.33
5.85 | 16.417 | 2.29 | 22.42
                             - TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                     5.85 | 16.500 | 2.29 | 22.50 | 7.89 | 16.583 | 2.29 | 22.58
                                                                                                                                                                          4.500 2.04 10.500
                                                                                                                                                                                                                                        1.53
                                                                                                                                                                          4.667
                                                                                                                                                                                    2.04 10.667
                                                                                                                                                                                                      7.89 16.667
                                                                                                                                                                                                                       2.29 | 22.67
                                                                                                                                                                                                                                         1.53
```

```
---- IRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN
                                                                                                                                                                                                                                                                                                      2.04 | 10.750
2.04 | 10.833
                                                                                                                                                                                                                                                                                                                                       7.89 | 16.750 | 2.29 | 22.75
7.89 | 16.833 | 2.29 | 22.83
                                                                                                                                                                                                                                                                                       4.833
0.333
                1.40 | 6.333
                                             2.54 | 12.333 | 18.32 | 18.33
                                                                                                                                                                                                                                                                                                                                                                                                       1.53
                1.40 | 6.417
1.40 | 6.500
                                              2.54 | 12.417 | 18.32 | 18.42 | 2.54 | 12.500 | 18.32 | 18.50
                                                                                                                                                                                                                                                                                       4.917
5.000
                                                                                                                                                                                                                                                                                                      2.04 |10.917
2.04 |11.000
                                                                                                                                                                                                                                                                                                                                       7.89 | 16.917 | 2.29 | 22.92
7.89 | 17.000 | 2.29 | 23.00
0.417
0.500
                                             2.54 | 12.583 | 9.41 | 18.58 | 2.54 | 12.667 | 9.41 | 18.67
0.583
                1.40 | 6.583
                                                                                                                                                                                                                                                                                       5.083
                                                                                                                                                                                                                                                                                                      2.04 | 11.083 | 12.21 | 17.083
                                                                                                                                                                                                                                                                                                                                                                        2.29 | 23.08
                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                                      2.04 |11.167 | 12.21 |17.167 | 2.29 | 23.17 | 2.04 |11.250 | 12.21 |17.250 | 2.29 | 23.25
                 1.40 | 6.667
0.750
                1.40 | 6.750
                                              2.54 12.750 9.41 18.75
                                                                                                             2.29
                                                                                                                                                                                                                                                                                       5.250
                                                                                                                                                                                                                                                                                                                                                                                                       1.53
0.833
                1.40 | 6.833
1.40 | 6.917
                                              2.54 |12.833
2.54 |12.917
                                                                              9.41 | 18.83
9.41 | 18.92
                                                                                                                                                                                                                                                                                       5.333
                                                                                                                                                                                                                                                                                                      2.04 |11.333 | 12.21 |17.333 | 2.04 |11.417 | 12.21 |17.417
                                                                                                                                                                                                                                                                                                                                                                       2.29 | 23.33 | 2.29 | 23.42
                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                       5.417
                                                                                                                                                                                                                                                                                                                                                                                                        1.53
0.917
                                                                                                              2.29
                1.40 | 7.000
1.40 | 7.083
1.40 | 7.167
                                              2.54 | 13.000
2.54 | 13.083
                                                                             9.41 | 19.00
6.87 | 19.08
6.87 | 19.17
                                                                                                                                                                                                                                                                                                                                                                       2.29 | 23.50
2.29 | 23.58
2.29 | 23.67
1.000
1.083
                                                                                                                                                                                                                                                                                       5.500
                                                                                                                                                                                                                                                                                                       2.04 111.500 12.21 17.500
                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                                      2.04 |11.583 | 52.91 |17.583 |
2.04 |11.667 | 52.91 |17.667
                                                                                                                                                                                                                                                                                        5.583
1.167
                                              2.54 | 13.167
                                                                                                             2.29
                                                                                                                                                                                                                                                                                       5.667
                                                                                                                                                                                                                                                                                                                                                                                                        1.53
1.250
1.333
                1.40 | 7.250
1.40 | 7.333
                                             2.54 | 13.250
2.54 | 13.333
                                                                             6.87 | 19.25
6.87 | 19.33
                                                                                                                                                                                                                                                                                       5.750
                                                                                                                                                                                                                                                                                                      2.04 111.750 52.91 117.750
                                                                                                                                                                                                                                                                                                                                                                       2.29 | 23.75
                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                                      2.04 |11.833 | 140.42 |17.833 | 2.29 | 23.83
2.04 |11.917 | 140.43 |17.917 | 2.29 | 23.92
                                                                                                                                                                                                                                                                                       5.833
                1.40 | 7.417
1.40 | 7.500
1.40 | 7.583
1.417
1.500
                                             2.54 |13.417
2.54 |13.500
                                                                              6.87 | 19.42
6.87 | 19.50
                                                                                                                                                                                                                                                                                       5.917
                                                                                                                                                                                                                                                                                       6.000 2.04 | 12.000 140.43 | 18.000 2.29 | 24.00
                                                                              5.34 | 19.58
5.34 | 19.67
1.583
                                             2.54 113.583
                1.40 | 7.667
1.40 | 7.750
                                               2.54 13.667
                                                                                                                                                                                                                                                                        Max.Eff.Inten.(mm/hr)= 140.43
over (min) 5.00 40.0
                                                                                                                                                                                                                                                                                                                                         40.00
1,750
                                              2.54 | 13.750
                                                                               5.34 | 19.75
                                                                                                                                                                                                                                                                       over (min) 5.00 40.00

Storage Coeff. (min)= 4.31 (ii) 37.22 (ii)

Unit Hyd. Tpeak (min)= 5.00 40.00

Unit Hyd. peak (cms)= 0.23 0.03
*TOTALS*
                1.40 | 7.833
1.40 | 7.917
                                             2.54 |13.833
2.54 |13.917
2.54 |14.000
                                                                              5.34 | 19.83
5.34 | 19.92
5.34 | 20.00
1.833
1.917
                1.40 8.000
2.000
                                                                                                             2.29
2.083
                1.65 | 8.083
1.65 | 8.167
                                              3.43 | 14.083
3.43 | 14.167
                                                                              3.82 | 20.08
3.82 | 20.17
                                                                                                                                                                                                                                                                        PEAK FLOW (cms)= 0.355 0.09 0.395
TIME TO PEAK (hrs)= 12.00 12.50 12.00
RUNOFF VOLUME (mm)= 125.20 76.33
TOTAL RAINFALL (mm)= 127.20 127.20
RUNOFF COEFFICIENT = 0.98 0.60 0.
2.167
                                                                                                                                                                                                                                                                                                                                                                                      12.00
                1.65 | 8.250
1.65 | 8.333
                                             3.43 | 14.250
3.43 | 14.333
                                                                              3.82 | 20.25
3.82 | 20.33
2.250
2.333
2.417
                1.65 | 8.417
                                               3.43 | 14.417
                                                                               3.82 | 20.42
                                                                                                             1.53
                1.65 | 8.500
1.65 | 8.583
                                               3.43 14.500
2.583
                                               3.43 114.583
                                                                               3.82 | 20.58
2.667
2.750
                1.65 | 8.667
1.65 | 8.750
                                              3.43 | 14.667
3.43 | 14.750
                                                                              3.82 | 20.67
3.82 | 20.75
                                                                                                                                                                                                                                                                  **** WARNING: STORAGE COEFF, IS SMALLER THAN TIME STEP!
                                                                                                                                                                                                                                                                           (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
2.833
                 1.65 | 8.833
                                               3.43 |14.833
                                                                               3.82 | 20.83
                 1.65 | 8.917
                                               3.43 14.917
                                                                               3.82 | 20.92
                                                                                                                                                                                                                                                                         CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
3.000
                 1.65 | 9.000
                                               3 43 115 000
                                                                               3 82 | 21 00
                                              4.07 |15.083
4.07 |15.167
4.07 |15.250
                                                                                                                                                                                                                                                                        THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
3.083
                 1.65 | 9.083
                                                                               3.82 21.08
                 1.65 | 9.167
3.167
                                                                               3.82 | 21.17
3.82 | 21.25
3.250
                                              4.07 |15.333
4.07 |15.417
3.333
                 1.65 9.333
3.417
                 1.65 | 9.417
                                                                               3.82 | 21.42
                                                                                                             1.53
3.500
                1.65 | 9.500
1.65 | 9.583
                                             4.07 | 15.500
4.58 | 15.583
                                                                              3.82 | 21.50
                                                                                                                                                                                                                                                                 | ADD HYD ( 0042)|
3.583
                                                                               3.82 | 21.58
                                                                                                                                                                                                                                                                    ABJATIS (19042)]
1+2=3 | AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)
ID1=1 (0203): 1.61 0.266 12.08 73.71
+ ID2=2 (0204): 1.93 0.395 12.00 99.78
3.667
                 1.65 9.667
                                               4.58 | 15.667
                                                                               3.82 | 21.67
                                                                                                              1.53
                 1.65 | 9.750
                                               4.58 |15.750
                                                                               3.82 | 21.75
3.833
                 1.65 | 9.833
                                               4.58 15.833
                                                                               3.82 | 21.83
                                                                                                              1.53
              1.65 | 9.917 | 4.58 | 15.917 | 3.82 | 21.92 | 1.65 | 10.000 | 4.58 | 16.000 | 3.82 | 22.00 | 2.03 | 10.083 | 5.85 | 16.083 | 2.29 | 22.08 | 2.04 | 10.167 | 5.85 | 16.167 | 2.29 | 22.17
3.917
4.000
                                                                                                              1.53
4.083
                                                                                                               1.53
                                                                                                                                                                                                                                                                           ID = 3 ( 0042): 3.54 0.631 12.00 87.92
4,250 2.04 | 10,250 5.85 | 16,250 2.29 | 22,25
                                                                                                                                                                                                                                                                        NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                              1.53
```

```
1.40 | 7,000
                                                                                                                                                                                                                                                                                  1.000
                                                                                                                                                                                                                                                                                                                            2.54 | 13.000
                                                                                                                                                                                                                                                                                                                                                         9.41 | 19.00
    | ADD HYD ( 0042)|
| 3 + 2 = 1 | AREA QPEAK TPEAK R.V.
| (ha) (cms) (hrs) (mm)
| ID1= 3 ( 0042): 3.54 0.631 12.00 87.92
| + ID2= 2 ( 0215): 15.80 1.454 12.58 85.71
                                                                                                                                                                                                                                                                                                 1.40 | 7.083
                                                                                                                                                                                                                                                                                                                            2.54 13.083
                                                                                                                                                                                                                                                                                                                                                          6.87 | 19.08
                                                                                                                                                                                                                                                                                   1.250
                                                                                                                                                                                                                                                                                                1.40 | 7.250
                                                                                                                                                                                                                                                                                                                            2.54 113.250
                                                                                                                                                                                                                                                                                                                                                         6.87 | 19.25
                                                                                                                                                                                                                                                                                   1.333
                                                                                                                                                                                                                                                                                                 1.40 | 7.333
                                                                                                                                                                                                                                                                                                                            2.54 | 13.333
2.54 | 13.417
                                                                                                                                                                                                                                                                                                                                                         6.87 | 19.42
                                                                                                                                                                                                                                                                                   1.417
                                                                                                                                                                                                                                                                                                                                                                                     2.29
                                                                                                                                                                                                                                                                                                 1.40 | 7.500
1.40 | 7.583
1.40 | 7.667
                                                                                                                                                                                                                                                                                                                                                        6.87 | 19.50
5.34 | 19.58
5.34 | 19.67
                                                                                                                                                                                                                                                                                                                           2.54 |13.500
2.54 |13.583
                                                                                                                                                                                                                                                                                   1.583
             ID = 1 ( 0042): 19.34 1.694 12.50 86.11
                                                                                                                                                                                                                                                                                  1.667
                                                                                                                                                                                                                                                                                                                            2.54 113,667
                                                                                                                                                                                                                                                                                                1.40 | 7.750
1.40 | 7.833
                                                                                                                                                                                                                                                                                                                           2.54 | 13.750
2.54 | 13.833
                                                                                                                                                                                                                                                                                                                                                         5.34 | 19.75
5.34 | 19.83
          NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                                                                                   1.833
                                                                                                                                                                                                                                                                                   1.917
                                                                                                                                                                                                                                                                                               1.40 | 7.917
1.40 | 8.000
                                                                                                                                                                                                                                                                                                                           2.54 | 13.917
2.54 | 14.000
                                                                                                                                                                                                                                                                                                                                                       5.34 | 19.92
5.34 | 20.00
     RESERVOIR( 0025) OVERFLOW IS OFF
                                                                                                                                                                                                                                                                                  2.000
     IN= 2---> OUT= I
DT= 5.0 min
                                                                                                                                                                                                                                                                                                                                                       3.82 | 20.08
3.82 | 20.17
                                                                                                                                                                                                                                                                                  2.083
                                                                                                                                                                                                                                                                                                 1.65 | 8.083
                                                                                                                                                                                                                                                                                                                            3.43 14.083
                                                                                                                                                                                                                                                                                                  1.65 | 8.167
                                                                                                                                                                                                                                                                                                                             3.43 14.167
                                              OUTFLOW STORAGE | OUTFLOW STORAGE
                                   -- (cms) (ha.m.) | (cms) (ha.m.)
0.0000 0.0000 | 0.6300 0.4548
0.2600 0.1908 | 0.7100 0.5242
                                                                                                                                                                                                                                                                                  2.250
                                                                                                                                                                                                                                                                                                 1.65 | 8.250
                                                                                                                                                                                                                                                                                                                            3.43 [14.250]
                                                                                                                                                                                                                                                                                                                                                         3.82 | 20.25
                                                                                                                                                                                                                                                                                                 1.65 | 8.333
1.65 | 8.417
                                                                                                                                                                                                                                                                                                                            3.43 |14.333
3.43 |14.417
                                                                                                                                                                                                                                                                                                                                                         3.82 | 20.33
3.82 | 20.42
                                                                                                                                                                                                                                                                                   2.333
                                   0.3900 0.2842 | 0.8100
                                                                                                0.5932
                                                                                                                                                                                                                                                                                  2.500
                                                                                                                                                                                                                                                                                                 1.65 | 8.500
                                                                                                                                                                                                                                                                                                                            3.43 | 14.500
                                                                                                                                                                                                                                                                                                                                                        3.82 | 20.50
3.82 | 20.58
                                    0.4900 0.3533 | 1.4000
                                                                                                                                                                                                                                                                                   2.583
                                                                                                                                                                                                                                                                                                 1.65 8.583
                                                                                                                                                                                                                                                                                                                            3.43 | 14.583
                                                                                             1.1965
                                                                                                                                                                                                                                                                                                                            3.43 14.667
                                                                                                                                                                                                                                                                                  2.667
                                                                                                                                                                                                                                                                                                 1.65 | 8.667
                                                                                                                                                                                                                                                                                                                                                         3.82 | 20.67
       AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) (INFLOW: ID= 2 ( 0042) 19.340 1.694 12.50 86.11 OUTFLOW: ID= 1 ( 0025) 19.340 0.808 13.58 86.10
                                                                                                                                                                                                                                                                                  2.750
                                                                                                                                                                                                                                                                                                1.65 | 8.750
1.65 | 8.833
                                                                                                                                                                                                                                                                                                                            3.43 | 14.750 | 3.82 | 20.75
                                                                                                                                                                                                                                                                                   2.833
                                                                                                                                                                                                                                                                                                                            3.43 | 14.833 | 3.82 | 20.83
                                                                                                                                                                                                                                                                                  2.917
                                                                                                                                                                                                                                                                                                 1.65 | 8.917
                                                                                                                                                                                                                                                                                                                            3.43 14.917
                                                                                                                                                                                                                                                                                                                                                         3.82 | 20.92
                                                                                                                                                                                                                                                                                                  1.65 | 9.000
                                                                                                                                                                                                                                                                                                                            3.43 |15.000
                                                                                                                                                                                                                                                                                  3.083
                                                                                                                                                                                                                                                                                                 1.65 | 9.083
                                                                                                                                                                                                                                                                                                                            4.07 15.083
                                                                                                                                                                                                                                                                                                                                                        3.82 | 21.08
                                                                                                                                                                                                                                                                                                                                                                                     1.53
                                                                                                                                                                                                                                                                                                1.65 | 9.167
1.65 | 9.250
                                                                                                                                                                                                                                                                                                                           4.07 |15.167
4.07 |15.250
                           PEAK FLOW REDUCTION [Qout/Qin](%)= 47.69
TIME SHIFT OF PEAK FLOW (min)= 65.00
                           TIME SHIFT OF PEAK FLOW (min)= 65.00
MAXIMUM STORAGE USED (ha.m.)= 0.5920
                                                                                                                                                                                                                                                                                   3.250
                                                                                                                                                                                                                                                                                                                                                        3.82 | 21.25
                                                                                                                                                                                                                                                                                  3.333
                                                                                                                                                                                                                                                                                                 1.65 | 9.333
1.65 | 9.417
                                                                                                                                                                                                                                                                                                                           4.07 | 15.333 | 3.82 | 21.33
4.07 | 15.417 | 3.82 | 21.42
                                                                                                                                                                                                                                                                                                                                                                                     1.53
                                                                                                                                                                                                                                                                                   3.417
                                                                                                                                                                                                                                                                                  3.500
                                                                                                                                                                                                                                                                                                 1.65 | 9.500
                                                                                                                                                                                                                                                                                                                            4.07 | 15.500
                                                                                                                                                                                                                                                                                                                                                         3.82 | 21.50
                                                                                                                                                                                                                                                                                                 1.65 | 9.583
                                                                                                                                                                                                                                                                                                                           4.58 |15.583
4.58 |15.667
                                                                                                                                                                                                                                                                                                                                                         3.82 | 21.58
3.82 | 21.67
                                                                                                                                                                                                                                                                                   3.583
     CALIB
                                                                                                                                                                                                                                                                                  3.667
                                                                                                                                                                                                                                                                                                 1.65 | 9.750 | 4.58 | 15.750 | 3.82 | 21.75
1.65 | 9.833 | 4.58 | 15.833 | 3.82 | 21.83
1.65 | 9.917 | 4.58 | 15.917 | 3.82 | 21.92
     | NASHYD ( 0225)| Area (ha)= 3.98 Curve Number (CN)= 81.0
| ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                                                                                                                                                                                                                                                                                  3.750
                                                                                                                                                                                                                                                                                                                                                                                     1.53
                            ----- U.H. Tp(hrs)= 0.62
                                                                                                                                                                                                                                                                                  3.917
                                                                                                                                                                                                                                                                                               1.65 | 10.000 | 4.58 | 16.000 | 3.82 | 22.00 | 2.03 | 10.083 | 5.85 | 16.083 | 2.29 | 22.08 | 2.04 | 10.167 | 5.85 | 16.167 | 2.29 | 22.17
                                                                                                                                                                                                                                                                                   4.000
               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                  4.083
                                                                                                                                                                                                                                                                                  4 167
                                                                                                                                                                                                                                                                                                                                                                                      1.53
                                                                                                                                                                                                                                                                                                                             5.85 | 16.250 | 2.29 | 22.25
                                                                                                                                                                                                                                                                                  4.250
                                                                                                                                                                                                                                                                                                 2.04 |10.250
                                                                                                                                                                                                                                                                                                                                                                                      1.53
                        ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.083 1.40 | 6.083 2.54 | 12.083 18.33 | 18.08 2.29 |
0.167 1.40 | 6.167 2.54 | 12.167 18.32 | 18.17 2.29
                                                                                                                                                                                                                                                                                                                             5.85 | 16.333 | 2.29 | 22.33 | 5.85 | 16.417 | 2.29 | 22.42
                                                                                                                                                                                                                                                                                  4.333
                                                                                                                                                                                                                                                                                               2.04 10.333
                                                                                                                                                                                                                                                                                                 2.04 | 10.417
                                                                                                                                                                                                                                                                                                                             5.85 | 16.500 2.29 | 22.50
                                                                                                                                                                                                                                                                                   4.500
                                                                                                                                                                                                                                                                                                2.04 | 10.500
                                                                                                                                                                                                                                                                                                                             7.89 | 16.583 | 2.29 | 22.58 | 7.89 | 16.667 | 2.29 | 22.67 | 7.89 | 16.750 | 2.29 | 22.75
                                                                                                                                                                                                                                                                                  4 583
                                                                                                                                                                                                                                                                                                2 04 110 583
                                                                                                                                                                                                                                                                                                                                                                                      1.53
                                                                                                                                                                                                                                                                                  4.667
                                                                                                                                                                                                                                                                                                 2.04 | 10.667
                        0.250
                                       1.40 | 6.250 | 2.54 | 12.250 | 18.32 | 18.25
                                                                                                                                                                                                                                                                                  4.750
                                                                                                                                                                                                                                                                                                 2.04 | 10.750
                                                                                                                                                                                                                                                                                                                                                                                      1.53
                                                                                                                                                                                                                                                                                                                             7.89 | 16.833 | 2.29 | 22.83
7.89 | 16.917 | 2.29 | 22.92
                                       1.40 | 6.333
                                                                 2.54 | 12.333 | 18.32 | 18.33
                                                                                                                                                                                                                                                                                                 2.04 10.833
                        0.417
                                       1.40 | 6.417
                                                                 2.54 | 12.417 | 18.32 | 18.42 | 2.29
                                                                                                                                                                                                                                                                                  4.917
                                                                                                                                                                                                                                                                                                 2.04 | 10.917
                                                                                                                                                                                                                                                                                                                                                                                      1.53
                       0.411 1.40 0.411 2.54 112.417 18.52 18.50 2.29 0.501 1.40 0.6.500 2.54 112.500 18.32 18.50 2.29 0.583 1.40 0.6.583 2.54 112.583 9.41 18.58 2.29 0.667 1.40 0.6.667 2.54 112.667 9.41 18.67 2.29 0.575 1.40 0.6.50 2.54 112.750 9.41 18.75 2.29
                                                                                                                                                                                                                                                                                                2.04 | 11.000 | 7.89 | 17.000 | 2.29 | 23.00 | 2.04 | 11.083 | 12.21 | 17.083 | 2.29 | 23.08
                                                                                                                                                                                                                                                                                   5 000
                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                   5.083
                                                                                                                                                                                                                                                                                   5.167
                                                                                                                                                                                                                                                                                                2.04 111.167 12.21 117.167 2.29 123.17
                                                                                                                                                                                                                                                                                               2.04 |11.250 | 12.21 |17.250 | 2.29 | 23.25
[ile://V1...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                        5,333 2,04 |11,333 12,21 |17,333 2,29 | 23,33 1,53 5,417 2,04 |11,417 12,21 |17,417 2,29 | 23,42 1,53
                                                                                                                                                                                                                                                                                  1.40 | 7.500 | 2.54 | 13.500 | 6.87 | 19.50 | 2.29 | 1.40 | 7.583 | 2.54 | 13.583 | 5.34 | 19.58 | 2.29 | 1.40 | 7.667 | 2.54 | 13.667 | 5.34 | 19.67 | 2.29
                        5,500 2.04 11,500 12.21 17.500 2.29 23.50 1.53
                                                                                                                                                                                                                                                                                   1.500
                                     2.04 | 11.500 | 12.21 | 17.500 | 2.29 | 23.50 | 2.04 | 11.583 | 52.91 | 17.583 | 2.29 | 23.58 | 2.04 | 11.667 | 52.91 | 17.667 | 2.29 | 23.67 | 2.04 | 11.750 | 52.91 | 17.750 | 2.29 | 23.75
                        5.583
                                                                                                                            1.53
                        5.667
                                                                                                                            1.53
                                                                                                                                                                                                                                                                                   1.667
                                                                                                                                                                                                                                                                                               1.40 | 7.750
1.40 | 7.833
                                                                                                                                                                                                                                                                                                                           2.54 | 13.750 | 5.34 | 19.75
2.54 | 13.833 | 5.34 | 19.83

    5.833
    2.04 | 11.833 | 140.42 | 17.833 | 2.29 | 23.83

    5.917
    2.04 | 11.917 | 140.43 | 17.917 | 2.29 | 23.92

    6.000
    2.04 | 12.000 | 140.43 | 18.000 | 2.29 | 24.00

                                                                                                                                                                                                                                                                                   1.833
                                                                                                                                                                                                                                                                                                 1.40 | 7.917
1.40 | 8.000
                                                                                                                                                                                                                                                                                                                            2.54 | 13.917
2.54 | 14.000
                                                                                                                                                                                                                                                                                                                                                         5.34 | 19.92
5.34 | 20.00
                                                                                                                                                                                                                                                                                   1 917
                                                                                                                                                                                                                                                                                  2.083
                                                                                                                                                                                                                                                                                                 1.65 | 8.083
                                                                                                                                                                                                                                                                                                                            3.43 | 14.083 | 3.82 | 20.08
                                                                                                                                                                                                                                                                                                                                                                                     1.53
                                                                                                                                                                                                                                                                                                 1.65 | 8.167
                                                                                                                                                                                                                                                                                                                            3.43 14.167
          Unit Hyd Qpeak (cms)= 0.245
```

```
2.250
                                                                                                                                                                                                                                                                                                                        1.65 | 8.250
                                                                                                                                                                                                                                                                                                                                                      3.43 | 14.250 | 3.82 | 20.25
      PEAK FLOW (cms)= 0.382 (i)
TIME TO PEAK (hrs)= 12.500
                                                                                                                                                                                                                                                                                                        2.333
                                                                                                                                                                                                                                                                                                                        1.65 | 8.333
1.65 | 8.417
                                                                                                                                                                                                                                                                                                                                                      3.43 | 14.333
3.43 | 14.417
                                                                                                                                                                                                                                                                                                                                                                                    3.82 | 20.33
3.82 | 20.42
                                                                                                                                                                                                                                                                                                         2.417
       RUNOFF VOLUME (mm)= 82.145
TOTAL RAINFALL (mm)= 127.199
                                                                                                                                                                                                                                                                                                        2.500
                                                                                                                                                                                                                                                                                                                         1 65 | 8 500
                                                                                                                                                                                                                                                                                                                                                       3.43 14.500
                                                                                                                                                                                                                                                                                                                                                                                       3.82 20.50
                                                                                                                                                                                                                                                                                                                        1.65 | 8.583
                                                                                                                                                                                                                                                                                                         2.583
                                                                                                                                                                                                                                                                                                                                                       3.43 |14.583
                                                                                                                                                                                                                                                                                                                                                       3.43 14.667
                                                                                                                                                                                                                                                                                                                                                                                       3.82 20.67
      RUNOFF COEFFICIENT = 0.646
                                                                                                                                                                                                                                                                                                        2.667
                                                                                                                                                                                                                                                                                                                        1.65 | 8.750
1.65 | 8.833
                                                                                                                                                                                                                                                                                                                                                     3.43 | 14.750 | 3.82 | 20.75
3.43 | 14.833 | 3.82 | 20.83
                                                                                                                                                                                                                                                                                                        2.750
                                                                                                                                                                                                                                                                                                                                                                                                                      1.53
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                                        2.833
                                                                                                                                                                                                                                                                                                        2.917
                                                                                                                                                                                                                                                                                                                         1 65 | 8 917
                                                                                                                                                                                                                                                                                                                                                       3 43 114 917 3 82 20 92
                                                                                                                                                                                                                                                                                                                        1.65 | 9.000
1.65 | 9.083
                                                                                                                                                                                                                                                                                                                                                       3.43 |15.000
                                                                                                                                                                                                                                                                                                                                                      4.07 | 15.083 | 3.82 | 21.08
                                                                                                                                                                                                                                                                                                        3.083
                                                                                                                                                                                                                                                                                                                                                                                                                      1.53
                                                                                                                                                                                                                                                                                                                        1.65 | 9.167 | 4.07 | 15.167 | 3.82 | 21.17 | 1.65 | 9.250 | 4.07 | 15.250 | 3.82 | 21.25
                                                                                                                                                                                                                                                                                                         3.167
 STANDHYD ( 0220) Area (ha)= 5.63
                                                                                                                                                                                                                                                                                                        3.250
                                                                                                                                                                                                                                                                                                                        1.65 | 9.333
1.65 | 9.417
                                                                                                                                                                                                                                                                                                                                                     4.07 |15.333 | 3.82 | 21.33
4.07 |15.417 | 3.82 | 21.42
4.07 |15.500 | 3.82 | 21.50
|ID=1 DT=5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00
                                                                                                                                                                                                                                                                                                        3.333
                                   IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                                                                                                                                                                        1.65 9.500
                                                                                                                                                                                                                                                                                                        3.500
     Surface Area (ha)= 2.36
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
                                                                                                                                                                                                                                                                                                        3 583
                                                                                                                                                                                                                                                                                                                        1.65 | 9.583 | 4.58 | 15.583 | 3.82 | 21.58 | 1.65 | 9.667 | 4.58 | 15.667 | 3.82 | 21.67
                                                                                   5.00
                                                                                                                                                                                                                                                                                                         3.667
     Average Slope (%)= 2.00 2.00

Length (m)= 250.00 40.00

Mannings n = 0.013 0.250
                                                                                                                                                                                                                                                                                                                        1.65 9.750 4.58 | 15.750 3.82 | 21.75
1.65 | 9.833 4.58 | 15.833 3.82 | 21.83
1.65 | 9.917 4.58 | 15.917 3.82 | 21.92
                                                                                   2.00
                                                                                                                                                                                                                                                                                                        3.750
                                                                                                                                                                                                                                                                                                        3.917
                                                                                                                                                                                                                                                                                                                        1.65 | 10.000 | 4.58 | 16.000 | 3.82 | 22.00 | 2.03 | 10.083 | 5.85 | 16.083 | 2.29 | 22.08 | 2.04 | 10.167 | 5.85 | 16.167 | 2.29 | 22.17
          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                        4.083
                                                                                                                                                                                                                                                                                                        4 167
                                                                                                                                                                                                                                                                                                                                                        5.85 |16.250 2.29 | 22.25
                                                                                                                                                                                                                                                                                                                        2.04 |10.250
                                                                                                                                                                                                                                                                                                                                                        5.85 | 16.333 | 2.29 | 22.33 | 5.85 | 16.417 | 2.29 | 22.42
                                             -- TRANSFORMED HYETOGRAPH --
                                                                                                                                                                                                                                                                                                        4.333
                                                                                                                                                                                                                                                                                                                        2.04 10.333
                                                                                                                                                                                                                                                                                                                                                                                                                       1.53
                     TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                        2.04 10.417
                                                                                                                                                                                                                                                                                                        4.417
                                                                                                                                                                                                                                                                                                        4.500
                                                                                                                                                                                                                                                                                                                        2.04 10.500
                                                                                                                                                                                                                                                                                                                                                        5.85 [16.500]
                                                                                                                                                                                                                                                                                                                                                                                       2.29 | 22.50
                                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                                                                                                                                                                                                                                                                                                       2.04 |10.583
                                                                                                                                                                                                                                                                                                                                                        7.89 | 16.583 | 2.29 | 22.58
7.89 | 16.667 | 2.29 | 22.67
                                                                                                                                                                                                                                                                                                        4.583
                                                                                                                                                                                                                                                                                                         4.667
                                                                                                                                                                                                                                                                                                        4.750
                                                                                                                                                                                                                                                                                                                        2.04 10.750
                                                                                                                                                                                                                                                                                                                                                        7.89 16.750 2.29 22.75
                                     1.40 | 6.333
                                                                  2.54 | 12.333 | 18.32 | 18.33
2.54 | 12.417 | 18.32 | 18.42
                                                                                                                                                                                                                                                                                                                        2.04 |10.833
2.04 |10.917
                                                                                                                                                                                                                                                                                                                                                        7.89 |16.833
7.89 |16.917
                                                                                                                                                                                                                                                                                                                                                                                       2.29 | 22.83
2.29 | 22.92
                     0.333
                                                                                                                                                                                                                                                                                                         4.833
                     0.417
                                                                                                                                                                                                                                                                                                         4.917
                                    1.40 | 6.500 | 2.54 | 12.500 | 18.32 | 18.50 | 2.29 | 1.40 | 6.583 | 2.54 | 12.583 | 9.41 | 18.58 | 2.29 | 1.40 | 6.667 | 2.54 | 12.667 | 9.41 | 18.67 | 2.29
                     0.500
                                                                                                                                                                                                                                                                                                         5.000
                                                                                                                                                                                                                                                                                                                       2.04 11.000 7.89 17.000 2.29 23.00
                                                                                                                                                                                                                                                                                                                                                                                                                       1.53
                     0.583
                                                                                                                                                                                                                                                                                                                        2.04 |11.083 | 12.21 |17.083 | 2.29 | 23.08
                     0.667
                                                                                                                                                                                                                                                                                                         5.167
                                                                                                                                                                                                                                                                                                                        2.04 11 167 12.21 117.167 2.29 23.17
                                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                                                  2.54 | 12.750
2.54 | 12.833
                                                                                                                                                                                                                                                                                                                       2.04 |11.250 | 12.21 |17.250 | 2.29 | 23.25 | 2.04 |11.333 | 12.21 |17.333 | 2.29 | 23.33
                                      1.40 | 6.750
                                                                                                   9.41 | 18.75
                     0.833
                                     1.40 | 6.833
                                                                                                  9.41 | 18.83
                                                                                                                                 2.29
                                                                                                                                                                                                                                                                                                         5.333
                                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                                    1.40 | 6.917
1.40 | 7.000
                                                                  2.54 | 12.917 | 9.41 | 18.92 | 2.54 | 13.000 | 9.41 | 19.00
                                                                                                                                                                                                                                                                                                         5 417
                                                                                                                                                                                                                                                                                                                        2.04 11.417 12.21 17.417 2.29 23.42
                                                                                                                                                                                                                                                                                                                                                                                                                        1 53
                     0.917
                                                                                                                                                                                                                                                                                                                        2.04 |11.500 | 12.21 |17.500 | 2.29 | 23.50
                     1.000
                                                                                                                                2.29
                                   1.40 | 7.083
1.40 | 7.167
                                                                  2.54 | 13.083 | 6.87 | 19.08
2.54 | 13.167 | 6.87 | 19.17
                                                                                                                                                                                                                                                                                                        5.583 2.04 | 11.583 52.91 | 17.583 2.29 | 23.58
5.667 2.04 | 11.667 52.91 | 17.667 2.29 | 23.67
                     1.083
                                                                                                                               2.29
                                                                                                                                                                                                                                                                                                                                                                                                                        1.53
                     1.250 1.40 | 7.250 2.54 | 13.250 6.87 | 19.25 2.29
                                                                                                                                                                                                                                                                                                        5.750 2.04 | 11.750 52.91 | 17.750 2.29 | 23.75
```

```
        5.833
        2.04 | 11.833
        140.42 | 17.833
        2.29 | 23.83
        1.53

        5.917
        2.04 | 11.917
        140.43 | 17.917
        2.29 | 23.92
        1.53

        6.000
        2.04 | 12.000
        140.43 | 18.000
        2.29 | 24.00
        1.53

    Max.Eff.Inten.(mm/hr)=
    140,43
    127.17

    over (min)
    5.00
    10.00

    Storage Coeff. (min)=
    3.14 (ii)
    9.55 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    10.00

    Unit Hyd. peak (cms)=
    0.27
    0.12

    *TOTALS*

               PEAK FLOW (cms)= 0.74 0.88 1.622 (iii)
TIME TO PEAK (hrs)= 12.00 12.00 12.00
RUNOFF VOLUME (mm)= 125.20 84.44 98.30
TOTAL RAINFALL (mm)= 127.20 127.20 127.20
RUNOFF COEFFICIENT = 0.98 0.66 0.77
        ***** WARNING: STORAGE COEFF, IS SMALLER THAN TIME STEP!
                    (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                  CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
                 (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
          RESERVOIR( 0050)| OVERFLOW IS OFF
        | N=2--> OUT=1 |

| DT= 5.0 min | OUTFLOW STORAGE | O.0000 | 0.0000 | 0.5800 | 0.1023 | 0.2500 | 0.0493 | 0.6600 | 0.1189
                                                         0.3700 0.0684 0.7600
0.4600 0.0822 0.7800
                                                                                                                                                      0.1366
           AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0220) 5.630 1.622 12.00 98.30
OUTFLOW: ID= 1 ( 0050) 5.630 0.759 12.17 98.29
                                           PEAK FLOW REDUCTION [Qout/Qin](%)= 46.82
TIME SHIFT OF PEAK FLOW (min)= 10.00
                                           TIME SHIFT OF PEAK FLOW (min)= 10.00
MAXIMUM STORAGE USED (ha.m.)= 0.1377
       ID = 3 ( 0002): 23.32 1.012 13.08 85.43
[ile:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%2
            ** SIMULATION : SCS_10yr **
```

```
NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
ADD HYD ( 0002)
 3+2=1 | AREA QPEAK TPEAK R.V.
   ID = 1 ( 0002): 28.95 1.491 12.50 87.93
  NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   V V I SSSSS U U A L
V V I SS U U AA L
V V I SS U U AAAAA L
V V I SS U U A A A L
                                      (v 6.2.2015)
    VV I SSSSS UUUUUU A A LLLLL
    OOO TTTTT TTTTT H H Y Y M M OOO TM
   0 0 T T H H Y Y MM MM 0 0
0 0 T T H H Y M M 0 0
000 T T H H Y M M 000
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         ***** DETAILED OUTPUT *****
 Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
 Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\5b4d618b-
3b80-42b8-877b-c4ed7 led8d13\scn
Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-
26df3e227620\5b4d618b-3b80-42b8-877b-c4ed71ed8d13\scen
DATE: 03/11/2024
                             TIME: 11:39:27
USER:
COMMENTS:
 *******************************
```

```
READ STORM | Filename: C:\Users\nyokich\AppD
                                                   ata\Local\Temp\
5e49fc0a-79f7-4237-8582-77f9360bb4e5\7983e628
Ptotal= 88.80 mm | Comments: SCS_10yr
                                                     TIME RAIN | ITIME RAIN
                                                                                    0.98 | 6.50 | 1.78 | 12.50 | 6.57 | 18.50 | 1.60 | 0.98 | 6.75 | 1.78 | 12.75 | 6.57 | 18.75 | 1.60 | 0.98 | 7.00 | 1.78 | 13.00 | 4.80 | 19.00 | 1.60
                                                       1.00
                                                                                      0.98 | 7.25 | 1.78 | 13.25 | 4.80 | 19.25 | 0.98 | 7.50 | 1.78 | 13.50 | 3.73 | 19.50
                                                       1.50
                                                                                                                                                                                                                                                                                                                  1.60
                                                                                      0.98 | 7.75 | 1.78 | 13.75 | 3.73 | 19.75 | 1.15 | 8.00 | 2.40 | 14.00 | 2.66 | 20.00
                                                        1 75
                                                                                      1.15 | 8.25 | 2.40 | 14.25 | 2.66 | 20.25
1.15 | 8.50 | 2.40 | 14.50 | 2.66 | 20.50
1.15 | 8.75 | 2.40 | 14.75 | 2.66 | 20.75
                                                     2.25
                                                       2.75
                                                                                      1.15 | 9.00 | 2.84 | 15.00 | 2.66 | 21.00 | 1.07 |
1.15 | 9.25 | 2.84 | 15.25 | 2.66 | 21.25 | 1.07 |
1.15 | 9.50 | 3.20 | 15.50 | 2.66 | 21.50 | 1.07
                                                       3.00
                                                       3.50
                                                                                       1.15 | 9.75 | 3.20 | 15.75 | 2.66 | 21.75 | 1.42 | 10.00 | 4.09 | 16.00 | 1.60 | 22.00
                                                       4.00
                                                                                      1.42 | 10.25 | 4.09 | 16.25 | 1.60 | 22.25 | 1.42 | 10.50 | 5.51 | 16.50 | 1.60 | 22.50
                                                       4.25
                                                                                                                                                                                                                                                                                                                    1.07
                                                       4.75
                                                                                      1.42 | 10.75 | 5.51 | 16.75 | 1.60 | 22.75
                                                                                                                                                                                                                                                                                                                    1.07
                                                                                    1.42 | 11.00 | 8.52 | 17.00 | 1.60 | 23.00 | 1.07 | 1.42 | 11.25 | 8.52 | 17.25 | 1.60 | 23.25 | 1.07
                                                       5.25
                                                       5.50 1.42 | 11.50 36.94 | 17.50 1.60 | 23.50 1.07
5.75 1.42 | 11.75 98.04 | 17.75 1.60 | 23.75 1.07
| CALIB | | NASHYD ( 0210)| Area (ha)= 6.83 Curve Number (CN)=83.0 | | D=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 | ...... U.H. Tp(hrs)= 0.54
                           NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                              -- TRANSFORMED HYETOGRAPH -
                                                TIME RAIN | TIME R
                                                   0.250 0.98 | 6.250 1.78 | 12.250 12.79 | 18.25 1.60
```

```
0.500 0.98 6.500 1.78 12.500 12.79 18.50
                                                                                         1.60
                                      1.78 | 12.583 | 6.57 | 18.58
1.78 | 12.667 | 6.57 | 18.67
 0.667
             0.98 | 6.667
                                                                                         1.60
 0.750 0.98 6.750
0.833 0.98 6.833
                                      1.78 | 12.750 | 6.57 | 18.75
1.78 | 12.833 | 6.57 | 18.83
                                                                                         1.60
 0.917 0.98 | 6.917
1.000 0.98 | 7.000
                                       1.78 | 12.917 | 6.57 | 18.92
1.78 | 13.000 | 6.57 | 19.00
 1.083 0.98 | 7.083
1.167 0.98 | 7.167
1.250 0.98 | 7.250
                                      1.78 | 13.083 | 4.80 | 19.08
1.78 | 13.167 | 4.80 | 19.17
                                                                                         1.60
                                      1.78 | 13.250 | 4.80 | 19.25
 1.333
             0.98 | 7.333
0.98 | 7.417
                                      1.78 | 13.333
1.78 | 13.417
                                                              4.79 | 19.33
4.80 | 19.42
 1.417
             0.98 | 7.500
0.98 | 7.583
0.98 | 7.667
                                       1.78 | 13.500 | 4.80 | 19.50 | 1.78 | 13.583 | 3.73 | 19.58 | 1.78 | 13.667 | 3.73 | 19.67
 1.500
  1.583
 1.667
                                      1.78 13.667
                                                                                         1.60
 1.750 0.98 7.750
1.833 0.98 7.833
                                      1.78 | 13.750 | 3.73 | 19.75
1.78 | 13.833 | 3.73 | 19.83
1.78 | 13.917 | 3.73 | 19.92
                                                                                         1.60
 1917 098 7917
 2.000 0.98 8.000
2.083 1.15 8.083
                                     1.78 | 14.000 | 3.73 | 20.00
2.40 | 14.083 | 2.66 | 20.08
                                                                                         1.07
 2.167 1.15 8.167
2.250 1.15 8.250
                                     2.40 | 14.167 | 2.66 | 20.17 | 2.40 | 14.250 | 2.66 | 20.25
             1.15 | 8.333
1.15 | 8.417
1.15 | 8.500
                                     2.40 | 14.333 | 2.66 | 20.33 | 2.40 | 14.417 | 2.66 | 20.42
 2.333
                                      2.40 14.500 2.66 20.50
 2.500
 2.583 1.15 | 8.583
2.667 1.15 | 8.667
                                     2.40 |14.583 | 2.66 | 20.58
2.40 |14.667 | 2.66 | 20.67
 2.750
              1.15 | 8.750 | 2.40 | 14.750 | 2.66 | 20.75
              1.15 | 8.833
                                      2.40 | 14.833 | 2.66 | 20.83
 2.917
              1.15 | 8.917
                                      2.40 | 14.917 | 2.66 | 20.92
             1.15 | 9.000
1.15 | 9.083
                                     2.40 | 15.000 | 2.66 | 21.00 | 2.84 | 15.083 | 2.66 | 21.08
 3.083
 3 167
              1.15 | 9.167
                                      2 84 15 167 2 66 21 17
              1.15 | 9.250
                                      2.84 |15.250
              1.15 | 9.333
 3.333
                                      2.84 | 15.333 | 2.66 | 21.33
 3.417
              1.15 | 9.417
                                      2.84 | 15.417 | 2.66 | 21.42 | 2.84 | 15.500 | 2.66 | 21.50
 3.500
              1.15 | 9.500
             1.15 | 9.583
1.15 | 9.667
1.15 | 9.750
                                     3.20 | 15.583 | 2.66 | 21.58
3.20 | 15.667 | 2.66 | 21.67
3.20 | 15.750 | 2.66 | 21.75
 3.583
 3.667
 3.750
              1.15 | 9.833
1.15 | 9.917
                                      3.20 | 15.833 | 2.66 | 21.83
3.20 | 15.917 | 2.66 | 21.92
 3.833
 3.917
 4.000
              1.15 | 10.000 | 3.20 | 16.000 | 2.66 | 22.00 | 1.42 | 10.083 | 4.08 | 16.083 | 1.60 | 22.08
4.081 6.083 1.60 | 22.08

4.167 1.42 | 10.167 4.09 | 16.167 1.60 | 22.17

4.250 1.42 | 10.250 4.09 | 16.250 1.60 | 22.15

4.333 1.42 | 10.333 4.08 | 16.333 1.60 | 22.33

4.417 1.42 | 10.417 4.09 | 16.417 1.60 | 22.42

4.500 1.42 | 10.500 4.09 | 16.500 1.60 | 22.58

4.583 1.42 | 10.583 5.51 | 16.583 1.60 | 22.58

4.667 1.42 | 10.667 5.51 | 16.667 1.60 | 22.57

4.750 1.42 | 10.750 5.51 | 16.750 1.60 | 22.57
                                                                                          1.07
                                                                                         1.07
 4.750 1.42 10.750 5.51 16.750 1.60 22.75 1.07
```

```
1.42 | 10.833 | 5.51 | 16.833 | 1.60 | 22.83 | 1.42 | 10.917 | 5.51 | 16.917 | 1.60 | 22.92
                    4 833
                                                                                                                                                                                                                                          0.833 0.98 | 6.833 1.78 | 12.833
                                                                                                         1.07
                                                                                                                                                                                                                                                      0.98 | 6.917
                                                                                                                                                                                                                                                                               1.78 | 12.917
                                                                                                                                                                                                                                                                                                       6.57 | 18.92
                    4.917
                                                                                                         1.07
                    5.000
                                 1.42 111.000
                                                         5.51 17.000
                                                                                  1.60 | 23.00
                                                                                                                                                                                                                                          1.000
                                                                                                                                                                                                                                                      0.98 | 7,000
                                                                                                                                                                                                                                                                               1.78 | 13.000
                                                                                                                                                                                                                                                                                                       6.57 | 19.00
                                                                                                                                                                                                                                                                                                                               1.60
                                                         8.52 |17.083
8.52 |17.167
                                                                                  1.60 | 23.08
                                 1.42 | 11.083
                                                                                                                                                                                                                                           1.083
                                                                                                                                                                                                                                                       0.98 | 7.083
                                                                                                                                                                                                                                                                               1.78 113.083
                                                                                                                                                                                                                                                                                                       4.80 | 19.08
                                 1.42 11.167
                    5.250
                                 1.42 (11.250
                                                         8 52 117 250
                                                                                  1 60 | 23 25
                                                                                                         1 07
                                                                                                                                                                                                                                          1.250
                                                                                                                                                                                                                                                     0.98 7.250
                                                                                                                                                                                                                                                                               1.78 [13.250]
                                                                                                                                                                                                                                                                                                       4.80 | 19.25
                                                                                                                                                                                                                                                                                                                               1.60
                     5.333
                                 1.42 11.333
                                                         8.52 | 17.333
                                                                                  1.60 | 23.33
                                                                                                                                                                                                                                           1.333
                                                                                                                                                                                                                                                      0.98 | 7.333
                                                                                                                                                                                                                                                                               1.78 | 13.333
                                                                                                                                                                                                                                                                                                       4.79 | 19.33
4.80 | 19.42
                    5.417
                                 1.42 111.417
                                                         8.52 17.417
                                                                                  1.60 | 23.42
                                                                                                          1.07
                                                                                                                                                                                                                                          1.417
                                                                                                                                                                                                                                                                               1.78 | 13,417
                                                                                                                                                                                                                                                                                                                               1.60
                                 1.42 |11.500 8.52 |17.500
1.42 |11.583 36.94 |17.583
                                                                                                                                                                                                                                                      0.98 | 7.500
0.98 | 7.583
                                                                                                                                                                                                                                                                               1.78 | 13.500
1.78 | 13.583
                                                                                                                                                                                                                                                                                                       4.80 | 19.50
3.73 | 19.58
                                                                                  1.60 | 23.50
                                                                                                                                                                                                                                           1.583
                    5.583
                                                                                  1.60 | 23.58
                                                                                                          1.07
                                                                                                                                                                                                                                                                                                                               1.60
                     5.667
                                 1.42 |11.667 | 36.94 |17.667 | 1.42 |11.750 | 36.94 |17.750
                                                                                   1.60 | 23.67
                                                                                                                                                                                                                                          1.667
                                                                                                                                                                                                                                                      0.98 7.667
                                                                                                                                                                                                                                                                               1.78 | 13.667
                                                                                                                                                                                                                                                                                                       3.73 | 19.67
                                                                                                                                                                                                                                                                                                                               1.60
                                                                                                                                                                                                                                                     0.98 | 7.750
0.98 | 7.833
                                                                                   1.60 | 23.75
                                                                                                                                                                                                                                                                               1.78 | 13.750
                                1.42 |11.833 | 98.03 | 17.833 | 1.60 | 23.83
1.42 |11.917 | 98.04 | 17.917 | 1.60 | 23.92
                                                                                                                                                                                                                                                                                                       3.73 | 19.83
                    5.833
                                                                                                          1.07
                                                                                                                                                                                                                                          1.833
                                                                                                                                                                                                                                                                               1.78 | 13.833
                                                                                                                                                                                                                                                                                                                               1.60
                                                                                                                                                                                                                                                     0.98 | 7.917
0.98 | 8.000
                                                                                                                                                                                                                                                                              1.78 | 13.917
1.78 | 14.000
                                                                                                                                                                                                                                                                                                     3.73 | 19.92
3.73 | 20.00
                                                                                                                                                                                                                                           1.917
                    6.000 1.42 12.000 98.04 18.000 1.60 24.00 1.07
                                                                                                                                                                                                                                          2.000
                                                                                                                                                                                                                                                                                                                               1.60
                                                                                                                                                                                                                                                                                                     2.66 | 20.08
2.66 | 20.17
                                                                                                                                                                                                                                          2.083
                                                                                                                                                                                                                                                      1.15 | 8.083
                                                                                                                                                                                                                                                                              2.40 14.083
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                        1.15 | 8.167
                                                                                                                                                                                                                                                                               2.40 |14.167
         Unit Hyd Opeak (cms)= 0.483
                                                                                                                                                                                                                                          2.250
                                                                                                                                                                                                                                                       1.15 | 8.250
                                                                                                                                                                                                                                                                              2.40 14.250
                                                                                                                                                                                                                                                                                                       2.66 | 20.25
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                       1.15 | 8.333
                                                                                                                                                                                                                                                                              2.40 |14.333
2.40 |14.417
                                                                                                                                                                                                                                                                                                      2.66 | 20.33
         PEAK FLOW (cms)= 0.455 (i)
TIME TO PEAK (hrs)= 12.417
                                                                                                                                                                                                                                          2.333
        RUNOFF VOLUME (mm)= 51.701
TOTAL RAINFALL (mm)= 88.801
RUNOFF COEFFICIENT = 0.582
                                                                                                                                                                                                                                          2.500
                                                                                                                                                                                                                                                      1.15 | 8.500
                                                                                                                                                                                                                                                                              2.40 114.500
                                                                                                                                                                                                                                                                                                     2.66 | 20.50
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                                             2.40 14.583
                                                                                                                                                                                                                                                                                                     2.66 | 20.58
                                                                                                                                                                                                                                          2.583
                                                                                                                                                                                                                                                       1.15 | 8.583
                                                                                                                                                                                                                                          2.667
                                                                                                                                                                                                                                                       1.15 | 8.667
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                          2.750
                                                                                                                                                                                                                                                      1.15 | 8.750
1.15 | 8.833
                                                                                                                                                                                                                                                                             2.40 | 14.750 | 2.66 | 20.75 | 2.40 | 14.833 | 2.66 | 20.83
                                                                                                                                                                                                                                          2.833
         (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                          2.917
                                                                                                                                                                                                                                                       1.15 | 8.917
                                                                                                                                                                                                                                                                              2.40 14.917
                                                                                                                                                                                                                                                                                                     2 66 20 92
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                        1.15 | 9.000
                                                                                                                                                                                                                                                                              2.40 |15.000
                                                                                                                                                                                                                                          3.083
                                                                                                                                                                                                                                                       1.15 | 9.083
                                                                                                                                                                                                                                                                              2.84 | 15.083
                                                                                                                                                                                                                                                                                                     2.66 | 21.08
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                      1.15 | 9.167
1.15 | 9.250
                                                                                                                                                                                                                                                                             2.84 |15.167
2.84 |15.250
                                                                                                                                                                                                                                                                                                       2.66 | 21.17
     STANDHYD ( 0205) Area (ha)= 7.90
                                                                                                                                                                                                                                          3.250
                                                                                                                                                                                                                                                                                                      2.66 21.25
    ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                                                                                                                                                                                                                                          3.333
                                                                                                                                                                                                                                                      1.15 | 9.333
1.15 | 9.417
                                                                                                                                                                                                                                                                              2 84 115 333
                                                                                                                                                                                                                                                                                                     2.66 | 21.33
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                                               2.84 |15.417
                                                                                                                                                                                                                                                                                                       2.66 | 21.42
                                                                                                                                                                                                                                          3.417
        3.500
                                                                                                                                                                                                                                                       1.15 | 9.500
                                                                                                                                                                                                                                                                              2.84 15.500
                                                                                                                                                                                                                                                                                                     2.66 | 21.50
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                          3.583
3.667
                                                                                                                                                                                                                                                      1.15 | 9.583
                                                                                                                                                                                                                                                                              3.20 |15.583
3.20 |15.667
                                                                                                                                                                                                                                                                                                     2.66 | 21.58
                                                                                                                                                                                                                                                      1.15 | 9.750
1.15 | 9.833
                                                                                                                                                                                                                                          3.750
                                                                                                                                                                                                                                                                              3.20 15.750 2.66 21.75
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                                              3.20 | 15.833 | 2.66 | 21.83
3.20 | 15.917 | 2.66 | 21.92
                                                                                                                                                                                                                                                        1.15 | 9.917
                                                                                                                                                                                                                                          3.917
                                                                                                                                                                                                                                                                                                                               1.07
                                                                                                                                                                                                                                                      1.15 | 10.000
1.42 | 10.083
                                                                                                                                                                                                                                                                              NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                          4.083
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                          4.167
                                                                                                                                                                                                                                                       1.42 10.167
                                                                                                                                                                                                                                                                               4.09 16.167 1.60 22.17
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                                                               4.09 |16.250
                                                                                                                                                                                                                                                                                                        1.60 | 22.25
                                                                                                                                                                                                                                                       1.42 | 10.250
                                                                                                                                                                                                                                          4.250
                                                                                                                                                                                                                                                                                                                                1.07
                    ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.083 0.98 (6.083 1.78 | 12.083 12.80 18.08 1.60 |
0.167 0.98 | 6.167 1.78 | 12.167 12.79 | 18.17 1.60
                                                                                                                                                                                                                                          4.333
                                                                                                                                                                                                                                                       1.42 110.333
                                                                                                                                                                                                                                                                               4.08 | 16.333
                                                                                                                                                                                                                                                                                                       1.60 | 22.33
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                                        1.42 | 10.417
                                                                                                                                                                                                                                                                               4.09 16.417
                                                                                                                                                                                                                                          4.500
                                                                                                                                                                                                                                                       1.42 (10.500
                                                                                                                                                                                                                                                                               4.09 | 16.500
                                                                                                                                                                                                                                                                                                       1.60 | 22.50
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                                                              5.51 | 16.583 | 1.60 | 22.58
5.51 | 16.667 | 1.60 | 22.67
5.51 | 16.750 | 1.60 | 22.75
                                                                                                                                                                                                                                          4 583
                                                                                                                                                                                                                                                       1.42 10.583
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                                        1.42 10.667
                    0.250
                                0.98 | 6.250
                                                         1.78 112 250 12 79 118 25
                                                                                                          1.60
                                                                                                                                                                                                                                          4.750
                                                                                                                                                                                                                                                       1.42 | 10.750
                                                                                                                                                                                                                                                                                                                                1.07
                                 0.98 6.333
                                                         1.78 | 12.333 | 12.79 | 18.33
                                                                                                                                                                                                                                                                               5.51 |16.833
                                                                                                                                                                                                                                                        1.42 10.833
                    0.417
                                 0.98 | 6.417
                                                         1 78 112 417 12 79 18 42
                                                                                                         1.60
                                                                                                                                                                                                                                          4.917
                                                                                                                                                                                                                                                       1.42 110.917
                                                                                                                                                                                                                                                                               5.51 16.917
                                                                                                                                                                                                                                                                                                        1.60 | 22.92
                                                                                                                                                                                                                                                                                                                                1.07
                    1.42 11.000
                                                                                                                                                                                                                                                                               5.51 |17.000
8.52 |17.083
                                                                                                                                                                                                                                                                                                        1.60 | 23.00
1.60 | 23.08
                                                                                                                                                                                                                                          5 000
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                                       1.42 11.083
                                                                                                                                                                                                                                          5.083
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                          5.167
                                                                                                                                                                                                                                                       1.42 111.167
                                                                                                                                                                                                                                                                               8.52 117.167
                                                                                                                                                                                                                                                                                                        1.60 | 23.17
                                                                                                                                                                                                                                                                                                                                1.07
                                                                                                                                                                                                                                                      1.42 |11.250 8.52 |17.250 1.60 | 23.25
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%2
                                                                                                                                                                                                                                           ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
Irrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.083 0.98  | 6.083 1.78 | 12.083 12.80 | 18.08 1.60
0.167 0.98 | 6.167 1.78 | 12.167 12.79 | 18.17 1.60
                               1.42 | 11.333 | 8.52 | 17.333 | 1.60 | 23.33 | 1.07 | 1.42 | 11.417 | 8.52 | 17.417 | 1.60 | 23.42 | 1.07
                    5.417
                    5.500
                                 1.42 11.500 8.52 17.500 1.60 23.50
                                                                                                         1.07
                                 1.42 |11.583 36.94 |17.583
                                                                                   1.60 | 23.58
                    5.583
                                 1.42 | 11.667 | 36.94 | 17.667 | 1.42 | 11.750 | 36.94 | 17.750
                     5.667
                                                                                   1.60 23.67
                                                                                                                                                                                                                                          0.167
                                                                                                                                                                                                                                                     0.98 | 6.250
0.98 | 6.333
                                                                                                                                                                                                                                                                             1.78 | 12.250 | 12.79 | 18.25
1.78 | 12.333 | 12.79 | 18.33
                               1.42 | 11.833 | 98.03 | 17.833 | 1.60 | 23.83 | 1.42 | 11.917 | 98.04 | 17.917 | 1.60 | 23.92
                                                                                                                                                                                                                                          0.333
                    5.833
                                                                                                                                                                                                                                                                                                                                1.60
                                                                                                                                                                                                                                                     0.98 | 6.417
0.98 | 6.500
                                                                                                                                                                                                                                                                              1.78 | 12.417 | 12.79 | 18.42
1.78 | 12.500 | 12.79 | 18.50
                    5.917
                                                                                                                                                                                                                                          0.417
                                                                                                                                                                                                                                                                                                                                1.60
                    6.000 1.42 | 12.000 98.04 | 18.000 1.60 | 24.00 1.07
                                                                                                                                                                                                                                          0.583
                                                                                                                                                                                                                                                     0.98 | 6.583
                                                                                                                                                                                                                                                                              1.78 | 12.583 | 6.57 | 18.58
                                                                                                                                                                                                                                                                                                                               1.60
```

```
30.00 47.58
30.00
                                                                                                                                                                0.667
                                                                                                                                                                        0.98 | 6.667
                                                                                                                                                                                         1.78 | 12.667 | 6.57 | 18.67
1.78 | 12.750 | 6.57 | 18.75
   Max.Eff.Inten.(mm/hr)= 98.04
over (min) 5.00 30.
                                                                                                                                                                                                                          1.60
   over (min) 5.00 50.00

Storage Coeff. (min)= 3.44 (ii) 25.11 (ii)

Unit Hyd. Tpeak (min)= 5.00 30.00
                                                                                                                                                                0.833
                                                                                                                                                                        0.98 | 6.833
                                                                                                                                                                                         1.78 | 12.833
                                                                                                                                                                                                         6.57 | 18.83
6.57 | 18.92
   Unit Hyd. Tpeak (mm)=
Unit Hyd. peak (cms)=

0.26
*TOTALS*
                                                                                                                                                                                         1.78 | 12.917
                                                                                                                                                                         0.98 | 6.917
                                                                                                                                                                                                                          1.60
                                                                                                                                                                0.917
                                                                                                                                                                1.000
                                                                                                                                                                         0.98 7.000
                                                                                                                                                                                         1.78 13.000
                                                                                                                                                                                                          6.57 19.00
                                                                                                                                                                        0.98 | 7.083
                                                                                                                                                                                                         4.80 | 19.08
4.80 | 19.17
                                                                                                                                                                                         1.78 |13.083
   | PEAK FLOW | (cms)= | 0.21 | 0.50 | 0.532 (iii) | TIME TO PEAK | (hrs)= | 12.00 | 12.33 | 12.33 | RUNOFF VOLUME | (mm)= | 86.80 | 45.72 | 49.82 | TOTAL RAINFALL | (mm)= | 88.80 | 88.80 | 88.80 | RUNOFF COEFFICIENT | 0.98 | 0.51 | 0.56
                                                                                                                                                                                         1.78 13.167
                                                                                                                                                                1.167
                                                                                                                                                                                                                          1.60
                                                                                                                                                                                         1.78 | 13.250 | 4.80 | 19.25
1.78 | 13.333 | 4.79 | 19.33
1.78 | 13.417 | 4.80 | 19.42
                                                                                                                                                                1.250
                                                                                                                                                                        0.98 7.250
                                                                                                                                                                                                                          1.60
                                                                                                                                                                        0.98 | 7.333
                                                                                                                                                                1.333
                                                                                                                                                                1 417
                                                                                                                                                                        0.98 | 7.417
                                                                                                                                                                                                                          1.60
                                                                                                                                                                        0.98 | 7.500
0.98 | 7.583
                                                                                                                                                                                         1.78 | 13.500
1.78 | 13.583
                                                                                                                                                                                                         4.80 | 19.50
3.73 | 19.58
                                                                                                                                                                1.583
                                                                                                                                                                                                                          1.60
                                                                                                                                                                        0.98 | 7.667
0.98 | 7.750
                                                                                                                                                                                                          3.73 | 19.67
3.73 | 19.75
***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                                         1.78 | 13.667
                                                                                                                                                                1.667
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                                                                                                                                                                1.750
                                                                                                                                                                                         1.78 | 13.750
                                                                                                                                                                                                                          1.60
                                                                                                                                                                        0.98 | 7.833
0.98 | 7.917
0.98 | 8.000
                                                                                                                                                                                         1.78 | 13.833
1.78 | 13.917
                                                                                                                                                                                                          3.73 | 19.83
3.73 | 19.92
         YOU SHOULD CONSIDER SPLITTING THE AREA.
                                                                                                                                                                1.833
    (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                                                                                                                                                                         3.73 | 20.00
                                                                                                                                                                2.000
                                                                                                                                                                                         1.78 14.000
                                                                                                                                                                                                                          1.60
   CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                                                                                                                                                                2.083
                                                                                                                                                                        1.15 | 8.083
                                                                                                                                                                                         2.40 |14.083
2.40 |14.167
                                                                                                                                                                                                         2.66 | 20.08
                                                                                                                                                                                                                          1.07
                                                                                                                                                                2.167
                                                                                                                                                                                                                          1.07
   THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                2.250
                                                                                                                                                                         1.15 | 8.250
                                                                                                                                                                                         2.40 14.250 2.66 20.25
                                                                                                                                                                                                                          1.07
                                                                                                                                                                2.333
                                                                                                                                                                         1.15 | 8.333
                                                                                                                                                                                         2.40 |14.333
                                                                                                                                                                2.417
                                                                                                                                                                         1.15 | 8.417
                                                                                                                                                                                         2.40 114,417
                                                                                                                                                                                                         2.66 | 20.42
                                                                                                                                                                                                                          1.07
                                                                                                                                                                2.500
2.583
                                                                                                                                                                        1.15 | 8.500
1.15 | 8.583
                                                                                                                                                                                        2.40 | 14.500
2.40 | 14.583
                                                                                                                                                                                                         2.66 | 20.50
2.66 | 20.58
                                                                                                                                                                2 667
                                                                                                                                                                         1.15 | 8.667
                                                                                                                                                                                         2 40 14 667
                                                                                                                                                                                                         2 66 20 67
                                                                                                                                                                                                                          1.07
                                                                                                                                                                         1.15 | 8.750
                                                                                                                                                                                         2.40 |14.750
                                                                                                                                                                                                          2.66 | 20.75
| ADD HYD ( 0003)|
 2.833
                                                                                                                                                                         1.15 | 8.833
                                                                                                                                                                                         2.40 14.833 2.66 20.83
                                                                                                                                                                                                                          1.07
                                                                                                                                                                         1.15 | 8.917
                                                                                                                                                                                         2.40 14.917
                                                                                                                                                                                                          2.66 | 20.92
                                                                                                                                                                3.000
                                                                                                                                                                         1.15 | 9.000
                                                                                                                                                                                         2.40 [15.000]
                                                                                                                                                                                                         2.66 | 21.00
                                                                                                                                                                                                                          1.07
                                                                                                                                                                        1.15 | 9.083
                                                                                                                                                                                        2.84 |15.083
2.84 |15.167
                                                                                                                                                                                                         2.66 | 21.08
                                                                                                                                                                3.083
    ID = 3 ( 0003): 14.73 0.981 12.33 50.69
                                                                                                                                                                3.250
                                                                                                                                                                         1.15 9.250
                                                                                                                                                                                         2.84 115.250
                                                                                                                                                                                                          2.66 | 21.25
                                                                                                                                                                         1.15 | 9.333
1.15 | 9.417
                                                                                                                                                                                         2.84 |15.333
2.84 |15.417
                                                                                                                                                                                                          2.66 | 21.33
2.66 | 21.42
                                                                                                                                                                3.333
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                3.417
                                                                                                                                                                3.500
                                                                                                                                                                         1.15 | 9.500
                                                                                                                                                                                         2.84 | 15.500
                                                                                                                                                                                                         2.66 | 21.50
                                                                                                                                                                                                                          1.07
                                                                                                                                                                         1.15 | 9.583
                                                                                                                                                                                         3.20 15.583
                                                                                                                                                                                                         2.66 21.58
CALIR
                                                                                                                                                                3 667
                                                                                                                                                                         1.15 | 9.667
                                                                                                                                                                                         3.20 15.667 2.66 21.67
                                                                                                                                                                                                                          1.07
3.20 | 15.750 | 2.66 | 21.75
3.20 | 15.833 | 2.66 | 21.83
                                                                                                                                                                         1.15 9.750
                                                                                                                                                                3.833
                                                                                                                                                                         1.15 | 9.833
                                                                                                                                                                                         3.20 | 15.917 | 2.66 | 21.92
3.20 | 16.000 | 2.66 | 22.00
                                                                                                                                                                3 917
                                                                                                                                                                         115 9 917
                                                                                                                                                                                                                          1.07
                                                                                                                                                                         1.15 10.000
                                                                                                                                                                4.000
                                                                                                                                                                                                                           1.07
                                                                                                                                                                        1.42 | 10.083 | 4.08 | 16.083 | 1.60 | 22.08 | 1.42 | 10.167 | 4.09 | 16.167 | 1.60 | 22.17
      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                4.083
                                                                                                                                                                                                                          1.07
                                                                                                                                                                4.250
                                                                                                                                                                        1.42 | 10.250 | 4.09 | 16.250 | 1.60 | 22.25
                                                                                                                                                                                                                          1.07
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4.333 1.42 | 10.333 4.08 | 16.333 1.60 | 22.33
                                                                                                                                                                                                                                                                                0.833 0.98 | 6.833 1.78 | 12.833
                                                                                                                          1.07
                                                                                                                                                                                                                                                                                                                                                       6.57 | 18.83
                                                                                                                                                                                                                                                                                                                                                                                   1.60
                                                                   4.09 |16.417
                                                                                                1.60 | 22.42
                                                                                                                                                                                                                                                                                0.917
                                                                                                                                                                                                                                                                                               0.98 | 6.917
                                                                                                                                                                                                                                                                                                                            1.78 | 12.917
                                                                                                                                                                                                                                                                                                                                                        6.57 | 18.92
                        4.417
                                       1.42 | 10.417
                                                                                                                           1.07
                        4.500
                                       1.42 10.500
                                                                   4.09 16.500
                                                                                                1.60 | 22.50
                                                                                                                            1.07
                                                                                                                                                                                                                                                                                1.000
                                                                                                                                                                                                                                                                                                0.98 | 7,000
                                                                                                                                                                                                                                                                                                                            1.78 | 13.000
                                                                                                                                                                                                                                                                                                                                                       6.57 | 19.00
                                                                                                                                                                                                                                                                                                                                                                                   1.60
                                      1.42 |10.583
                                                                                                1.60 | 22.58
                        4.583
                                                                   5.51 |16.583
                                                                                                                                                                                                                                                                                  1.083
                                                                                                                                                                                                                                                                                                0.98 | 7.083
                                                                                                                                                                                                                                                                                                                            1.78 113.083
                                                                                                                                                                                                                                                                                                                                                        4.80 | 19.08
                        4.667
                                                                   5.51 |16.667
                        4.750
                                      1.42 110.750
                                                                   5 51 116 750
                                                                                                1 60 1 22 75
                                                                                                                            1 07
                                                                                                                                                                                                                                                                                 1.250
                                                                                                                                                                                                                                                                                              0.98 7.250
                                                                                                                                                                                                                                                                                                                            1.78 [13.250]
                                                                                                                                                                                                                                                                                                                                                       4.80 | 19.25
                                                                                                                                                                                                                                                                                                                                                                                   1.60
                                                                   5.51 16.833
                                                                                                                                                                                                                                                                                  1.333
                                                                                                                                                                                                                                                                                               0.98 | 7.333
                                                                                                                                                                                                                                                                                                                            1.78 | 13.333
                                                                                                                                                                                                                                                                                                                                                       4.79 19.33
                                       1.42 |10.833
                                                                                                                                                                                                                                                                                                                                                       4.80 | 19.42
                        4.917
                                       1.42 10.917
                                                                   5.51 16.917
                                                                                                1.60 | 22.92
                                                                                                                            1.07
                                                                                                                                                                                                                                                                                 1.417
                                                                                                                                                                                                                                                                                                                            1.78 | 13,417
                                                                                                                                                                                                                                                                                                                                                                                   1.60
                                                                                                                                                                                                                                                                                               0.98 | 7.500
0.98 | 7.583
                                                                                                                                                                                                                                                                                                                            1.78 | 13.500
1.78 | 13.583
                                                                                                                                                                                                                                                                                                                                                       4.80 | 19.50
3.73 | 19.58
                                       1.42 |11.000
                                                                   5.51 |17.000
                                                                                                1.60 | 23.00
                                                                                                                                                                                                                                                                                  1.583
                        5.083
                                      1.42 11.083
                                                                  8.52 17.083
                                                                                              1.60 | 23.08
                                                                                                                           1.07
                                                                                                                                                                                                                                                                                                                                                                                    1.60
                        5.167
                                       1.42 111.167
                                                                  8.52 | 17.167
8.52 | 17.250
                                                                                               1.60 | 23.17
                                                                                                                            1.07
                                                                                                                                                                                                                                                                                 1.667
                                                                                                                                                                                                                                                                                               0.98 7.667
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0.98 | 7.833
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                                       1.42 | 11.333
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                                       1.42 |11.417
                                                                   8.52 | 17.417
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0.98 | 8.000
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1.78 | 14.000
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3.73 | 20.00
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                                      1.42 | 11.500 8.52 | 17.500
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                                      1.42 |11.583 | 36.94 |17.583 | 1.42 |11.667 | 36.94 |17.667
                                                                                                1.60 | 23.58
1.60 | 23.67
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2.66 | 20.17
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                        5.667
                                      1.42 | 11.750 | 36.94 | 17.750 | 1.60 | 23.75 | 1.42 | 11.833 | 98.03 | 17.833 | 1.60 | 23.83 | 1.42 | 11.917 | 98.04 | 17.917 | 1.60 | 23.92
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2.40 |14.417
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                                     1.42 | 12.000 | 98.04 | 18.000 | 1.60 | 24.00
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          Unit Hyd Qpeak (cms)= 1.805
                                                                                                                                                                                                                                                                                2.667
                                                                                                                                                                                                                                                                                                1.15 | 8.667
                                                                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                                                                 2.750
                                                                                                                                                                                                                                                                                                1.15 | 8.750
                                                                                                                                                                                                                                                                                                                          2.40 | 14.750 | 2.66 | 20.75
         PEAK FLOW (cms)= 1.449 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 47.671
TOTAL RAINFALL (mm)= 88.801
RUNOFF COEFFICIENT = 0.537
                                                                                                                                                                                                                                                                                               1.15 | 8.833
                                                                                                                                                                                                                                                                                 2.833
                                                                                                                                                                                                                                                                                                                          2.40 | 14.833 | 2.66 | 20.83
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                                                                                                                                                                                                                                                                                                                                                      2.66 | 21.08
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                                                                                                                                                                                                                                                                                               1.15 | 9.167
1.15 | 9.250
                                                                                                                                                                                                                                                                                                                          2.84 |15.167
2.84 |15.250
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                                                                                                                                                                                                                                                                                 3.250
                                                                                                                                                                                                                                                                                                                                                       2.66 21.25
          (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                3.333
                                                                                                                                                                                                                                                                                               1.15 | 9.333
1.15 | 9.417
                                                                                                                                                                                                                                                                                                                          2 84 | 15 333
                                                                                                                                                                                                                                                                                                                                                      2.66 21.33
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                                                                                                                                                                                                                                                                                               1.15 | 9.583
                                                                                                                                                                                                                                                                                                                          3.20 |15.583
3.20 |15.667
                                                                                                                                                                                                                                                                                                                                                      2.66 | 21.58
2.66 | 21.67
                                                                                                                                                                                                                                                                                  3.583
     CALIB
                                                                                                                                                                                                                                                                                3.667
      NASHYD ( 0201)| Area (ha)= 3.17 Curve Number (CN)= 77.0
|D=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res (N)= 3.00
                                                                                                                                                                                                                                                                                3.750
                                                                                                                                                                                                                                                                                                1.15 | 9.750
                                                                                                                                                                                                                                                                                                                          3.20 15.750 2.66 21.75
                                                                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                                                                                                           3.20 | 15.833 | 2.66 | 21.83
3.20 | 15.917 | 2.66 | 21.92
                                                                                                                                                                                                                                                                                                1.15 9.833
     ID= 1 DT= 5.0 min |
                             ---- U.H. Tp(hrs)= 0.16
                                                                                                                                                                                                                                                                                3.917
                                                                                                                                                                                                                                                                                                1.15 | 9.917
                                                                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                                                                               1.15 |10.000
1.42 |10.083
                                                                                                                                                                                                                                                                                                                           4.000
               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                4.083
                                                                                                                                                                                                                                                                                                                                                                                    1.07
                                                                                                                                                                                                                                                                                4 167
                                                                                                                                                                                                                                                                                                1.42 10.167
                                                                                                                                                                                                                                                                                                                            4.09 16.167 1.60 22.17
                                                                                                                                                                                                                                                                                                                                                                                    1.07
                                                                                                                                                                                                                                                                                                                            4.09 | 16.250
                                                                                                                                                                                                                                                                                                                                                        1.60 | 22.25
                                                                                                                                                                                                                                                                                                1.42 | 10.250
                                                                                                                                                                                                                                                                                4.250
                                                                                                                                                                                                                                                                                                                                                                                    1.07
                        ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
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                                                                                                                                                                                                                                                                                                                                                        1.60 | 22.33
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                                                                                                                                                                                                                                                                                 4.500
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                                                                                                                                                                                                                                                                                                                            4.09 | 16.500
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                                                                                                                                                                                                                                                                                                                                                                                    1.07
                                                                                                                                                                                                                                                                                                                            5.51 |16.583
5.51 |16.667
5.51 |16.750
                                                                                                                                                                                                                                                                                4 583
                                                                                                                                                                                                                                                                                                1 42 110 583
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                                                                                                                                                                                                                                                                                 4.667
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                        0.250
                                      0.98 | 6.250
                                                                  1.78 112 250 12 79 118 25
                                                                                                                            1.60
                                                                                                                                                                                                                                                                                4.750
                                                                                                                                                                                                                                                                                                1.42 | 10.750
                                                                                                                                                                                                                                                                                                                                                         1.60 | 22.75
                                                                                                                                                                                                                                                                                                                                                                                    1.07
                                      0.98 6.333
                                                                  1.78 | 12.333 | 12.79 | 18.33
                                                                                                                                                                                                                                                                                                1.42 10.833
                                                                                                                                                                                                                                                                                                                            5.51 16.833
                        0.417
                                      0.98 | 6.417
                                                                  1.78 | 12.417 | 12.79 | 18.42
                                                                                                                          1.60
                                                                                                                                                                                                                                                                                4.917
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                                                                                                                                                                                                                                                                                                                            5.51 16.917
                                                                                                                                                                                                                                                                                                                                                         1.60 | 22.92
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                                                                                                                                                                                                                                                                                                                            5.51 |17.000
8.52 |17.083
                                      0.98 | 6.500
                                                                  1.78 | 12.500 | 12.79 | 18.50
                                                                                                                                                                                                                                                                                                1.42 11.000
                                                                                                                                                                                                                                                                                                                                                        1.60 | 23.00
1.60 | 23.08
                                                                                                                                                                                                                                                                                 5 000
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    0.583
    0.98 | 6.583
    1.78 | 12.583
    6.57 | 18.58
    1.60

    0.667
    0.98 | 6.667
    1.78 | 12.667
    6.57 | 18.67
    1.60

    0.750
    0.98 | 6.750
    1.78 | 12.750
    6.57 | 18.75
    1.60

                                                                                                                                                                                                                                                                                5.083
                                                                                                                                                                                                                                                                                                1.42 111.083
                                                                                                                                                                                                                                                                                                                                                                                     1.07
                                                                                                                                                                                                                                                                                5.167
                                                                                                                                                                                                                                                                                                1.42 111.167
                                                                                                                                                                                                                                                                                                                            8.52 117.167
                                                                                                                                                                                                                                                                                                                                                         1.60 | 23.17
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                                                                                                                                                                                                                                                                                               1.42 |11.250 8.52 |17.250 1.60 | 23.25
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%2
                                                                                                                                                                                                                                                                                1.333 0.98 | 7.333
1.417 0.98 | 7.417
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1.78 |13.417
                                                                                                                                                                                                                                                                                                                                                     4.79 | 19.33
4.80 | 19.42
                        5.333
                                      1.42 | 11.333 | 8.52 | 17.333 | 1.60 | 23.33 | 1.07
                                                                                                                                                                                                                                                                                                                                                                                   1.60
                        5.417
                                      1.42 | 11.417 | 8.52 | 17.417 | 1.60 | 23.42 | 1.07
                        5.500
                                      1.42 11.500 8.52 17.500 1.60 23.50
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                                                                                                                                                                                                                                                                                                                            1.78 |13.583
                                      1.42 |11.583 36.94 |17.583
                                                                                                1.60 | 23.58
                        5.583
                                                                                                                            1.07
                                      1.42 | 11.667 | 36.94 | 17.667 | 1.42 | 11.750 | 36.94 | 17.750
                        5.667
                                                                                                 1.60 | 23.67
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                                                                                                                                                                                                                                                                                              0.98 | 7.750
0.98 | 7.833
                                                                                                                                                                                                                                                                                                                            1.78 | 13.750
                                     1.42 |11.833 | 98.03 | 17.833 | 1.60 | 23.83 | 1.42 |11.917 | 98.04 | 17.917 | 1.60 | 23.92
                                                                                                                                                                                                                                                                                                                           1.78 | 13.833
                                                                                                                                                                                                                                                                                                                                                       3.73 | 19.83
                        5.833
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                                                                                                                                                                                                                                                                                                                                                                                   1.60
                        5.917
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1.78 | 14.000
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3.73 | 20.00
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                                                                                                                                                                                                                                                                                                0.98 8.000
                                     1.42 | 12,000 | 98.04 | 18.000 | 1.60 | 24.00
                                                                                                                                                                                                                                                                                2.083
                                                                                                                                                                                                                                                                                               1.15 | 8.083
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                                                                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                                                                                1.15 8.167
                                                                                                                                                                                                                                                                                                                           2.40 14.167
                                                                                                                                                                                                                                                                                                                                                       2.66 | 20.17
          Unit Hyd Qpeak (cms)= 0.757
                                                                                                                                                                                                                                                                                2.250
                                                                                                                                                                                                                                                                                               1.15 | 8.250
                                                                                                                                                                                                                                                                                                                          2.40 | 14.250
                                                                                                                                                                                                                                                                                                                                                     2.66 | 20.25
                                                                                                                                                                                                                                                                                                                                                                                   1.07
          PEAK FLOW (cms)= 0.389 (i)
TIME TO PEAK (hrs)= 12.000
                                                                                                                                                                                                                                                                                2.333
                                                                                                                                                                                                                                                                                                1.15 | 8.333
                                                                                                                                                                                                                                                                                                                          2.40 | 14.333
2.40 | 14.417
                                                                                                                                                                                                                                                                                                                                                      2.66 | 20.33
2.66 | 20.42
                                                                                                                                                                                                                                                                                 2.417
                                                                                                                                                                                                                                                                                                1.15 | 8.417
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RUNOFF VOLUME (mm)= 43.783
TOTAL RAINFALL (mm)= 88.801
RUNOFF COEFFICIENT = 0.493
                                                                                                                                                                      1.15 | 8.583
                                                                                                                                                                                      2.40 |14.583 | 2.40 |14.667
                                                                                                                                                                                                      2.66 | 20.58
                                                                                                                                                              2.583
                                                                                                                                                             2.667
                                                                                                                                                                                                                       1.07
                                                                                                                                                                      1.15 | 8.750
1.15 | 8.833
                                                                                                                                                             2.750
                                                                                                                                                                                      2.40 | 14.750 | 2.66 | 20.75
                                                                                                                                                                                                                       1.07
                                                                                                                                                                                      2.40 14.833
                                                                                                                                                                                                      2.66 | 20.83
  (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                             2.833
                                                                                                                                                             2.917
                                                                                                                                                                      1 15 | 8 917
                                                                                                                                                                                      2 40 114 917
                                                                                                                                                                                                      2 66 20 92
                                                                                                                                                                                                                       1.07
                                                                                                                                                                      1.15 | 9.000
1.15 | 9.083
                                                                                                                                                                                      2.40 |15.000
                                                                                                                                                             3.083
                                                                                                                                                                                      2.84 | 15.083
                                                                                                                                                                                                      2.66 | 21.08
                                                                                                                                                                                                                       1.07
                                                                                                                                                                      1.15 | 9.167
1.15 | 9.250
                                                                                                                                                                                      2.84 |15.167
2.84 |15.250
                                                                                                                                                                                                      2.66 | 21.17
                                                                                                                                                              3.167
STANDHYD ( 0202) Area (ha)= 4.57
                                                                                                                                                                                                       2.66 | 21.25
                                                                                                                                                             3.250
                                                                                                                                                                                                                       1.07
                                                                                                                                                                      1.15 | 9.333
1.15 | 9.417
                                                                                                                                                                                      2.84 |15.333
2.84 |15.417
                                                                                                                                                                                                      2.66 | 21.33
2.66 | 21.42
|ID=1 DT=5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
                                                                                                                                                              3.333
                                                                                                                                                                                                                        1.07
                   IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                      1.15 | 9.500
                                                                                                                                                             3.500
                                                                                                                                                                                      2.84 | 15.500 | 2.66 | 21.50
                                                                                                                                                                                                                       1.07
   Surface Area (ha)= 1.83
Dep. Storage (mm)= 2.00
Average Slope (%)= 5.00
                                                                                                                                                             3 583
                                                                                                                                                                      1.15 | 9.583
                                                                                                                                                                                      3.20 | 15.583 | 2.66 | 21.58
3.20 | 15.667 | 2.66 | 21.67
                                                                                                                                                                                                                       1.07
                                            5.00
                                                                                                                                                              3.667
                                                                                                                                                                                                                       1.07
   Average Slope (%)= 5.00 5.00

Length (m)= 500.00 500.00

Mannings n = 0.013 0.250
                                             5.00
                                                                                                                                                             3.750
                                                                                                                                                                      1.15 | 9.750
                                                                                                                                                                                      3.20 | 15.750 2.66 | 21.75
                                                                                                                                                                                                                       1.07
                                                                                                                                                                      1.15 9.833
                                                                                                                                                                                      3.20 | 15.833 | 2.66 | 21.83
  Mannings n
                                                                                                                                                             3.917
                                                                                                                                                                      1.15 | 9.917
                                                                                                                                                                                      3.20 | 15.917 | 2.66 | 21.92
                                                                                                                                                                                                                       1.07
                                                                                                                                                                      1.15 10.000
                                                                                                                                                                                      3.20 | 16.000 | 2.66 | 22.00
4.08 | 16.083 | 1.60 | 22.08
                                                                                                                                                                                                                        1.07
     NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                             4.083
                                                                                                                                                                      1.42 | 10.083
                                                                                                                                                                                                                        1.07
                                                                                                                                                             4 167
                                                                                                                                                                      1.42 110.167
                                                                                                                                                                                       4.09 | 16.167
                                                                                                                                                                                                       1.60 | 22.17
                                                                                                                                                                                                                        1.07
                                                                                                                                                                       1.42 |10.250
                                                                                                                                                                                       4.09 |16.250
                                                                                                                                                                                                        1.60 | 22.25
                       -- TRANSFORMED HYETOGRAPH --
                                                                                                                                                             4.333
                                                                                                                                                                      1.42 10.333
                                                                                                                                                                                       4.08 | 16.333 | 1.60 | 22.33
                                                                                                                                                                                                                        1.07
           TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                                       1.42 10.417
                                                                                                                                                                                       4.09 | 16.417
                                                                                                                                                                                                        1.60 | 22.42
                                                                                                                                                              4.417
            hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                                                                                                                                                             4.500
                                                                                                                                                                       1.42 10.500
                                                                                                                                                                                       4.09 16.500
                                                                                                                                                                                                        1.60 | 22.50
                                                                                                                                                                                                                        1.07
                                                                                                                                                             4.583
4.667
                                                                                                                                                                      1.42 |10.583
1.42 |10.667
                                                                                                                                                                                       5.51 |16.583
5.51 |16.667
                                                                                                                                                                                                        1.60 | 22.58
                   0.98 | 6.083
                                   1.78 |12.083 | 12.80 | 18.08
                                                                                                                                                                                                                        1.07
                                   1.78 | 12.167 | 12.79 | 18.17
1.78 | 12.250 | 12.79 | 18.25
                                                                                                                                                                                                                        1.07
           0.167
                   0.98 | 6.167
           0.250
                                                                     1.60
                                                                                                                                                             4.750
                                                                                                                                                                      1.42 10.750
                                                                                                                                                                                       5.51 16.750
                                                                                                                                                                                                        1.60 | 22.75
                                                                                                                                                                                                                        1.07
                                   1.78 | 12.333 | 12.79 | 18.33
1.78 | 12.417 | 12.79 | 18.42
                                                                                                                                                                      1.42 | 10.833
1.42 | 10.917
                                                                                                                                                                                       5.51 |16.833
5.51 |16.917
                                                                                                                                                                                                        1.60 | 22.83
1.60 | 22.92
           0.333
                   0.98 6.333
                                                                                                                                                              4.833
                                                                                                                                                                                                                        1.07
           0.417
                   0.98 | 6.417
                                                                      1.60
                                                                                                                                                              4.917
                                                                                                                                                                                                                        1.07
           0.500
                   0.98 | 6.500
                                   1.78 | 12.500 | 12.79 | 18.50 | 1.78 | 12.583 | 6.57 | 18.58
                                                                     1.60
                                                                                                                                                              5.000
                                                                                                                                                                      1.42 111.000
                                                                                                                                                                                       5.51 17.000
                                                                                                                                                                                                        1.60 | 23.00
                                                                                                                                                                                                                        1.07
           0.583
                   0.98 | 6.583
                                                                                                                                                              5.083
                                                                                                                                                                      1.42 |11.083
                                                                                                                                                                                       8.52 | 17.083
                                                                                                                                                                                                        1.60 | 23.08
                                                                    1.60
           0.667
                   0.98 6 667
                                    1.78 12.667 6.57 18.67
                                                                     1.60
                                                                                                                                                             5.167
                                                                                                                                                                      1.42 111.167
                                                                                                                                                                                       8 52 117 167
                                                                                                                                                                                                        1.60 | 23.17
                                                                                                                                                                                                                        1.07
                    0.98 | 6.750
                                    1.78 | 12.750
                                                                                                                                                                       1.42 11.250
                                                                                                                                                                                       8.52 17.250
                                                                                                                                                                                                        1.60 | 23.25
           0.833
                   0.98 | 6.833
                                    1.78 12.833 6.57 18.83
                                                                     1.60
                                                                                                                                                              5.333
                                                                                                                                                                      1.42 111.333
                                                                                                                                                                                       8.52 117.333
                                                                                                                                                                                                        1.60 | 23.33
                                                                                                                                                                                                                        1.07
                                   1.78 | 12.917 | 6.57 | 18.92
1.78 | 13.000 | 6.57 | 19.00
                   0.98 | 6.917
                                                                                                                                                              5 417
                                                                                                                                                                      1.42 11.417
                                                                                                                                                                                       8.52 17.417
                                                                                                                                                                                                        1.60 | 23.42
           0.917
                                                                                                                                                                                                                        1.07
                                                                                                                                                                      1.42 11.500
                                                                                                                                                                                       8.52 | 17.500
                                                                                                                                                                                                        1.60 | 23.50
                   0.98 | 7.000
                                                                                                                                                                                                                        1.07
           1.000
                                                                    1.60
                   0.98 | 7.083
0.98 | 7.167
                                   1.78 | 13.083 | 4.80 | 19.08
1.78 | 13.167 | 4.80 | 19.17
                                                                                                                                                                     1.42 | 11.583 | 36.94 | 17.583 | 1.60 | 23.58 | 1.42 | 11.667 | 36.94 | 17.667 | 1.60 | 23.67
           1.083
                                                                    1.60
                                                                                                                                                             5.583
                                                                                                                                                                                                                        1.07
           1.167
                                                                     1.60
           1.250 0.98 | 7.250 1.78 | 13.250 4.80 | 19.25 1.60
                                                                                                                                                             5.750
                                                                                                                                                                     1.42 111.750 36.94 17.750 1.60 23.75
                                                                                                                                                                                                                       1.07
```

```
    5.833
    1.42 | 11.833
    98.03 | 17.833
    1.60 | 23.83
    1.07

    5.917
    1.42 | 11.917
    98.04 | 17.917
    1.60 | 23.92
    1.07

    6.000
    1.42 | 12.000
    98.04 | 18.000
    1.60 | 24.00
    1.07

    Max.Eff.Inten.(mm/hr)=
    98.04
    31.99

    over (min)
    5.00
    45.00

    Storage Coeff. (min)=
    4.17 (ii)
    42.67 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    45.00

    Unit Hyd. peak (cms)=
    0.24
    0.03

    *TOTALS*

             ***** WARNING: STORAGE COEFF, IS SMALLER THAN TIME STEP!
                 (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
THAN THE STORAGE COEFFICIENT.
               (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
      ID = 3 ( 0040): 7.74 0.834 12.00 51.42
              NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
        RESERVOIR( 0032) OVERFLOW IS OFF
       | IN= 2---> OUT= 1 |
| DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                                                            (cms) (ha.m.) | (cms) (ha.m.)
000 0.0000 | 0.1020 0.2824
                                                 0.0000 | 0.0000 | 0.1020
0.0400 | 0.1208 | 0.1160
0.0640 | 0.1775 | 0.1330
                                                                                                                                   0.3268
                                                                                                                                       0.3659
                                                  0.0790 0.2218 | 0.0000
          AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) (INFLOW: ID=2 ( 0040) 7.740 0.834 12.00 51.42 OUTFLOW: ID=1 ( 0032) 7.740 0.078 14.17 51.3
                                     PEAK FLOW REDUCTION [Qout/Qin](%)= 9.35
TIME SHIFT OF PEAK FLOW (min)=130.00
file://V1...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                                 2.333 1.15 | 8.333 2.40 | 14.333 2.66 | 20.33 2.417 1.15 | 8.417 2.40 | 14.417 2.66 | 20.42
```

```
MAXIMUM STORAGE USED (ha.m.)= 0.2186
ADD HYD ( 0001)
      1+2=3 | AREA QPEAK TPEAK R.V.
                                                              (ha) (cms) (hrs) (mm)
           ID1=1 ( 0200): 20.32 1.449 12.25 47.67
+ ID2=2 ( 0032): 7.74 0.078 14.17 51.32
              ID = 3 ( 0001): 28.06 1.501 12.25 48.68
        NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                - TRANSFORMED HYETOGRAPH --
                          TIME RAIN | TIME R
                           0.333 0.98 | 6.333
0.417 0.98 | 6.417
                                                                                           1.78 | 12.333 | 12.79 | 18.33
1.78 | 12.417 | 12.79 | 18.42
                                                                                                                                                                                   1.60
                                                                                                                                                                                    1.60
                                                                                            1.78 | 12.500 | 12.79 | 18.50
1.78 | 12.583 | 6.57 | 18.58
1.78 | 12.667 | 6.57 | 18.67
                            0.500 0.98 6.500
                                                                                                                                                                                   1.60
                            0.750 0.98 | 6.750
0.833 0.98 | 6.833
0.917 0.98 | 6.917
                                                                                            1.78 | 12.750 | 6.57 | 18.75
1.78 | 12.833 | 6.57 | 18.83
1.78 | 12.917 | 6.57 | 18.92
                                                                                                                                                                                 1.60
                                                                                           1.78 | 13.000 6.57 | 19.00

1.78 | 13.000 6.57 | 19.00

1.78 | 13.083 4.80 | 19.08

1.78 | 13.167 4.80 | 19.17

1.78 | 13.250 4.80 | 19.25

1.78 | 13.333 4.79 | 19.33

1.78 | 13.3417 4.80 | 19.42
                           1.000 0.98 | 7.000
1.083 0.98 | 7.083
1.167 0.98 | 7.167
1.250 0.98 | 7.250
                                                                                                                                                                                 1.60
                            1.333 0.98 | 7.333
1.417 0.98 | 7.417
1.500 0.98 | 7.500
                                                                                                                                     4.80 | 19.50
                                                                                             1.78 | 13.500
                                                                                            1.78 |13.583 3.73 | 19.58
1.78 |13.667 3.73 | 19.67
                            1.583 0.98 7.583
                                                0.98 | 7.667
                             1.667
                                                                                              1.78 13.750
                             1.750
                                                                                                                                       3.73 | 19.75
                                                                                                                                                                                 1.60
                                                0.98 | 7.833
0.98 | 7.917
                                                                                              1.78 |13.833
                                                                                                                                       3.73 | 19.83
3.73 | 19.92
                            1.917
                                                                                              1.78 13.917
                                                                                                                                                                                 1.60
                                                                                                                                    3.73 | 20.00
2.66 | 20.08
                                                0.98 | 8.000
1.15 | 8.083
                                                                                           1.78 | 14.000
2.40 | 14.083
                            2.083
                            2.167
                                                  1.15 | 8.167
                                                                                            2.40 14.167 2.66 20.17
                            2.250 1.15 | 8.250 2.40 | 14.250 2.66 | 20.25
```

```
2.500 1.15 | 8.500 2.40 | 14.500 2.66 | 20.50 2.583 1.15 | 8.583 2.40 | 14.583 2.66 | 20.58
                    1.15 | 8.667
1.15 | 8.750
          2.667
                                        2.40 14.667
                                                             2.66 20.67
                                        2.40 |14.750
                    1.15 | 8.833
1.15 | 8.917
1.15 | 9.000
          2.833
                                       2.40 [14.833
                                                           2.66 | 20.83
                                       2.40 |14.917
                                                            2.66 | 20.92
          2.917
          3.000
          3.083
                    1.15 | 9.083
                                       2.84 15.083 2.66 21.08
                     1.15 9.167
                                        2.84 |15.167
          3.250
                    1.15 | 9.250
                                       2.84 15.250 2.66 21.25
          3.333
                    1.15 | 9.333
1.15 | 9.417
                                       2.84 |15.333
2.84 |15.417
                                                           2.66 | 21.33
2.66 | 21.42
          3.417
                    1.15 | 9.500
1.15 | 9.583
                                       2.84 | 15.500
3.20 | 15.583
3.20 | 15.667
                                                            2.66 | 21.50
2.66 | 21.58
                    1.15 | 9.667
          3.667
                                                           2.66 21.67
                                                                                1.07
                    1.15 | 9.750
1.15 | 9.833
                                       3.20 | 15.750 | 2.66 | 21.75
3.20 | 15.833 | 2.66 | 21.83
          3.833
                    1.15 | 9.917
1.15 | 10.000
                                       3.20 | 15.917 | 2.66 | 21.92
3.20 | 16.000 | 2.66 | 22.00
          3 917
          4.000
                    4.083
                                        4.09 16.250
          4.250
                    1.42 | 10.250
                                                             1.60 | 22.25
                    1.42 | 10.333
1.42 | 10.417
1.42 | 10.500
                                        4.08 | 16.333 | 1.60 | 22.33
4.09 | 16.417 | 1.60 | 22.42
          4.333
                                        4.09 16.500 1.60 22.50
          4.500
                                                                                 1.07
          4.583
                    1.42 |10.583
                                        5.51 |16.583
5.51 |16.667
                                                             1.60 | 22.58
                    1.42 | 10.667
                                                              1.60 | 22.67
          4.667
                                        5.51 |16.750 | 1.60 | 22.75
5.51 |16.833 | 1.60 | 22.83
5.51 |16.917 | 1.60 | 22.92
                    1.42 | 10.750
1.42 | 10.833
          4 750
          4.833
          4.917
                    1.42 | 10.917
                                                                                 1.07
                     1.42 |11.000
                                        5.51 |17.000
8.52 |17.083
          5.083
                    1.42 | 11.083
                                                              1.60 | 23.08
                                                                                  1.07
          5.167
                    1.42 | 11.167
1.42 | 11.250
                                        8.52 | 17.167
8.52 | 17.250
                                                             1.60 | 23.17
1.60 | 23.25
          5.250
          5.333
                    1.42 (11.333
                                        8.52 [17.333
                                                             1.60 | 23.33
                     1.42 11.417
                                        8.52 | 17.417
                                                              1.60 | 23.42
          5.500
                    1.42 111 500 8 52 117 500
                                                              1.60 | 23.50
          5.583 1.42 | 11.583 36.94 | 17.583  
5.667 1.42 | 11.667 36.94 | 17.667  
5.750 1.42 | 11.750 36.94 | 17.750
                                                              1.60 | 23.58
                                                              1.60 | 23.67
1.60 | 23.75
          5.833
                    1.42 |11.833 | 98.03 |17.833 | 1.60 | 23.83 | 1.42 |11.917 | 98.04 |17.917 | 1.60 | 23.92
          5.917
          6.000 1.42 12.000 98.04 18.000 1.60 24.00 1.07
Unit Hyd Qpeak (cms)= 0.862
PEAK FLOW (cms)= 0.873 (i)
TIME TO PEAK (hrs)= 12.583
RUNOFF VOLUME (mm)= 51.703
TOTAL RAINFALL (mm)= 88.801
RUNOFF COEFFICIENT = 0.582
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(i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
| NASHYD ( 0203)| Area (ha)= 1.61 Curve Number (CN)= 76.0

|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                                         -- U.H. Tp(hrs)= 0.24
               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                           -- TRANSFORMED HYETOGRAPH --
                          TIME RAIN | TIME R
                           1.60
                           0.417 0.98 6.417
                                                                                      1.78 112 417 12 79 118 42
                                                                                                                                                                          1 60
                                                                                     1.78 | 12.417 | 12.79 | 18.42

1.78 | 12.500 | 12.79 | 18.50

1.78 | 12.583 | 6.57 | 18.58

1.78 | 12.667 | 6.57 | 18.67

1.78 | 12.750 | 6.57 | 18.75
                          0.500 0.98 6.500
0.583 0.98 6.583
                                                                                                                                                                       1.60
                                              0.98 | 6.667
0.98 | 6.750
                           0.667
                           0.750
                                              0.98 | 6.833
0.98 | 6.917
0.98 | 7.000
                                                                                       1.78 | 12.833 | 6.57 | 18.83
1.78 | 12.917 | 6.57 | 18.92
                           0.833
                                                                                      1.78 | 13.000 | 6.57 | 19.00
1.78 | 13.083 | 4.80 | 19.08
1.78 | 13.167 | 4.80 | 19.17
                           1.000
                                                                                                                                                                       1.60
                           1.083 0.98 | 7.083
1.167 0.98 | 7.167
                                                                                      0.98 | 7,250
0.98 | 7,333
0.98 | 7,417
                            1.250
                            1.333
                           1.417
                                                                                                                                                                       1.60
                           1.500
1.583
                                              0.98 | 7.500
0.98 | 7.583
                           1.583 0.98 | 7.583
1.667 0.98 | 7.667
1.750 0.98 | 7.750
1.833 0.98 | 7.833
                                                                                        1.78 |13.750
                                                                                      1.78 | 13.833
                                                                                                                               3.73 | 19.83
                                                                                                                                                                       1.60
                                               0.98 | 7.917
                                                                                        1.78 | 13.917
                                                                                                                              3.73 | 19.92
3.73 | 20.00
                            1.917
                           2.000
                                               0.98 | 8.000
                                                                                       1.78 | 14.000
                                                                                                                                                                       1.60
                                               1.15 | 8.083
1.15 | 8.167
1.15 | 8.250
                                                                                      2.40 | 14.083 | 2.66 | 20.08 | 2.40 | 14.167 | 2.66 | 20.17
                           2.083
                           2.250
                                                                                      2.40 14.250
                                                                                                                             2.66 | 20.25
                                               1.15 | 8.333
1.15 | 8.417
                                                                                      2.40 | 14.333
2.40 | 14.417
                                                                                                                            2.66 | 20.33
2.66 | 20.42
                            2.333
                            2.417
                           2.500
                                                1.15 | 8.500
                                                                                      2.40 14.500 2.66 20.50
                                                1.15 | 8.583
                                                                                      2.40 14.583
                                                                                                                            2.66 | 20.58
                           2 667
                                               1.15 | 8.667
                                                                                      2.40 14.667 2.66 20.67
                                                                                     2.40 | 14.667 | 2.66 | 20.67 | 2.40 | 14.750 | 2.66 | 20.75 | 2.40 | 14.833 | 2.66 | 20.83 | 2.40 | 14.917 | 2.66 | 20.92
                                                1.15 | 8.750
                           2.833
                                                1.15 | 8.833
                           2 917
                                                1.15 | 8.917
                                               1.15 | 9.000
                                                                                      2.40 | 15.000 | 2.66 | 21.00
                           3.083 1.15 | 9.083 2.84 | 15.083 2.66 | 21.08
3.167 1.15 | 9.167 2.84 | 15.167 2.66 | 21.17
                                                                                                                                                                      1.07
                           3.250 1.15 9.250 2.84 15.250 2.66 21.25 1.07
```

```
3.333 1.15 | 9.333 2.84 | 15.333 2.66 | 21.33 1.07 3.417 1.15 | 9.417 2.84 | 15.417 2.66 | 21.42 1.07
                                                                                                                                                                                                                                                                                                             Length (m)= 300.00 300.00
Mannings n = 0.013 0.250
                           3.500
                                            1.15 | 9.500 | 2.84 | 15.500 | 2.66 | 21.50
                                            1.15 | 9.583
                                                                          3.20 |15.583
3.20 |15.667
                                                                                                           2.66 | 21.58
2.66 | 21.67
                           3.750
                                            1 15 19 750
                                                                          3 20 115 750 2 66 21 75
                                                                            3.20 |15.833
                                            1.15 9.917
                           3.917
                                                                            3.20 | 15.917
                                                                                                            2.66 | 21.92
                                                                            3.20 |16.000 | 2.66 | 22.00
4.08 |16.083 | 1.60 | 22.08
                                            1.15 |10.000
                           4.083
                                            1.42 10.083
                           4.167
                                            1.42 10.167
                                                                            4.09 | 16.167 | 1.60 | 22.17
4.09 | 16.250 | 1.60 | 22.25
                                             1.42 10.250
                                                                            4.08 16.333 1.60 22.33
                           4.333
                                            1.42 110.333
                                             1.42 | 10.417
                                            1.42 10.500 4.09 16.500 1.60 22.50
                           4.500
                                                                                                                                              1.07
                                            1.42 | 10.583
1.42 | 10.667
                                                                            5.51 |16.583
5.51 |16.667
                                                                                                            1.60 | 22.58
1.60 | 22.67
                           4.583
                           4.667
                                            1.42 | 10.750
1.42 | 10.833
1.42 | 10.917
                                                                            5.51 |16.750 | 1.60 | 22.75
5.51 |16.833 | 1.60 | 22.83
5.51 |16.917 | 1.60 | 22.92
5.51 |17.000 | 1.60 | 23.00
                           4 750
                           4.917
                           5.000
                                            1.42 111.000
                                                                                                                                              1.07
                                            1.42 |11.083
                                                                             8.52 |17.083
                                                                                                              1.60 | 23.08
                           5.167
                                            1.42 | 11.167
                                                                            8.52 17.167
                                                                                                             1.60 | 23.17
                           5.333
                                            1.42 | 11.333 8.52 | 17.333
                                                                                                             1.60 | 23.33
                           5.417
5.500
                                            1.42 |11.417
1.42 |11.500
                                                                            8.52 | 17.417
8.52 | 17.500
                                                                                                             1.60 | 23.42
1.60 | 23.50

    5.583
    1.42
    11.583
    36.94
    17.583
    1.60
    23.58

    5.667
    1.42
    11.667
    36.94
    17.667
    1.60
    23.67

    5.750
    1.42
    11.750
    36.94
    17.750
    1.60
    23.75

                                                                                                                                               1.07
                           5.833
                                          1.42 |11.833 | 98.03 | 17.833 | 1.60 | 23.83 | 1.42 | 11.917 | 98.04 | 17.917 | 1.60 | 23.92
                           5.917
                           6.000 1.42 | 12.000 98.04 | 18.000 1.60 | 24.00 1.07
           Unit Hyd Qpeak (cms)= 0.256
           PEAK FLOW (cms)= 0.153 (i)
TIME TO PEAK (hrs)= 12.083
RUNOFF VOLUME (mm)= 42.778
TOTAL RAINFALL (mm)= 88.801
           RUNOFF COEFFICIENT = 0.482
           (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
     | STANDHYD ( 0204)| Area (ha)= 1.93
|ID= 1 DT= 5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
                                            IMPERVIOUS PERVIOUS (i)
           Surface Area (ha)= 1.16 0.77
Dep. Storage (mm)= 2.00 5.00
Average Slope (%)= 1.00 1.00
                                                                                              5.00
file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                          3.833 1.15 | 9.833 3.20 | 15.833 2.66 | 21.83 1.07 3.917 1.15 | 9.917 3.20 | 15.917 2.66 | 21.92 1.07
                                           1.15 | 10.000 | 3.20 | 16.000 | 2.66 | 22.00 | 1.42 | 10.083 | 4.08 | 16.083 | 1.60 | 22.08
                           4.083
                           4.167
                                            1.42 10.167
                                                                            4.09 16.167
                                                                                                              1.60 | 22.17
                                            1.42 |10.250
                                                                            4.09 |16.250
                                                                            4.08 | 16.333 | 1.60 | 22.33
4.09 | 16.417 | 1.60 | 22.42
4.09 | 16.500 | 1.60 | 22.50
                           4.333
                                            1.42 10.333
                                            1.42 | 10.417
1.42 | 10.500
                           4.417
                           4.500
                                                                            5.51 |16.583 | 1.60 | 22.58
5.51 |16.667 | 1.60 | 22.67
                           4.583
                                            1.42 110 583
                                             1.42 |10.667
                                                                            5.51 | 16.750 | 1.60 | 22.75
5.51 | 16.833 | 1.60 | 22.83
5.51 | 16.917 | 1.60 | 22.92
                           4.750
                                            1.42 10.750
                                                                                                                                              1.07
                                             1.42 |10.833
                                             1.42 10.917
                           4.917
                                            1.42 |11.000
1.42 |11.083
                                                                            5.51 |17.000
8.52 |17.083
                                                                                                              1.60 | 23.00
1.60 | 23.08
                                                                            8.52 17.167
                           5.167
                                            1.42 | 11.167
                                                                                                             1.60 | 23.17
                                                                                                                                              1.07
                                            1.42 | 11.250
1.42 | 11.333
                                                                            8.52 | 17.250
8.52 | 17.333
                                                                                                             1.60 | 23.25
1.60 | 23.33
                           5.333
                                            1.42 | 11.417 | 8.52 | 17.417 | 1.60 | 23.42 | 1.42 | 11.500 | 8.52 | 17.500 | 1.60 | 23.50
                           5.417
                           5.583
```

```
3.73 | 19.73
3.73 | 19.83
3.73 | 19.92
3.73 | 20.00
2.66 | 20.08
2.66 | 20.17
                    1.833 0.98 | 7.833
1.917 0.98 | 7.917
                                                                 1.78 | 13.833
1.78 | 13.917
                    2.000
                                  0.98 8.000
                                                                 1.78 14.000
                                                                                                                             1.60
                                   1.15 | 8.083
                                                                2.40 |14.083
2.40 |14.167
                    2.167
                    2.250
                                   1.15 | 8.250
                                                                2.40 14.250 2.66 | 20.25
                                                                                                                             1.07
                                   1.15 | 8.333
                                                                 2.40 |14.333
                                                                 2.40 14.417 2.66 20.42
                    2.417
                    2.500
2.583
                                   1.15 | 8.500
1.15 | 8.583
                                                               2.40 |14.500 | 2.66 | 20.50
2.40 |14.583 | 2.66 | 20.58
                    2.667
                                  1.15 | 8,667
                                                               2.40 14.667 2.66 20.67
                                   1.15 | 8.750
                                                                 2.40 | 14.750 | 2.66 | 20.75
                    2.750
                                                               2.40 | 14.833 | 2.66 | 20.83
2.40 | 14.917 | 2.66 | 20.92
                    2.833
                                   1.15 | 8.833
                                   1.15 8.917
                     3.000
                                   1.15 | 9.000
                                                                2.40 | 15.000 | 2.66 | 21.00
                    3 083
                                                                2.84 | 15.083 | 2.66 | 21.08
                                    1.15 | 9.167
                                                                 2.84 |15.167
                                                                                               2.66 | 21.17
                    3.167
                     3.250
                                    1.15 | 9.250
                                                                 2.84 | 15.250 | 2.66 | 21.25
                                    1.15 | 9.333
                                                                 2.84 | 15.333
                                                                 2.84 15.417 2.66 21.42
                    3.417
                                   1.15 | 9.417
                                   1.15 | 9.500
1.15 | 9.583
                                                               2.84 | 15.500 | 2.66 | 21.50 | 3.20 | 15.583 | 2.66 | 21.58
                    3.583
                    3.667
                                   1.15 | 9.667
                                                                 3.20 [15.667 2.66 ] 21.67
                     3.750 1.15 | 9.750 3.20 | 15.750 2.66 | 21.75 1.07
        ID1=1 (0203): 1.61 0.153 12.08 42.78
+ ID2=2 (0204): 1.93 0.260 12.00 64.97
          ID = 3 ( 0042): 3.54 0.395 12.00 54.88
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
ID = 1 ( 0042): 19.34 1.003 12.50 52.28
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
  RESERVOIR( 0025)| OVERFLOW IS OFF
 IN= 2---> OUT= 1
 DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                               -- (cms) (ha.m.) | (cms) (ha.m.)
0.0000 0.0000 | 0.6300 0.4548
0.2600 0.1908 | 0.7100 0.5242
                                0.3900 0.2842 | 0.8100 0.5932
0.4900 0.3533 | 1.4000 1.1965
   PEAK FLOW REDUCTION [Qout/Qin](%)= 48.83
                       TIME SHIFT OF PEAK FLOW (min)= 65.00
MAXIMUM STORAGE USED (ha.m.)= 0.3532
| NASHYD ( 0225)| Area (ha)= 3.98 Curve Number (CN)= 81.0

| ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00

| U.H. Tp(hrs)= 0.62
           NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                              - TRANSFORMED HYETOGRAPH -
                   TIME RAIN | TIME R
                    0.250 0.98 6.250 1.78 12.250 12.79 18.25 1.60
```

300.00

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

- TRANSFORMED HYETOGRAPH -TIME RAIN | TIME R

0.98 | 6.250

0.98 6.750

0.98 | 6.833

0.98 | 7.250 0.98 | 7.333

0.98 | 7.417 0.98 | 7.500 0.98 | 7.583

0.333 0.98 | 6.333

0.417 0.98 6.417 0.500 0.98 6.500

0.583 0.98 | 6.583 0.667 0.98 | 6.667

1.000 0.98 | 7.000 1.083 0.98 | 7.083 1.167 0.98 | 7.167

1.667 0.98 | 7.667 1.750 0.98 | 7.750

0.750

0.833 0.917

1.333

1.417

1.583

1.78 | 12.250 | 12.79 | 18.25 1.78 | 12.333 | 12.79 | 18.33

1.78 | 12.417 | 12.79 | 18.42 1.78 | 12.500 | 12.79 | 18.50

1.78 | 12.583 | 6.57 | 18.58 1.78 | 12.667 | 6.57 | 18.67

1.78 | 13.000 | 6.57 | 19.00 1.78 | 13.083 | 4.80 | 19.08 1.78 | 13.167 | 4.80 | 19.17

1.78 | 13.167 | 4.80 | 19.17 1.78 | 13.250 | 4.80 | 19.25 1.78 | 13.333 | 4.79 | 19.33 1.78 | 13.417 | 4.80 | 19.42 1.78 | 13.500 | 4.80 | 19.50 1.78 | 13.583 | 3.73 | 19.58

6.57 | 18.75

3.73 | 19.67 3.73 | 19.75

1.78 112.750

1.78 |12.833 1.78 |12.917

1.78 | 13.667 1.78 | 13.750

1.60

1.60

1.60

1.60

1.60

1.60

```
1.42 | 11.583 | 36.94 | 17.583 | 1.60 | 23.58 | 1.42 | 11.667 | 36.94 | 17.667 | 1.60 | 23.67
                    1.42 | 11.750 | 36.94 | 17.750 | 1.60 | 23.75
           5.750
                                                                          1.07
           5.833 1.42 11.833 98.03 17.833 1.60 23.83 1.07
5.917 1.42 11.917 98.04 17.917 1.60 23.92 1.07
6.000 1.42 12.000 98.04 18.000 1.60 24.00 1.07
           5.833
  Max.Eff.Inten.(mm/hr)= 98.04 35.71 over (min) 5.00 50.00 Storage Coeff. (min)= 4.98 (ii) 48.92 (ii) Unit Hyd. Tpeak (min)= 5.00 50.00 Unit Hyd. peak (cms)= 0.22 0.02 **TOTALS*
   PEAK FLOW (cms)= 0.24
TIME TO PEAK (hrs)= 12.00
                                      0.24 0.05
12.00 12.67
                                                                 12.00
   ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
     (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
   CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
   (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
(ha) (cms) (hrs) (mm)
```

```
4.833 1.42 |10.833 5.51 |16.833 1.60 | 22.83
4.917 1.42 |10.917 5.51 |16.917 1.60 | 22.92
                                                                                                         1.60
                                                                                                          1.60
                    0.500
                                 0.98 | 6.500
                                                          1.78 12.500 12.79 18.50
                                                                                                          1.60
                                                                                                                                                                                                                                             5,000
                                                                                                                                                                                                                                                         1.42 | 11.000
                                                                                                                                                                                                                                                                                  5.51 17.000
                                                                                                                                                                                                                                                                                                           1.60 | 23.00
                                                                                                                                                                                                                                                                                                                                   1.07
                                 0.98 | 6.583
                                                         1.78 |12.583
1.78 |12.667
                                                                                 6.57 | 18.58
6.57 | 18.67
                    0.583
                                                                                                                                                                                                                                                         1.42 111.083
                                                                                                                                                                                                                                                                                  8.52 17.083
                    0.667
                    0.750
                                 0.98 | 6.750
                                                          1 78 112 750
                                                                                 6 57 | 18 75
                                                                                                          1 60
                                                                                                                                                                                                                                             5.250
                                                                                                                                                                                                                                                        1.42 111.250 8.52 17.250
                                                                                                                                                                                                                                                                                                          1.60 | 23.25
                                                                                                                                                                                                                                                                                                                                   1.07
                                                          1.78 |12.833
                                                                                                                                                                                                                                                         1.42 11.333
                                                                                                                                                                                                                                                                                8.52 17.333
                    0.917
                                 0.98 | 6.917
                                                          1.78 12.917
                                                                                  6.57 | 18.92
                                                                                                          1.60
                                                                                                                                                                                                                                             5.417
                                                                                                                                                                                                                                                         1.42 11.417
                                                                                                                                                                                                                                                                                  8.52 17.417
                                                                                                                                                                                                                                                                                                           1,60 | 23,42
                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                                         0.98 | 7.000
0.98 | 7.083
                                                                                                                                                                                                                                                                                                          1.60 | 23.50
1.60 | 23.58
                                                          1.78 | 13.000
                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                             5.583
                    1.083
                                                         1.78 | 13.083
                                                                                 4.80 | 19.08
                                                                                                          1.60
                    1.167
                                 0.98 | 7.167
0.98 | 7.250
                                                          1.78 13.167
                                                                                  4.80 | 19.17
                                                                                                                                                                                                                                            5.667
                                                                                                                                                                                                                                                                                                           1.60 | 23.67
                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                           3.69 | 1.42 | 11.89 | 36.24 | 17.80 | 1.60 | 23.55 | 1.07 | 5.853 | 1.42 | 11.813 | 38.03 | 17.83 | 1.60 | 23.75 | 1.07 | 5.917 | 1.42 | 11.91 | 98.04 | 17.91 | 1.60 | 23.92 | 1.07 | 6.000 | 1.42 | 12.000 | 98.04 | 18.000 | 1.60 | 24.00 | 1.07 |
                                                          1.78 | 13.250
                    1.333
                                 0.98 | 7.333
                                                          1.78 113.333
                                                                                  4.79 | 19.33
                                                                                                          1.60
                                0.98 | 7.417
                    1.500
                                                         1.78 | 13.500
                                                                                4.80 | 19.50
                                                                                                         1.60
                                 0.98 | 7.583
                                                         1.78 | 13.583
1.78 | 13.667
                                                                                 3.73 | 19.58
3.73 | 19.67
                     1.583
                                                                                                                                                                                                                                Unit Hyd Qpeak (cms)= 0.245
                    1.667
                                 0.98 | 7.750
0.98 | 7.833
0.98 | 7.917
                                                                                 3.73 | 19.75
3.73 | 19.83
3.73 | 19.92
                    1 750
                                                          1 78 113 750
                                                                                                          1.60
                                                                                                                                                                                                                                PEAK FLOW
                                                                                                                                                                                                                                 PEAK FLOW (cms)- 0.226 (
TIME TO PEAK (hrs)= 12.500
                                                         1.78 | 13.917
                    1.917
                                                                                                          1.60
                                                                                                                                                                                                                                RUNOFF VOLUME (mm)= 48.977
TOTAL RAINFALL (mm)= 88.801
                    2.000
                                 0.98 | 8.000
                                                        1.78 | 14.000
2.40 | 14.083
                                                                                 3.73 | 20.00
                                                                                                         1.60
                                 1.15 | 8.083
                    2.083
                    2.167
                                 1.15 | 8.167
                                                        2.40 14.167
                                                                                 2.66 | 20.17
                                                                                                          1.07
                                                                                                                                                                                                                                RUNOFF COEFFICIENT = 0.552
                                                                                                                                                                                                                                (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                    2.333
                                 1.15 | 8.333
                                                        2.40 | 14.333 | 2.66 | 20.33
                                 1.15 | 8.417
1.15 | 8.500
                                                        2.40 |14.417
2.40 |14.500
                                                                                 2.66 | 20.42
2.66 | 20.50
                    2.417
                                 1.15 | 8.583
1.15 | 8.667
1.15 | 8.750
                    2.583
                                                        2.40 [14.583 2.66 ] 20.58
                                                                                                          1.07
                                                         2.40 | 14.667
                                                                                                                                                                                                                             STANDHYD ( 0220) Area (ha)= 5.63
                    2.750
                                                        2.40 [14.750
                                                                                2.66 | 20.75
                                                                                                         1.07
                                                                                                                                                                                                                            |ID= 1 DT= 5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00
                    2 833
                                 1.15 | 8.833
1.15 | 8.917
                                                        2.40 |14.833
2.40 |14.917
                                                                                 2.66 | 20.83
2.66 | 20.92
                    2.917
                                 1.15 | 9.000
1.15 | 9.083
1.15 | 9.167
                                                        2.40 | 15.000
2.84 | 15.083
2.84 | 15.167
                                                                                2.66 | 21.00
2.66 | 21.08
                                                                                                                                                                                                                                                         IMPERVIOUS PERVIOUS (i)
                    3.000
                                                                                                          1.07
                                                                                                                                                                                                                                Surface Area (ha)= 2.36
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
                                                                                                                                                                                                                                                                                            3.27
5.00
                    3.167
                                                                                 2.66 | 21.17
                                                                                                                                                                                                                                 Average Slope (\%)= 2.00 2.00
Length (m)= 250.00 40.00
Mamnings n = 0.013 0.250
                                 1.15 | 9.250
                                                        2.84 | 15.250
2.84 | 15.333
                                                                                 2.66 | 21.25
2.66 | 21.33
                    3 250
                                                                                                                                                                                                                                                                                              2.00
                    3.417
                                  1.15 9.417
                                                        2.84 115.417
                                                                                2.66 | 21.42
                                                                                                          1.07
                                                                                                                                                                                                                                Mannings n
                                 1.15 | 9.500
1.15 | 9.583
                                                        2.84 |15.500
3.20 |15.583
                                                                                                                                                                                                                                     NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                    3.583
                                                                                2.66 | 21.58
                                                                                                         1.07
                    3,667
                                  1.15 9.667
                                                         3.20 |15.667
                                                                                 2.66 | 21.67
                    3.750
                                  1.15 | 9.750
                                                         3.20 | 15.750
                                                                                 2.66 | 21.75
                                                                                                          1.07
                                                                                                                                                                                                                                             ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                                 1.15 | 9.833
1.15 | 9.917
                                                         3.20 | 15.833 | 2.66 | 21.83
3.20 | 15.917 | 2.66 | 21.92
                    3.833
                    3.917
                    4.000
                                 1.15 110.000
                                                          3.20 | 16.000
                                                                                  2.66 | 22.00
                                 1.42 |10.083
1.42 |10.167
                                                         4.08 |16.083
4.09 |16.167
                                                                                 1.60 | 22.08
1.60 | 22.17
                                                                                                                                                                                                                                                        0.98 | 6.083 | 1.78 | 12.083 | 12.80 | 18.08 | 0.98 | 6.167 | 1.78 | 12.167 | 12.79 | 18.17
                    4.083
                                                                                                                                                                                                                                            0.083
                                                                                                                                                                                                                                                                                                                                 1.60
                    4.167
                    4.250
                                  1.42 [10.250]
                                                          4.09 [16.250]
                                                                                   1.60 | 22.25
                                                                                                                                                                                                                                            0.250
                                                                                                                                                                                                                                                        0.98 6.250
                                                                                                                                                                                                                                                                                1.78 | 12.250 | 12.79 | 18.25
                                                                                                                                                                                                                                                                                                                                   1.60
                                  1.42 |10.333
                                                                                                                                                                                                                                                         0.98 | 6.333
                                                                                                                                                                                                                                                                                 1.78 | 12.333 | 12.79 | 18.33
                                                          4.08 16.333
                                                                                                                                                                                                                                             0.333
                    4.417
                                  1.42 110 417
                                                         4.09 16.417
                                                                                  1.60 | 22.42
                                                                                                          1.07
                                                                                                                                                                                                                                            0.417
                                                                                                                                                                                                                                                         0.98 | 6.417
                                                                                                                                                                                                                                                                                 1.78 | 12.417 | 12.79 | 18.42
                                                                                                                                                                                                                                                                                                                                   1.60
                                                                                                                                                                                                                                                                                1.78 | 12.500 | 12.79 | 18.50
1.78 | 12.583 | 6.57 | 18.58
1.78 | 12.667 | 6.57 | 18.67
                                  1.42 |10.500
                                                          4.09 |16.500
                                                                                   1.60 | 22.50
                                                                                                                                                                                                                                                        0.98 | 6.500
0.98 | 6.583
                                                                                                                                                                                                                                                                                                                                   1.60
                                                                                                                                                                                                                                            0.583
                                                         5.51 116.583
                                                                                                                                                                                                                                                                                                                                  1.60
                    4.583
                                 1.42 | 10.583
                                                                                   1.60 | 22.58
                                                                                                           1.07
                                 1.42 | 10.667 | 5.51 | 16.667 | 1.60 | 22.67 | 1.07 | 1.42 | 10.750 | 5.51 | 16.750 | 1.60 | 22.75 | 1.07
                    4 667
                                                                                                                                                                                                                                            0.667
                                                                                                                                                                                                                                                        0.98 6.667
                                                                                                                                                                                                                                            0.750 0.98 6.750 1.78 12.750 6.57 18.75 1.60
[ile://V1...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                                                                                                                                                                                                                                                        1.42 | 11.333 | 8.52 | 17.333 | 1.60 | 23.33 | 1.42 | 11.417 | 8.52 | 17.417 | 1.60 | 23.42
                    0.833 0.98 | 6.833
                                                                                 6.57 | 18.92
                    0.917
                                0.98 | 6.917
                                                         1.78 | 12.917
                                                                                                         1.60
                                 0.98 | 7.000
                                                         1.78 | 13.000
                                                                                 6.57 | 19.00
                                                                                                          1.60
                                                                                                                                                                                                                                            5.500
                                                                                                                                                                                                                                                        1.42 11 500 8 52 17 500 1 60 23 50 1 07
                                                                                                                                                                                                                                                          1.42 |11.583 36.94 |17.583
                                                                                                                                                                                                                                                                                                           1.60 | 23.58
                    1.083
                                                         1.78 | 13.083
                                 0.98 | 7.083
                                                                                  4.80 | 19.08
                                                                                                          1.60
                                 0.98 | 7.167
0.98 | 7.250
                    1.167
                                                          1.78 13.167
                                                                                  4.80 | 19.17
                                                                                                                                                                                                                                             5.667
                                                                                                                                                                                                                                                         1.42 111.667 36.94 17.667
                                                                                                                                                                                                                                                                                                           1.60 | 23.67
                                                                                                                                                                                                                                                                                                                                   1.07
                                                                                                                                                                                                                                            5.750 1.42 | 11.750 36.94 | 17.750 1.60 | 23.75

5.833 1.42 | 11.833 98.03 | 17.833 1.60 | 23.83

5.917 1.42 | 11.917 98.04 | 17.917 1.60 | 23.92
                                                          1.78 | 13.250
                    1.333
                                 0.98 | 7.333
                                                         1.78 [13.333
                                                                                  4.79 | 19.33
                                                                                                          1.60
                                                                                                                                                                                                                                                                                                                                   1.07
                                                         1.78 |13.417
1.78 |13.500
                                                                                 4.80 | 19.42
4.80 | 19.50
                    1.417
                                 0.98 | 7.417
                                                                                                                                                                                                                                                        1.42 | 12.000 | 98.04 | 18.000 | 1.60 | 24.00
                    1.500
                                 0.98 | 7.500
                                                                                                          1.60
                    1.583
                                 0.98 | 7.583
                                                          1.78 113.583
                                                                                 3.73 | 19.58
                                                                                                          1.60
```

```
Max.Eff.Inten.(mm/hr)= 98.04 78.03
over (min) 5.00 15.00
Storage Coeff. (min)= 3.62 (ii) 11.42 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
        0.98 | 7.667
                          1.78 | 13.667
1.750
                         1.78 | 13.750
                                         3.73 | 19.75
                                                           1.60
        0.98 | 7.833
0.98 | 7.917
                          1.78 |13.833
                                          3.73 | 19.83
3.73 | 19.92
1.833
                                                                                                                                                                                5.00 15.00
1.917
                         1.78 | 13.917
                                                            1.60
                                                                                                                                                                              0.25 0.09
*TOTALS*
        0.98 | 8.000
1.15 | 8.083
                         1.78 | 14.000
2.40 | 14.083
                                                                                                                                               Unit Hyd. peak (cms)=
                                                                                                                                               2.66 | 20.17
2.167
        1.15 | 8.167
                         2.40 | 14.167
                                                            1.07
        1.15 | 8.250
1.15 | 8.333
                        2.40 | 14.250
2.40 | 14.333
                                          2.66 | 20.25
2.66 | 20.33
2.333
        1.15 | 8.417
1.15 | 8.500
                        2.40 | 14.417
2.40 | 14.500
                                          2.66 | 20.42
2.66 | 20.50
2 417
        1.15 | 8.583
1.15 | 8.667
2.583
                        2.40 [14.583
                                         2.66 | 20.58
                         2.40 14.667
                                                                                                                                           ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
2,750
        1.15 | 8.750
                         2.40 | 14.750
                                          2.66 | 20.75
                                                            1.07
        1.15 | 8.833
1.15 | 8.917
1.15 | 9.000
                        2.40 | 14.833
2.40 | 14.917
2.40 | 15.000
                                         2.66 | 20.83
2.66 | 20.92
                                                                                                                                                (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
2.833
3.000
                                         2.66 | 21.00
                                                            1.07
        1.15 | 9.083
1.15 | 9.167
                         2.84 |15.083
2.84 |15.167
                                          2.66 | 21.08
2.66 | 21.17
                                                                                                                                                    THAN THE STORAGE COEFFICIENT.
3.083
                                                                                                                                               (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
3.167
        1.15 | 9.250
1.15 | 9.333
                        2.84 | 15.250 | 2.66 | 21.25 | 2.84 | 15.333 | 2.66 | 21.33
3 250
3.333
3.417
        1.15 | 9.417
                         2.84 | 15.417 | 2.66 | 21.42
                                                           1.07
         1.15 | 9.500
                         2.84 |15.500
3.20 |15.583
                                                                                                                                            RESERVOIR( 0050) OVERFLOW IS OFF
         1.15 | 9.583
3.583
                                          2.66 | 21.58
                                                            1.07
                                                                                                                                             IN- 2---> OUT- 1
                                                                                                                                                                   OUTFLOW STORAGE | OUTFLOW STORAGE
3.667
3.750
        1.15 | 9.667
1.15 | 9.750
                         3.20 |15.667
3.20 |15.750
                                         2.66 | 21.67
2.66 | 21.75
                                                                                                                                            DT= 5.0 min
                                                                                                                                                              -- (cms) (ha.m.) | (cms) (ha.m.)
0.0000 0.0000 | 0.5800 0.1023
0.2500 0.0493 | 0.6600 0.1189
3.833
         1.15 | 9.833
                         3.20 | 15.833 | 2.66 | 21.83
                         3.20 | 15.917
4.000
         1.15 110,000
                          3.20 | 16.000
                                           2 66 | 22 00
                                                                                                                                                              0.3700 0.0684 | 0.7600
                                                                                                                                                                                                   0.1366
         1.42 |10.083
                          4.08 |16.083
                                           1.60 | 22.08
                                                                                                                                                              0.4600 0.0822 | 0.7800
                                                                                                                                                                                                   0.1400
4.167
         1.42 | 10.167
                          4.09 16.167
                                           1.60 | 22.17
1.60 | 22.25
4.250
         1.42 110.250
                          4.09 16.250
                                                                                                                                                                  AREA OPEAK TPEAK R.V.
                                                                                                                                             (ha) (cms) (hrs) (mm)
INFLOW: ID=2 ( 0220) 5.630 0.938 12.00 63.05
OUTFLOW: ID=1 ( 0050) 5.630 0.459 12.17 63.04
4.333
         1.42 | 10.333
                          4.08 16.333
                                           1.60 | 22.33
4.417
         1.42 10.417
                          4.09 | 16.417
                                           1.60 | 22.42
                                                            1.07
        1.42 10.500
                         4.09 16.500
                                          1.60 | 22.50
1.60 | 22.58
        1.42 |10.583
                         5.51 16.583
4.583
4 667
         1.42 110.667
                          5.51 16.667
                                           1.60 | 22.67
                                                            1.07
                                                                                                                                                         PEAK FLOW REDUCTION [Qout/Qin](%)= 48.97
                                                                                                                                                         TIME SHIFT OF PEAK FLOW (min)= 10.00
MAXIMUM STORAGE USED (ha.m.)= 0.0831
         1.42 |10.750
                          5.51 |16.750
                                           1.60 | 22.75
4.833
         1.42 | 10.833
                          5.51 16.833
                                           1.60 | 22.83
                                                            1.07
                         5.51 (16.917
5.51 (17.000
                                           1.60 | 22.92
1.60 | 23.00
         1.42 10.917
        1.42 11.000
5.000
                                                            1.07
                         8.52 | 17.083
8.52 | 17.167
                                           1.60 | 23.08
1.60 | 23.17
5.083
        1.42 111.083
                                                            1.07
         1.42 11.167
5.250 1.42 | 11.250 8.52 | 17.250 1.60 | 23.25
                                                                                                                                           | ADD HYD ( 0002)|
                                                            1.07
```

```
| 1 + 2 = 3 | AREA QPEAK TPEAK R.V.
       (ha) (cms) (hrs) (mm)

ID1=1 ( 0225): 3.98 0.226 12.50 48.98

+ ID2=2 ( 0025): 19.34 0.490 13.58 52.27
       ID = 3 ( 0002): 23.32 0.610 13.08 51.71
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
  | ADD HYD ( 0002)|
   3+2=1 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1=3 ( 0002): 23.32 0.610 13.08 51.71

+ ID2=2 ( 0050): 5.63 0.459 12.17 63.04
       ID = 1 ( 0002): 28.95 0.900 12.50 53.91
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
       V V I SSSSS U U A L
                                                 (v 6.2.2015)
          V I SS U U AA L
V I SS U U AA L
V I SS U U AAAAA L
V I SS U U AA A L
V I SS U U A A L
V I SSSSS UUUUU A A LLLLL
 OOO TTTTT TTTTT H H Y Y M M OOO TM
O O T T H H YY MM MM O O
O O T T H H Y M M O O
OOO T T H H Y M M OOO
Developed and Distributed by Smart City Water Inc
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  All rights reserved.
               ***** DETAILED OUTPUT *****
   Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
   Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\b6441983-
  9ad7-4325-817d-7198a65d06d5\scen
  Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\b6441983-9ad7-4325-817d-7198a65d06d5\scen
  DATE: 03/11/2024 TIME: 11:39:28
  USER:
file:///V...%20Updated%20E4%20Analysis/VO/Detailed%20Ouput/Proposed%20VO%20Detailed%20Ouput/S20-%20All/%20Storms.xxt[3/11/204 11:44:24 AM] | file:///V...%20Updated%20E4%20Ouput/Proposed%20VO%20Detailed%20Ouput/S20-%20All/%20Storms.xxt[3/11/204 11:44:24 AM] |
```

```
COMMENTS:
       READ STORM | Filename: C:\Users\nyokich\AppD
                                          ata\Local\Temp\
| 5e49fc0a-79f7-4237-8582-77f9360bb4e5\e33ebcda
| Ptotal=105.60 mm | Comments: SCS_25yr
                                TIME RAIN | Iris mm/hr | hrs m
                              2.25
                                                    1.37 | 8.25 | 2.85 | 14.25 | 3.17 | 20.25
                                                                                                                                                                                   1.27
                                                   1.37 | 8.50 | 2.85 | 14.50 | 3.17 | 20.50 | 1.37 | 8.75 | 2.85 | 14.75 | 3.17 | 20.75
                                 2.75
                                3.00
                                                   1.37 | 9.00 | 3.38 | 15.00 | 3.17 | 21.00 | 1.37 | 9.25 | 3.38 | 15.25 | 3.17 | 21.25
                                 3.25
                                                   1.37 | 9.50 | 3.80 | 15.50 | 3.17 | 21.50 | 1.37 | 9.75 | 3.80 | 15.75 | 3.17 | 21.75 | 1.69 | 10.00 | 4.86 | 16.00 | 1.90 | 22.00
                                 3.50
                                3.75
4.00
                                                   1.69 | 10.25 | 4.86 | 16.25 | 1.90 | 22.25 | 1.69 | 10.50 | 6.55 | 16.50 | 1.90 | 22.50 | 1.69 | 10.75 | 6.55 | 16.75 | 1.90 | 22.75
                                4.25
                                4.50
                                                                                                                                                                                       1.27
                                                 1.69 | 11.00 | 10.14 | 17.00 | 1.90 | 23.00 | 1.69 | 11.25 | 10.14 | 17.25 | 1.90 | 23.25
                                 5.50 1.69 11.50 43.93 17.50 1.90 23.50
                                                                                                                                                                                      1.27
                                5.75 1.69 | 11.75 116.58 | 17.75 1.90 | 23.75 1.27
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
```

- TRANSFORMED HYETOGRAPH ---- IRANSFORMED HYETOGRAPH ---TIME RAIN | TIME RAIN 0.333 1.16 | 6.333 | 2.11 | 12.333 | 15.21 | 18.33 2.11 | 12.333 | 15.21 | 18.33 2.11 | 12.417 | 15.21 | 18.42 2.11 | 12.500 | 15.21 | 18.50 2.11 | 12.583 | 7.81 | 18.58 2.11 | 12.667 | 7.81 | 18.67 1.16 | 6.417 1.16 | 6.500 0.417 0.500 0.583 1.16 | 6.583 1.16 | 6.667 7.81 | 18.75 7.81 | 18.83 7.81 | 18.92 0.750 1.16 6.750 2.11 12.750 1.90 0.833 1.16 | 6.833 1.16 | 6.917 2.11 |12.833 2.11 |12.917 0.917 1.90 1.16 | 7.000 1.16 | 7.083 1.16 | 7.167 2.11 |13.000 2.11 |13.083 5.70 | 19.17 1.167 2.11 | 13.167 1.90 1.250 1.333 1.16 | 7.250 1.16 | 7.333 2.11 |13.250 2.11 |13.333 5.70 | 19.25 5.70 | 19.33 1.16 | 7.417 1.16 | 7.500 1.16 | 7.583 1.417 1.500 2.11 |13.417 2.11 |13.500 5.70 | 19.42 5.70 | 19.50 1.583 2.11 [13.583 4.44 | 19.58 1.90 1.16 | 7.667 1.16 | 7.750 2.11 13.667 1,750 2.11 | 13.750 4.43 | 19.75 1.90 1.16 | 7.833 1.16 | 7.917 2.11 |13.833 2.11 |13.917 2.11 |14.000 4.43 | 19.83 4.43 | 19.92 4.43 | 20.00 1.833 2.000 1.16 8.000 1.90 2.083 1.37 | 8.083 1.37 | 8.167 2.85 |14.083 2.85 |14.167 3.17 | 20.08 3.17 | 20.17 2.167 1.37 | 8.250 1.37 | 8.333 2.250 2.85 |14.250 3.17 | 20.25 2.85 14.333 2.333 3.17 | 20.33 2.417 1.37 | 8.417 2.85 114.417 3.17 | 20.42 1.37 | 8.500 1.37 | 8.583 2.85 |14.500 2.583 2.85 14.583 3.17 | 20.58 2.667 2.750 1.37 | 8.667 1.37 | 8.750 2.85 |14.667 2.85 |14.750 3.17 | 20.67 3.17 | 20.75 1.37 | 8.833 1.37 | 8.917 3.17 | 20.83 3.17 | 20.92 2.833 2.85 | 14.833 2.85 14.917 1.37 | 9.000 1.37 | 9.083 1.37 | 9.167 1.37 | 9.250 3.000 2.85 | 15.000 3.17 21.00 3.38 |15.083 3.167 3.38 | 15.167 | 3.38 | 15.250 3.17 | 21.17 3.17 | 21.25 3.250 3.333 1.37 9.333 3.38 15.333 3.417 1.37 | 9.417 3.38 | 15.417 3.17 | 21.42 1.37 | 9.500 1.37 | 9.583 3.38 | 15.500 | 3.17 | 21.50 | 3.80 | 15.583 | 3.17 | 21.58 3.583 3.80 |15.667 3.80 |15.750 3 667 1.37 | 9.667 3.17 | 21.67 1.27 1.37 | 9.750 3.833 1.37 | 9.833 3.80 | 15.833 | 3.17 | 21.83 1.27 1.37 | 9.937 | 3.80 | 15.833 | 3.17 | 21.83 | 13.7 | 9.917 | 3.80 | 15.917 | 3.17 | 21.92 | 1.37 | 10.000 | 3.80 | 16.000 | 3.17 | 22.00 | 1.69 | 10.083 | 4.86 | 16.083 | 1.90 | 22.08 | 1.69 | 10.167 | 4.86 | 16.167 | 1.90 | 22.17 3.917 4.000 1.27 4.083 4.250 1.69 | 10.250 4.86 | 16.250 1.90 | 22.25

```
4.333 1.69 | 10.333 4.86 | 16.333 1.90 | 22.33
4.417 1.69 | 10.417 4.86 | 16.417 1.90 | 22.42
                           4.500 1.69 10.500 4.86 16.500 1.90 22.50
                                                                                         6.55 16.583
                           4.667
                                                 1.69 10.667
                                                                                         6.55 16.667
                                                                                                                                  1.90 | 22.67
                                                                                                                                                                          1.27
                                               1.69 10.750
1.69 10.833
                                                                                       6.55 | 16.750 | 1.90 | 22.75
6.55 | 16.833 | 1.90 | 22.83
                           4.833
                                                                                                                                                                          1.27
                           4.917
                                                1.69 | 10.917
1.69 | 11.000
                                                                                        6.55 | 16.917 | 1.90 | 22.92
6.55 | 17.000 | 1.90 | 23.00
                                                                                                                                  1.90 | 23.08
1.90 | 23.17
                            5.083
                                                 1.69 | 11.083 | 10.14 | 17.083
                                                                                                                                                                            1.27
                                                  1.69 11.167 10.14 17.167
                           5.250
                                                1.69 | 11.250 | 10.14 | 17.250 | 1.90 | 23.25
                            5.333
                                                1.69 |11.333 | 10.14 |17.333 | 1.69 |11.417 | 10.14 |17.417
                                                                                                                                  1.90 | 23.33
1.90 | 23.42
                            5.417
                                                                                                                                                                           1.27
                                                                                                                                  1.90 | 23.50
1.90 | 23.58
                            5.500
                                                 1 69 111 500 10 14 117 500
                                                                                                                                                                           1.27
                                                1.69 |11.583 | 43.93 |17.583
1.69 |11.667 | 43.93 |17.667
                             5.583
                                                                                                                                   1.90 | 23.67
                            5.667
                                                                                                                                                                            1.27
                           5.750 1.69 11.750 43.93 17.750 1.90 23.75
                                                                                                                                                                          1.27
                                              1.69 |11.833 | 116.57 |17.833 | 1.90 | 23.83
1.69 |11.917 | 116.58 |17.917 | 1.90 | 23.92
                           5.833
                                                                                                                                                                            1.27
                           5.917
                           6.000 1.69 | 12.000 116.58 | 18.000 1.90 | 24.00
        Unit Hyd Qpeak (cms)= 0.483
       PEAK FLOW (cms)= 0.585 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 66.308
TOTAL RAINFALL (mm)= 105.602
RUNOFF COEFFICIENT = 0.628
        (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
| STANDHYD ( 0205)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                                                IMPERVIOUS PERVIOUS (i)
        Surface Area (ha)= 1.58
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
        Average Slope (%)= 2.00 5.00

Length (m)= 229.49 250.00

Mannings n = 0.013 0.250
                                                                                                               5.00
               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                             - TRANSFORMED HYETOGRAPH -
                         TIME RAIN | TIME R
                           0.250 1.16 6.250 2.11 12.250 15.21 18.25 1.90
```

```
1.16 | 6.333 | 2.11 | 12.333 | 15.21 | 18.33 | 1.16 | 6.417 | 2.11 | 12.417 | 15.21 | 18.42
                                                                                                                                                                                                                                                                                                                                           4.833 1.69 | 10.833 6.55 | 16.833 1.90 | 22.83
4.917 1.69 | 10.917 6.55 | 16.917 1.90 | 22.92
                            0.333
                            0.417
                                                                                                                                                     1.90
                            0.500
                                               1.16 | 6.500
                                                                              2.11 12.500 15.21 18.50
                                                                                                                                                                                                                                                                                                                                            5,000
                                                                                                                                                                                                                                                                                                                                                             1.69 111.000
                                                                                                                                                                                                                                                                                                                                                                                               6.55 17,000
                                                                                                                                                                                                                                                                                                                                                                                                                                   1.90 | 23.00
                                              1.16 | 6.583
                                                                              2.11 |12.583 | 2.11 |12.667
                                                                                                                  7.81 | 18.58
7.81 | 18.67
                            0.583
                                                                                                                                                                                                                                                                                                                                                              1.69 | 11.083 | 10.14 | 17.083
                                                                                                                                                                                                                                                                                                                                                                                                                                    1.90 | 23.08
                                                                                                                                                                                                                                                                                                                                                                                             10.14 | 17.167
                            0.667
                            0.750
                                               1.1616.750
                                                                              2 11 112 750
                                                                                                                  781 | 1875
                                                                                                                                                    1.90
                                                                                                                                                                                                                                                                                                                                            5.250
                                                                                                                                                                                                                                                                                                                                                             1.69 111.250 10.14 117.250
                                                                                                                                                                                                                                                                                                                                                                                                                                   1.90 | 23.25
                                               1.16 | 6.833
                                                                               2.11 |12.833
                                                                                                                                                                                                                                                                                                                                                             1.69 |11.333 | 10.14 |17.333
                                                                                                                                                                                                                                                                                                                                                             1.69 11.417 10.14 17.417
                            0.917
                                               1.16 | 6.917
                                                                              2.11 12.917
                                                                                                                  7.81 | 18.92
                                                                                                                                                    1.90
                                                                                                                                                                                                                                                                                                                                            5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                   1.90 | 23.42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.27
                                                                                                                                                                                                                                                                                                                                                             1.69 | 11.500 | 10.14 | 17.500 | 1.69 | 11.583 | 43.93 | 17.583 | 1.69 | 11.667 | 43.93 | 17.667
                                              1.16 | 7.000
1.16 | 7.083
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.90 | 23.50
1.90 | 23.58
                                                                              2.11 | 13.000
                                                                                                                                                                                                                                                                                                                                            5.583
                            1.083
                                                                              2.11 13.083
                                                                                                                  5.70 | 19.08
                                                                                                                                                    1.90
                            1.167
                                              1.16 | 7.167
1.16 | 7.250
                                                                              2.11 |13.167
2.11 |13.250
                                                                                                                  5.70 | 19.17
5.70 | 19.25
                                                                                                                                                                                                                                                                                                                                           5.667
                                                                                                                                                                                                                                                                                                                                                                                                                                   1.90 | 23.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.27
                                                                                                                                                                                                                                                                                                                                                            1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75 | 1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83
                                              1.16 | 7.333
1.16 | 7.417
1.16 | 7.500
                            1.333
                                                                              2.11 113.333
                                                                                                                  5.70 | 19.33
                                                                                                                                                    1.90
                                                                                                                                                                                                                                                                                                                                           5.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.27
                                                                                                                                                                                                                                                                                                                                          5.70 | 19.50
                            1.500
                                                                              2.11 [13.500
                                                                                                                                                   1.90
                                              1.16 | 7.583
1.16 | 7.667
                                                                              2.11 |13.583
2.11 |13.667
                                                                                                                  4.44 | 19.58
4.43 | 19.67
                             1.583
                                                                                                                                                                                                                                                                                                                           Max.Eff.Inten.(mm/hr)= 116.58
                            1.667
                                              1.16 | 7.750
1.16 | 7.833
1.16 | 7.917
                                                                                                                  4.43 | 19.75
4.43 | 19.83
4.43 | 19.92
                             1 750
                                                                              2.11 113.750
                                                                                                                                                    1 90
                                                                                                                                                                                                                                                                                                                                         over (min) 5.00
                                                                                                                                                                                                                                                                                                                                                                                                   25.00
                                                                                                                                                                                                                                                                                                                           over (min) 5.00 25.00
Storage Coeff. (min) = 3.21 (ii) 21.65 (ii)
Unit Hyd. Tpeak (min) = 5.00 25.00
                                                                              2.11 | 13.833
2.11 | 13.917
                                                                                                                                                                                                                                                                                                                          Unit Hyd. Tpeak (mm)=
Unit Hyd. peak (cms)= 0.27 0.05
*TOTALS*
                            1.917
                                                                                                                                                    1.90
                            2.000
                                               1.16 8.000
                                                                              2.11 |14.000
2.85 |14.083
                                                                                                                  4.43 | 20.00
                                                                                                                                                    1.90
                                               1.37 | 8.083
                            2.083
                                                                                                                                                                                                                                                                                                                          PEAK FLOW (cms)= 0.25 0.73 0.

TIME TO PEAK (hrs)= 12.00 12.25 12.00 12.25 12.00 12.25 12.00 12.25 12.00 12.25 12.00 12.25 12.00 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.60 12.
                                                                                                                                                                                                                                                                                                                                                                                                                                                0.763 (iii)
                            2.167
                                               1.37 | 8.167
                                                                              2.85 14.167
                                                                                                                  3.17 | 20.17
                                                                                                                                                                                                                                                                                                                                                                                                                       12.25 12.25
50 59.34 63.76
0 105.60 105.60
                            2.333
                                              1.37 | 8.333
                                                                              2.85 | 14.333
                                                                                                                  3.17 | 20.33
                                              1.37 | 8.417
1.37 | 8.500
                                                                              2.85 |14.417
2.85 |14.500
                            2.417
                            2.583
                                               1.37 | 8.583
                                                                              2.85 114.583
                                                                                                                  3.17 | 20.58
                                              1.37 | 8.667
1.37 | 8.750
                                                                                                                                                                                                                                                                                                                    ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                                                                              2.85 14.750
                            2.750
                                                                                                                  3.17 | 20.75
                            2.833
                                              1.37 | 8.833
1.37 | 8.917
                                                                              2.85 |14.833
2.85 |14.917
                                                                                                                 3.17 | 20.83
3.17 | 20.92
                                                                                                                                                                                                                                                                                                                                         YOU SHOULD CONSIDER SPLITTING THE AREA
                            2.917
                                              1.37 | 9.000
1.37 | 9.083
1.37 | 9.167
                                                                              2.85 | 15.000
3.38 | 15.083
3.38 | 15.167
                                                                                                                 3.17 | 21.00
3.17 | 21.08
                                                                                                                                                                                                                                                                                                                              (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES.
                            3.000
                                                                                                                                                                                                                                                                                                                            CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                            3.167
                                                                                                                 3.17 | 21.17
                                              1.37 | 9.250
                                                                              3.38 | 15.250
3.38 | 15.333
                                                                                                                 3.17 | 21.25
3.17 | 21.33
                            3.250
                                                                                                                                                                                                                                                                                                                                     THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                                                                                                                                                                            (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
                            3.333
                            3.417
                                               1.37 9.417
                                                                               3.38 115.417
                                                                                                                  3.17 | 21.42
                                              1.37 | 9.500
1.37 | 9.583
                                                                              3.38 | 15.500
3.80 | 15.583
                            3.583
                                                                                                                 3.17 | 21.58
                                              1.37 | 9.667
1.37 | 9.750
                            3,667
                                                                               3.80 |15.667
                                                                                                                                                                                                                                                                                                                    | ADD HYD ( 0003)|
                            3.750
                                                                               3.80 | 15.750
                                                                                                                  3.17 | 21.75
                                                                                                                                                                                                                                                                                                                       1+2=3 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1-1 (0205): 7.90 0.763 12.25 63.76

+ID2=2 (0210): 6.83 0.585 12.42 66.31
                                              1.37 | 9.833
1.37 | 9.917
                                                                              3.80 |15.833
3.80 |15.917
                                                                                                                 3.17 | 21.83
3.17 | 21.92
                            3.833
                            3.917
                                               1.37 10.000
                            4.000
                                                                                 3.80 | 16.000
                                                                                                                  3.17 | 22.00
                                              1.69 |10.083
1.69 |10.167
                                                                               4.86 |16.083
4.86 |16.167
                                                                                                                  1.90 | 22.08
1.90 | 22.17
                            4.083
                            4.167
                            4.250
                                               1.69 110.250
                                                                                 4.86 | 16.250
                                                                                                                    1.90 | 22.25
                                                                                                                                                                                                                                                                                                                              ID = 3 ( 0003): 14.73 1.313 12.25 64.94
                                               1.69 10.333
                                                                                 4.86 16.333
                            4.333
                                                                                                                                                                                                                                                                                                                           NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                            4.417
                                               1 69 110 417
                                                                                4.86 16.417
                                                                                                                   1.90 | 22.42
                                               1.69 |10.500
                                                                                 4.86 |16.500
                                                                                                                    1.90 | 22.50
                                                                                6.55 16.583
                            4.583
                                              1.69 | 10.583
                                                                                                                    1.90 | 22.58
                                                                                                                                                      1.27
                            4 667
                                               1 69 10 667
                                                                                 6.55 16.667
                                                                                                                    1.90 | 22.67
                                                                                                                                                                                                                                                                                                                     CALIB
                                              1.69 | 10.750 | 6.55 | 16.750 | 1.90 | 22.75
                                                                                                                                                                                                                                                                                                                    NASHYD ( 0200) Area (ha)= 20.32 Curve Number (CN)= 80.0
file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed
```

```
3.833 1.37 | 9.833 3.80 | 15.833 3.17 | 21.83
3.917 1.37 | 9.917 3.80 | 15.917 3.17 | 21.92
|ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                         --- U.H. Tp(hrs)= 0.43
                                                                                                                                                                                                                                                                                      1.37 | 10.000 | 3.80 | 16.000 | 3.17 | 22.00 | 1.69 | 10.083 | 4.86 | 16.083 | 1.90 | 22.08
          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                       4.167
                                                                                                                                                                                                                                                                                      1.69 10.167
                                                                                                                                                                                                                                                                                                                  4.86 16.167
                                                                                                                                                                                                                                                                                                                                               1.90 | 22.17
                                                                                                                                                                                                                                                                                                                                                                          1.27
                                                                                                                                                                                                                                                                                      4.333
                                                                                                                                                                                                                                                                                                                                             1.90 | 22.33
                                         - TRANSFORMED HYETOGRAPH -
                   TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
                                                                                                                                                                                                                                                                                      1.69 | 10.417
1.69 | 10.500
                                                                                                                                                                                                                                                                                                                 4.86 |16.417
4.86 |16.500
                                                                                                                                                                                                                                                                                                                                              1.90 | 22.42
1.90 | 22.50
                                                                                                                                                                                                                                                                       4.417
                               1.16 | 6.083 | 2.11 | 12.083 | 15.22 | 18.08
1.16 | 6.167 | 2.11 | 12.167 | 15.21 | 18.17
                  0.083
                                                                                                                                                                                                                                                                       4.583
                                                                                                                                                                                                                                                                                      1.69 [10.583
                                                                                                                                                                                                                                                                                                                  6.55 | 16.583
                                                                                                                                                                                                                                                                                                                                              1.90 | 22.58
                                                                                                                                                                                                                                                                                                                                                                          1.27
                                                                                                                                                                                                                                                                                      1.69 10.667
                                                                                                                                                                                                                                                                                                                 6.55 | 16.667 | 1.90 | 22.67
6.55 | 16.750 | 1.90 | 22.75
                  0.250
                                 1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25
                                                                                                                                                                                                                                                                       4.750
                                 1.16 | 6.333
1.16 | 6.417
                                                          2.11 |12.333 | 15.21 | 18.33
2.11 |12.417 | 15.21 | 18.42
                                                                                                                                                                                                                                                                        4.833
                                                                                                                                                                                                                                                                                      1.69 | 10.833
1.69 | 10.917
                                                                                                                                                                                                                                                                                                                 6.55 | 16.833
6.55 | 16.917
                                                                                                                                                                                                                                                                                                                                             1.90 | 22.83
1.90 | 22.92
                  0.417
                                                                                                                                                                                                                                                                        4.917
                                 1.16 | 6.500
1.16 | 6.583
                                                          2.11 | 12.500 | 15.21 | 18.50
2.11 | 12.583 | 7.81 | 18.58
2.11 | 12.667 | 7.81 | 18.67
                                                                                                                                                                                                                                                                                       1 69 111 000
                                                                                                                                                                                                                                                                                                                  6.55 17.000
                                                                                                                                                                                                                                                                                                                                              1.90 | 23.00
                                                                                                                                                                                                                                                                                                                                              1.90 | 23.08
1.90 | 23.17
                                                                                                                                                                                                                                                                                       1.69 |11.083 | 10.14 |17.083
                                 1.16 | 6.667
                                                                                                                                                                                                                                                                                      1.69 11.167 10.14 17.167
                  0.667
                                                                                                                   1.90
                                                                                                                                                                                                                                                                        5.167
                  0.750
                                 1.16 | 6.750
1.16 | 6.833
                                                          2.11 | 12.750
2.11 | 12.833
                                                                                       7.81 | 18.75
7.81 | 18.83
                                                                                                                                                                                                                                                                                      1.90 | 23.25
1.90 | 23.33
                                                                                                                                                                                                                                                                        5.250
                  0.833
                                                                                                                                                                                                                                                                        5,333
                                 1.16 | 6.917
1.16 | 7.000
                                                          2.11 |12.917
2.11 |13.000
                                                                                       7.81 | 18.92
7.81 | 19.00
                  0.917
                                                                                                                                                                                                                                                                        5 417
                                                                                                                                                                                                                                                                                                                                               1 90 | 23 42
                                                                                                                                                                                                                                                                                                                                                                          127
                                                                                                                                                                                                                                                                                      1.69 | 11.500 | 10.14 | 17.500 | 1.90 | 23.50 | 1.69 | 11.583 | 43.93 | 17.583 | 1.90 | 23.58
                  1.000
                                                                                       5.70 | 19.08
5.70 | 19.17
                  1.083
                                 1.16 | 7.083
                                                          2.11 113.083
                                                                                                                   1.90
                                                                                                                                                                                                                                                                       5.583
                                                                                                                                                                                                                                                                                                                                                                          1.27
                                                                                                                                                                                                                                                                                      1.69 | 11.667 | 43.93 | 17.667 | 1.90 | 23.67 | 1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75
                                                            2.11 |13.167
                                                                                                                                                                                                                                                                         5.667
                  1,250
                                 1.16 | 7.250
                                                           2.11 | 13.250
                                                                                        5.70 | 19.25
                                                                                                                   1.90
                                                                                                                                                                                                                                                                        5.750
                                                                                                                                                                                                                                                                                                                                                                           1.27
                                1.16 | 7.250
1.16 | 7.333
1.16 | 7.417
1.16 | 7.500
1.16 | 7.583
1.16 | 7.667
                                                          2.11 |13.333
2.11 |13.417
                                                                                       5.70 | 19.33
5.70 | 19.42
5.70 | 19.50
                                                                                                                                                                                                                                                                                     1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83 | 1.69 | 11.917 | 116.58 | 17.917 | 1.90 | 23.92
                  1.333
                                                                                                                                                                                                                                                                        5.833
                                                          2.11 [13.500
                                                                                                                                                                                                                                                                       6.000 1.69 12.000 116.58 18.000 1.90 24.00 1.27
                  1.500
                                                                                                                   1.90
                   1.583
                                                           2.11 |13.583
2.11 |13.667
                                                                                        4.44 | 19.58
4.43 | 19.67
                                                                                                                                                                                                                                                          Unit Hyd Qpeak (cms)= 1.805
                  1.667
                                 1.16 | 7.750
1.16 | 7.833
                  1.750
                                                          2.11 13.750
                                                                                        4.43 | 19.75
                                                                                                                   1.90
                                                                                                                                                                                                                                                          PEAK FLOW (cms)= 1.885 (i)
TIME TO PEAK (hrs)= 12.250
                                                           2.11 13.833
                  1.833
                                                                                        4.43 | 19.83
                  1.917
                                 1.16 | 7.917
                                                           2.11 13.917
                                                                                        4.43 | 19.92
                                                                                                                   1.90
                                                                                                                                                                                                                                                          RUNOFF VOLUME (mm)= 61.667
TOTAL RAINFALL (mm)= 105.602
RUNOFF COEFFICIENT = 0.584
                                  1.16 | 8.000
                                                            2.11 |14.000
                  2.083
                                 1.37 | 8.083
                                                           2.85 | 14.083
                                                                                        3.17 | 20.08
                                                                                                                   1.27
                  2.167
                                 1.37 | 8.167
1.37 | 8.250
                                                          2.85 |14.167
2.85 |14.250
                                                                                       3.17 | 20.17
3.17 | 20.25
                                 1.37 | 8.333
1.37 | 8.417
                  2.333
                                                           2.85 | 14.333
                                                                                        3.17 | 20.33
                                                                                                                                                                                                                                                          (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                            2.85 14.417
                  2.500
                                 1.37 | 8 500
                                                           2.85 | 14.500
                                                                                        3.17 | 20.50
                  2.583
                                  1.37 | 8.583
                                                            2.85 |14.583
                  2,667
                                 1.37 | 8.667
1.37 | 8.750
                                                           2.85 |14.667
2.85 |14.750
                                                                                        3.17 | 20.67
3.17 | 20.75
                                                                                                                                                                                                                                                     2.750
                                  1.37 | 8.833
                   2.833
                                                            2.85 |14.833
                  2.917
                                 1.37 | 8.917
                                                            2.85 |14.917
                                                                                        3.17 | 20.92
                                 1.37 | 9.000
1.37 | 9.083
                                                          2.85 | 15.000
3.38 | 15.083
                                                                                       3.17 | 21.00
                                                                                                                                                                                                                                                               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                  3.083
                                                                                       3.17 | 21.08
                  3 167
                                 1.37 | 9.167
                                                            3.38 15.167
                                                                                        3.17 | 21.17
                                 1.37 | 9.250
                                                            3.38 |15.250
                  3.333
                                 1.37 | 9.333
                                                            3.38 | 15.333
                                                                                        3.17 | 21.33
                                                                                                                                                                                                                                                                                               - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                                                                                                                      TIME RAIN | TIME R
                                 1.37 | 9.417
1.37 | 9.500
                                                          3.38 | 15.417
3.38 | 15.500
                   3.417
                                                                                      3.17 21.50
                  3.500
                                                                                                                   1.27
                                1.37 | 9.583
1.37 | 9.667
                                                          3.80 | 15.583 | 3.17 | 21.58 | 3.80 | 15.667 | 3.17 | 21.67
                  3.583
                                                                                                                  1.27
                  3.750
                               1.37 | 9.750 | 3.80 | 15.750 | 3.17 | 21.75 | 1.27
                                                                                                                                                                                                                                                                       0.250 1.16 6.250 2.11 12.250 15.21 18.25 1.90
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4.833 1.69 | 10.833 6.55 | 16.833 1.90 | 22.83
4.917 1.69 | 10.917 6.55 | 16.917 1.90 | 22.92
                                                                                                                                                      1.90
                             0.500
                                                1.16 | 6.500
                                                                               2.11 | 12.500 | 15.21 | 18.50
                                                                                                                                                                                                                                                                                                                                              5,000
                                                                                                                                                                                                                                                                                                                                                                1.69 111.000
                                                                                                                                                                                                                                                                                                                                                                                                 6.55 17,000
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.90 | 23.00
                                               1.16 | 6.583
                                                                               2.11 |12.583
2.11 |12.667
                                                                                                                   7.81 | 18.58
7.81 | 18.67
                                                                                                                                                                                                                                                                                                                                                               1.69 |11.083 | 10.14 |17.083 | 1.69 |11.167 | 10.14 |17.167
                             0.583
                                                                                                                                                                                                                                                                                                                                                                                                                                      1.90 | 23.08
                             0.750
                                               1.1616.750
                                                                               2 11 112 750
                                                                                                                   7.81 | 18.75
                                                                                                                                                     1.90
                                                                                                                                                                                                                                                                                                                                              5.250
                                                                                                                                                                                                                                                                                                                                                             1.69 111.250 10.14 117.250
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.90 | 23.25
                                                1.16 | 6.833
                                                                                2.11 |12.833
                                                                                                                                                                                                                                                                                                                                                              1.69 | 11.333 | 10.14 | 17.333 | 1.69 | 11.417 | 10.14 | 17.417
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.90 | 23.33
                                               1.16 | 6.917
1.16 | 7.000
1.16 | 7.083
                                                                                                                   7.81 18.92
                             0.917
                                                                                2.11 12.917
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                                                                                                                                                                                                                                                                                                                                              5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.90 | 23.42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.27
                                                                                                                                                                                                                                                                                                                                                              1.69 | 11.500 | 10.14 | 17.500 | 1.90 | 23.50 | 1.69 | 11.583 | 43.93 | 17.583 | 1.90 | 23.67 | 1.69 | 11.667 | 43.93 | 17.667 | 1.90 | 23.67
                                                                               2.11 |13.000
2.11 |13.083
                             1.083
                                                                                                                   5.70 | 19.08
                                                                                                                                                     1.90
                             1.167
                                               1.16 | 7.167
1.16 | 7.250
                                                                               2.11 |13.167
2.11 |13.250
                                                                                                                   5.70 | 19.17
5.70 | 19.25
                                                                                                                                                                                                                                                                                                                                             5.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.27
                                                                                                                                                                                                                                                                                                                                                              1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75 | 1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83
                                               1.16 | 7.333
1.16 | 7.417
1.16 | 7.500
                             1.333
                                                                               2.11 113.333
                                                                                                                   5.70 | 19.33
                                                                                                                                                     1.90
                                                                                                                                                                                                                                                                                                                                             5.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.27
                                                                                                                                                                                                                                                                                                                                             5.70 | 19.50
                             1.500
                                                                               2.11 [13.500
                                                                                                                                                     1.90
                                               1.16 | 7.583
1.16 | 7.667
                                                                               2.11 |13.583
2.11 |13.667
                              1.583
                                                                                                                                                                                                                                                                                                                             Unit Hyd Qpeak (cms)= 0.757
                             1.667
                                               1.16 | 7.750
1.16 | 7.833
1.16 | 7.917
                                                                               2.11 |13.750
2.11 |13.833
2.11 |13.917
                                                                                                                   4.43 | 19.75
4.43 | 19.83
4.43 | 19.92
                             1 750
                                                                                                                                                     1 90
                                                                                                                                                                                                                                                                                                                             PEAK FLOW
                                                                                                                                                                                                                                                                                                                              PEAK FLOW (cms)- 0.509 (i)
TIME TO PEAK (hrs)= 12.000
                             1.917
                                                                                                                                                                                                                                                                                                                             RUNOFF VOLUME (mm)= 57.092
TOTAL RAINFALL (mm)= 105.602
                                               1.16 | 8.000 | 2.11 | 14.000 | 1.37 | 8.083 | 2.85 | 14.083 | 1.37 | 8.167 | 2.85 | 14.167
                             2.000
                                                                                                                  4.43 | 20.00
3.17 | 20.08
                                                                                                                                                     1.90
                             2.083
                                                                                                                                                                                                                                                                                                                             RUNOFF COEFFICIENT = 0.541
                             2.167
                                                                                                                   3.17 | 20.17
                                               1.37 | 8.250
1.37 | 8.333
                                                                                                                                                                                                                                                                                                                             (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                             2.333
                                                                               2.85 | 14.333
                                                                                                                   3.17 | 20.33
                                               1.37 | 8.417
1.37 | 8.500
                                                                               2.85 |14.417
2.85 |14.500
                             2.417
                                               1.37 | 8.583
1.37 | 8.667
1.37 | 8.750
                             2.583
                                                                               2.85 |14.583
                                                                                                                   3.17 | 20.58
3.17 | 20.67
                                                                                                                                                                                                                                                                                                                       STANDHYD ( 0202) Area (ha)= 4.57
                                                                               2.85 14.750
                             2.750
                                                                                                                   3.17 | 20.75
                                                                                                                                                                                                                                                                                                                      ID= 1 DT= 5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
                             2.833
                                               1.37 | 8.833
1.37 | 8.917
                                                                               2.85 | 14.833
2.85 | 14.917
                                                                                                                   3.17 | 20.83
3.17 | 20.92
                             2.917
                                               1.37 | 9.000 | 2.85 | 15.000
1.37 | 9.083 | 3.38 | 15.083
1.37 | 9.167 | 3.38 | 15.167
                                                                                                                   3.17 | 21.00
3.17 | 21.08
                                                                                                                                                                                                                                                                                                                                                               IMPERVIOUS PERVIOUS (i)
                             3.000
                                                                                                                                                                                                                                                                                                                             Surface Area (ha)= 1.83
Dep. Storage (mm)= 2.00
Average Slope (%)= 5.00
                                                                                                                                                                                                                                                                                                                                                                                                                2.74
5.00
                             3.167
                                                                                                                 3.17 | 21.17
                                               1.37 | 9.250
1.37 | 9.333
1.37 | 9.417
                                                                                                                  3.17 | 21.25
3.17 | 21.33
3.17 | 21.42
                                                                                                                                                                                                                                                                                                                             Average Slope (%)= 5.00 5.00

Length (m)= 500.00 500.00

Mamings n = 0.013 0.250
                                                                               3.38 | 15.250
3.38 | 15.333
                             3.250
                                                                                                                                                                                                                                                                                                                                                                                                                    5.00
                                                                                3.38 115.417
                             3.417
                                                                                                                                                                                                                                                                                                                             Mannings n
                                               1.37 | 9.500
1.37 | 9.583
                                                                               3.38 | 15.500
3.80 | 15.583
                                                                                                                                                                                                                                                                                                                                   NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                             3.583
                                                                                                                 3.17 | 21.58
                                               1.37 | 9.667
1.37 | 9.750
                             3,667
                                                                                3.80 | 15.667
                                                                                                                   3.17 | 21.67
                             3.750
                                                                                3.80 | 15.750
                                                                                                                   3.17 | 21.75
                                                                                                                                                                                                                                                                                                                                              ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
hrs hm/hr | hrs mm/hr | hrs mm/hr |
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                                               1.37 | 9.833
1.37 | 9.917
1.37 | 10.000
                                                                                                                  3.17 | 21.83
3.17 | 21.92
3.17 | 22.00
                                                                               3.80 |15.833
3.80 |15.917
                             3.833
                             3.917
                                                                                 3.80 | 16.000
                             4.000
                                               1.69 |10.083
1.69 |10.167
                                                                                4.86 | 16.083
4.86 | 16.167
                                                                                                                   1.90 | 22.08
1.90 | 22.17
                             4.083
                                                                                                                                                                                                                                                                                                                                             0.083
                             4.167
                             4.250
                                                1.69 [10.250]
                                                                                 4.86 | 16.250
                                                                                                                   1.90 | 22.25
                                                                                                                                                                                                                                                                                                                                                               1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90
                                                1.69 |10.333
                                                                                 4.86 | 16.333
                                                                                                                                                                                                                                                                                                                                                               1.16 | 6.333
                                                                                                                                                                                                                                                                                                                                                                                               2.11 |12.333 | 15.21 | 18.33
                                                                                 4 86 16 417 1 90 22 42
                                                                                                                                                                                                                                                                                                                                                                                               2.11 | 12.417 | 15.21 | 18.42
                             4.417
                                               1 69 110 417
                                                                                                                                                                                                                                                                                                                                             0.417
                                                                                                                                                                                                                                                                                                                                                               1.16 | 6.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90
                                                                                                                                                                                                                                                                                                                                                                                               2.11 | 12.500 | 15.21 | 18.50
2.11 | 12.583 | 7.81 | 18.58
2.11 | 12.667 | 7.81 | 18.67
                                                1.69 |10.500
                                                                                 4.86 |16.500
                                                                                                                     1.90 | 22.50
                                                                                                                                                                                                                                                                                                                                                               1.16 | 6.500
1.16 | 6.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.90
                                                                                                                                                                                                                                                                                                                                             0.583
                                                                                 6.55 16.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.90
                             4.583
                                               1.69 | 10.583
                                                                                                                    1.90 | 22.58
                                                                                                                                                       1.27
                             4 667
                                                1 69 10 667
                                                                                 6.55 16.667
                                                                                                                     1.90 | 22.67
                                                                                                                                                                                                                                                                                                                                             0.667
                                                                                                                                                                                                                                                                                                                                                               1.16 | 6.667
                                               1.69 | 10.750 | 6.55 | 16.750 | 1.90 | 22.75
                                                                                                                                                                                                                                                                                                                                             0.750 1.16 6.750 2.11 12.750 7.81 18.75 1.90
[ile://V1...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                                                                                                                 7.81 | 18.83
7.81 | 18.92
                                                                                                                                                                                                                                                                                                                                             0,833 1.16 | 6.833 2.11 | 12.833
                                               1.16 | 6.917 | 2.11 | 12.917
                             0.917
                                                                                                                  7.81 | 19.00
5.70 | 19.08
                                                                                                                                                                                                                                                                                                                                             5.500 1.69 |11.500 10.14 |17.500
5.583 1.69 |11.583 43.93 |17.583
5.667 1.69 |11.667 43.93 |17.667
                                               1.16 | 7.000 | 2.11 | 13.000 | 1.16 | 7.083 | 2.11 | 13.083
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                             1.083
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                                                                                                                   5.70 | 19.17
                                                                                                                                                                                                                                                                                                                                                                                                                                     1.90 | 23.67
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                             1.333
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1.16 | 7.083 | 2.11 | 13.083 | 1.16 | 7.167 | 2.11 | 13.167 | 1.16 | 7.250 | 2.11 | 13.250 | 1.16 | 7.333 | 2.11 | 13.333 | 1.16 | 7.417 | 2.11 | 13.417 | 1.16 | 7.500 | 2.11 | 13.500 | 1.16 | 7.583 | 2.11 | 13.583 | 1.16 | 7.667 | 2.11 | 13.667 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 2.11 | 13.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 1.16 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.750 | 7.75
                                                                                                                                                                                                                                                                                                        5.867 1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.57 |
5.833 | 1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83 |
5.917 | 1.69 | 11.917 | 116.58 | 17.917 | 1.90 | 23.92 |
6.000 | 1.69 | 12.000 | 116.58 | 18.000 | 1.90 | 24.00
                                                                                   5.70 | 19.33
5.70 | 19.42
5.70 | 19.50
                                                                                                                                                                                                                                                                                                                                                              .s.58 46.37
40.00
9 (P
1.583
                                                                                    4.44 | 19.58
                                                                                                                                                                                                                                                                                        Max.Eff.Inten.(mm/hr)= 116.58 46.37

over (min) 5.00 40.00

Storage Coeff. (min)= 3.89 (ii) 37.08 (ii)

Unit Hyd. Tpeak (min)= 5.00 40.00
1.750
                                                                                  4.43 | 19.75
                                                                                                                     1.90
                 1.16 | 7.833
1.16 | 7.917
                                                2.11 |13.833
2.11 |13.917
                                                                                   4.43 | 19.83
4.43 | 19.92
1.833
                                                                                                                                                                                                                                                                                                                                                         5.00 40.00
1.917
                                                                                                                     1.90
                                                                                                                                                                                                                                                                                       Unit Hyd. Tpeak (min)= 5.00 40.00

Unit Hyd. peak (cms)= 0.25 0.03

*TOTALS*

PEAK FLOW (cms)= 0.47 0.21 0.555

TIME TO PEAK (lns)= 12.00 12.50 12.00

RUNOFF VOLUME (mm)= 103.60 55.62

TOTAL RAINFALL (mm)= 105.60 105.60

RUNOFF COEFFICIENT = 0.98 0.53 0
                 1.16 | 8.000
1.37 | 8.083
1.37 | 8.167
                                                2.11 |14.000
2.85 |14.083
                                                                                                                                                                                                                                                                                                                                                                                                              0.555
12.00
70.97
                                                                                                                                                                                                                                                                                                                                                                                                            0.555 (iii)
                                                 2.85 14.167
                                                                                   3.17 | 20.17
2.167
                 1.37 | 8.250
1.37 | 8.333
                                                2.85 |14.250
2.85 |14.333
                                                                                   3.17 | 20.25
3.17 | 20.33
2.333
                 1.37 | 8.417
1.37 | 8.500
                                                2.85 |14.417
2.85 |14.500
                                                                                   3.17 | 20.42
3.17 | 20.50
2.417
                                                                                                                                                                                                                                                                                                                                                                                                                          105 60
                 1.37 | 8.583
1.37 | 8.667
                                                2.85 | 14.583
2.85 | 14.667
                                                                                  3.17 | 20.58
3.17 | 20.67
2.583
                                                                                                                                                                                                                                                                                  ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
2,750
                 1.37 | 8.750
                                                2.85 | 14.750
                                                                                    3.17 | 20.75
                 1.37 | 8.833
1.37 | 8.917
1.37 | 9.000
                                                2.85 | 14.833
2.85 | 14.917
2.85 | 15.000
                                                                                  3.17 | 20.83
3.17 | 20.92
3.17 | 21.00
                                                                                                                                                                                                                                                                                          (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
2.833
3.000
                 1.37 | 9.083
                                                3.38 |15.083
3.38 |15.167
                                                                                   3.17 | 21.08
3.17 | 21.17
                                                                                                                                                                                                                                                                                                   THAN THE STORAGE COEFFICIENT.
3.083
                                                                                                                                                                                                                                                                                         (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
3.167
                 1.37 | 9.250
1.37 | 9.333
                                                3.38 | 15.250
3.38 | 15.333
3 250
                                                                                    3.17 21.25
3.333
                                                                                   3.17 21.33
3.417
                 1.37 | 9.417
                                                 3.38 | 15.417
                                                                                   3.17 | 21.42
                 1.37 | 9.500
1.37 | 9.583
                                                 3.38 |15.500
3.80 |15.583
                                                                                    3.17 | 21.58
3.583
                                                                                                                                                                                                                                                                                  | ADD HYD ( 0040)|
                                                                                                                                                                                                                                                                                      3.667
3.750
                 1.37 | 9.667
1.37 | 9.750
                                                 3.80 |15.667
3.80 |15.750
                                                                                   3.17 | 21.67
3.17 | 21.75
                 1.37 | 9.833
                                                3.80 | 15.833 | 3.17 | 21.83
3.80 | 15.917 | 3.17 | 21.92
3.833
4.000
                  1.37 110.000
                                                  3.80 | 16.000 | 3.17 | 22.00
4.86 | 16.083 | 1.90 | 22.08
                                                                                    3.17 | 22.00
                  1.69 10.083
                                                                                                                                                                                                                                                                                             ID = 3 ( 0040): 7.74 1.064 12.00 65.29
                                                  4.86 | 16.167
4.86 | 16.250
                                                                                    1.90 | 22.17
4.167
                 1.69 | 10.167
4.250
                                                                                                                                                                                                                                                                                         NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                  4.86 | 16.333
4.86 | 16.417
4.333
                  1.69 |10.333
4.417
                  1.69 10.417
                                                                                     1.90 | 22.42
4.500
                 1.69 | 10.500 | 4.86 | 16.500 | 1.90 | 22.50 | 1.69 | 10.583 | 6.55 | 16.583 | 1.90 | 22.58
                                                                                                                                                                                                                                                                                   RESERVOIR( 0032)| OVERFLOW IS OFF
                                                                                                                                                                                                                                                                                    IN= 2---> OUT= 1 |
4.583
                                                                                                                                                                                                                                                                                  6.55 | 16.667 | 1.90 | 22.67
6.55 | 16.750 | 1.90 | 22.75
4 667
                 1.69 10.667
                  1.69 | 10.750
                                                                                                                                                                                                                                                                                                                      0.0000 0.0000 | 0.1020
0.0400 0.1208 | 0.1160
0.0640 0.1775 | 0.1330
4.833
                 1.69 | 10.833
                                                  6.55 16.833
                                                                                     1.90 | 22.83
                                                                                                                       1.27
                                                                                                                                                                                                                                                                                                                                                                                            0.2824
                                                  6.55 | 16.917 | 1.90 | 22.92 | 6.55 | 17.000 | 1.90 | 23.00
                  1.69 | 10.917
                                                                                                                                                                                                                                                                                                                                                                                            0.3268
                                                                                                                                                                                                                                                                                                                                                                                                0.3659
                 1.69 11.000
5.000
                                                                                                                      1.27
                1.69 | 11.083 | 10.14 | 17.083 | 1.69 | 11.167 | 10.14 | 17.167
                                                                                     1.90 | 23.08
1.90 | 23.17
5.083
                                                                                                                                                                                                                                                                                                                       0.0790 0.2218 | 0.0000
                                                                                                                                                                                                                                                                                                                                                                                               0.0000
                                                                                                                                                                                                                                                                                                                               AREA OPEAK TPEAK R.V.
5.250 1.69 | 11.250 10.14 | 17.250 1.90 | 23.25
                                                                                                                       1.27
```

```
(ha) (cms) (hrs) (mm)
INFLOW: ID=2 ( 0040) 7.740 1.064 12.00 65.29
OUTFLOW: ID=1 ( 0032) 7.740 0.101 14.00 65.19
                                                                                                                                                          1 833
                                                                                                                                                          2.000
                                                                                                                                                          2.083
               PEAK FLOW REDUCTION [Qout/Qin](%)= 9.54
               TIME SHIFT OF PEAK FLOW
                                                        (min)=120.00
                                                                                                                                                          2.250
               MAXIMUM STORAGE USED
                                                                                                                                                          2.333
                                                        (ha.m.)= 0.2811
                                                                                                                                                          2.417
                                                                                                                                                          2.500
2.583
                                                                                                                                                          2.667
   | 1+2=3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | (D1=1 (0200): 20.32 1.885 12.25 61.67 | + ID2=2 (0032): 7.74 0.101 14.00 65.19
                                                                                                                                                          2.833
                                                                                                                                                          2.917
                                                                                                                                                          3.000
                                                                                                                                                          3 083
       ID = 3 ( 0001): 28.06 1.955 12.25 62.64
                                                                                                                                                          3.250
                                                                                                                                                          3.333
     NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                          3.500
                                                                                                                                                          3.583
   CALIB
                                                                                                                                                          3.667
   NASHYD ( 0215)| Area (ha)= 15.80 Curve Number (CN)= 83.0

ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00

U.H. Tp(hrs)= 0.70
                                                                                                                                                          3.833
  ID= 1 DT= 5.0 min | Ia
                                                                                                                                                          3 917
        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                          4.083
                                                                                                                                                          4.250
              ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN |
                                                                                                                                                          4.333
                                                                                                                                                          4.417
              4.500
                                                                                                                                                          4.583
4.667
             0.167
                     1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25
1.16 | 6.333 | 2.11 | 12.333 | 15.21 | 18.33
             0.250
                                                                                                                                                          4.750
             0.417
                      1.16 6.417
                                    2.11 12.417 15.21 18.42
                                                                                                                                                          4.917
                     1.16 | 6.500
1.16 | 6.583
                                    2.11 |12.417 | 13.21 | 18.42
2.11 |12.500 | 15.21 | 18.50
2.11 |12.583 | 7.81 | 18.58
2.11 |12.667 | 7.81 | 18.67
2.11 |12.750 | 7.81 | 18.75
                                                                                                                                                          5.083
             0.583
                                                                    1.90
                     1.16 | 6.667
1.16 | 6.750
             0.667
                                                                                                                                                          5 167
             0.750
                                                                     1.90
                                                                                                                                                          5.250
                     1.16 | 6.833
1.16 | 6.917
1.16 | 7.000
                                                     7.81 | 18.83
7.81 | 18.92
7.81 | 19.00
                                    2.11 |12.833
2.11 |12.917
             0.833
                                                                                                                                                          5.333
             0.917
             1.000
                                     2.11 13.000
                     1.16 | 7.083
1.16 | 7.167
                                    2.11 |13.083
2.11 |13.167
                                                     5.70 | 19.08
5.70 | 19.17
              1.083
                                                                                                                                                          5 583
             1.167
                     1.16 | 7.250
1.16 | 7.333
             1.250
                                     2 11 113 250
                                                     5.70 | 19.25
                                                                                                                                                          5.750
                                     2.11 |13.333
                                                     5.70 | 19.42
5.70 | 19.50
             1.417
                      1.16 7.417
                                     2 11 113 417
                                                                     1.90
                     1.16 | 7.500
                                     2.11 |13.500
                                     2.11 113.583
             1.583
                                                     4.44 | 19.58
                                                                     1.90
                     1.16 | 7.667 | 2.11 | 13.667 | 4.43 | 19.67 | 1.16 | 7.750 | 2.11 | 13.750 | 4.43 | 19.75
             1.667
PEAK FLOW (cms)= 1.124 (i)
TIME TO PEAK (hrs)= 12.583
      RUNOFF VOLUME (mm)= 66.309
TOTAL RAINFALL (mm)= 105.602
RUNOFF COEFFICIENT = 0.628
      (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
   NASHYD ( 0203)| Area (ha)= 1.61 Curve Number (CN)= 76.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                 --- U.H. Tp(hrs)= 0.24
        NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
```

```
1.69 |11.833 | 116.57 |17.833 | 1.90 | 23.83 | 1.69 |11.917 | 116.58 |17.917 | 1.90 | 23.92
             5.917
                       1.69 | 12.000 | 116.58 | 18.000 | 1.90 | 24.00
    Unit Hyd Qpeak (cms)= 0.862
                      1.37 | 8.833
1.37 | 8.917
                                          2.85 |14.833
2.85 |14.917
                                                              3.17 | 20.83
3.17 | 20.92
             3.000
                       1.37 | 9.000
                                          2.85 115 000
                                                               3.17 | 21.00
                        1.37 | 9.083
                                           3.38 |15.083
             3.167
                        1.37 | 9.167
                                           3.38 | 15.167
                                                               3.17 | 21.17
                       1.37 | 9.250
1.37 | 9.333
                                           3.38 | 15.250
3.38 | 15.333
             3.333
                                                               3.17 21.33
             3.417
3.500
                        1.37 | 9.417
1.37 | 9.500
                                           3.38 | 15.417
3.38 | 15.500
                                                               3.17 | 21.42
3.17 | 21.50
             3.583
                        1.37 | 9.583
                                           3.80 | 15.583
                                                               3.17 | 21.58
             3.667
3.750
                       1.37 | 9.667
                                          3.80 | 15.667
3.80 | 15.750
                                                              3.17 | 21.75
             3.833
                       1.37 | 9.833
1.37 | 9.917
                                           3.80 | 15.833
3.80 | 15.917
                                                              3.17 | 21.83
3.17 | 21.92
             3.917
                                           3.80 |16.000
4.86 |16.083
                                                               3.17 | 22.00
1.90 | 22.08
1.90 | 22.17
             4.000
                        1 37 110 000
              4.083
                         1.69 10.083
                        1.69 | 10.167
                                            4.86 16.167
             4.167
                       1.69 |10.250
1.69 |10.333
1.69 |10.417
                                           4.86 |16.250 | 1.90 | 22.25
4.86 |16.333 | 1.90 | 22.33
4.86 |16.417 | 1.90 | 22.42
             4 250
             4.333
             4 417
                                            4.86 |16.500
             4.583
                        1.69 10.583
                                           6.55 16.583 1.90 22.58
                        1.69 | 10.667
1.69 | 10.750
                                           6.55 | 16.667 | 1.90 | 22.67
6.55 | 16.750 | 1.90 | 22.75
             4.667
             4.750
                                                                                    1.27
                        1.69 | 10.833
1.69 | 10.917
                                           6.55 | 16.833 | 1.90 | 22.83
6.55 | 16.917 | 1.90 | 22.92
             4.833
                                            6.55 17.000 1.90 | 23.00
             5.000
                        1.69 111.000
             5.083
                        1.69 |11.083 | 10.14 |17.083 | 1.69 |11.167 | 10.14 |17.167
                                                                1.90 | 23.08
1.90 | 23.17
             5.167
                                                                1.90 | 23.25
1.90 | 23.33
             5.250
                        1.69 11.250 10.14 17.250
                        1.69 |11.333 | 10.14 |17.333
             5.417
                        1.69 | 11.417 | 10.14 | 17.417 | 1.90 | 23.42
                       1.69 |11.500 | 10.14 |17.500 | 1.69 |11.583 | 43.93 |17.583 | 1.69 |11.667 | 43.93 |17.667
                                                                1.90 | 23.50
             5.583
                                                                 1.90 | 23.58
             5 667
                                                                1.90 | 23.67
                                                                                     1.27
                        1.69 |11.750 43.93 |17.750
                      1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83 | 1.69 | 11.917 | 116.58 | 17.917 | 1.90 | 23.92
             5.833
                                                                                     1.27
             6.000 1.69 12.000 116.58 18.000 1.90 24.00
    Unit Hyd Qpeak (cms)= 0.256
    PEAK FLOW (cms)= 0.201 (i)
TIME TO PEAK (hrs)= 12.083
    RUNOFF VOLUME (mm)= 55.921
TOTAL RAINFALL (mm)= 105.602
RUNOFF COEFFICIENT = 0.530
    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
STANDHYD ( 0204) Area (ha)= 1.93
```

1.16 | 7.833 | 2.11 | 13.833 1.16 | 7.917 | 2.11 | 13.917

2.11 | 14.000

2.85 114.083

2.85 |14.167

2.85 114.250

2.85 |14.333 2.85 |14.417

2.85 |14.500 2.85 |14.583

2.85 14,667

2.85 114.833

2.85 |14.917 2.85 |15.000

3.38 | 15.083 3.38 |15.167

3 38 115 250

3.38 |15.333 3.38 |15.417

3.38 | 15.500

3.80 | 15.583

3.80 | 15.667

4.86 16.500

6.55 |16.583 6.55 |16.667

6.55 | 16.917

1.69 | 11.000 | 6.55 | 17.000 | 1.90 | 23.00 | 1.69 | 11.083 | 10.14 | 17.083 | 1.90 | 23.08

1.69 11.167 10.14 17.167 1.90 23.17

1.69 | 11.333 | 10.14 | 17.333 | 1.90 | 23.33 | 1.69 | 11.417 | 10.14 | 17.417 | 1.90 | 23.42

1.69 | 11.583 | 43.93 | 17.583 | 1.90 | 23.58 | 1.69 | 11.667 | 43.93 | 17.667 | 1.90 | 23.67 | 1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75

1.69 |11.250 | 10.14 |17.250

1.69 111.500 10.14 17.500

3.80 | 15.750 | 3.17 | 21.75 3.80 | 15.833 | 3.17 | 21.83

3.80 | 15.917 | 3.17 | 21.92 | 3.80 | 16.000 | 3.17 | 22.00 | 4.86 | 16.083 | 1.90 | 22.08

4.86 | 16.167 | 1.90 | 22.17 4.86 | 16.250 | 1.90 | 22.25

4.86 | 16.333 | 1.90 | 22.33 | 4.86 | 16.417 | 1.90 | 22.42

6.55 | 16.750 | 1.90 | 22.75 6.55 | 16.833 | 1.90 | 22.83

1.16 | 8,000

1.37 | 8.083

1.37 | 8.250

1.37 | 8.333

1.37 | 8.417

1.37 | 8.500 1.37 | 8.583

1.37 | 8,667

1.37 | 8.750

1.37 | 8.833

1.37 | 8.917 1.37 | 9.000

1.37 | 9.083 1.37 | 9.167

1.37 | 9.250

1.37 | 9.333

1.37 | 9.500

1.37 | 9.583

1.37 | 9.667

1.37 | 9.750 1.37 | 9.833

137 9 917 1.37 10.000

1.69 10.083

1.69 |10.167 1.69 |10.250

1.69 | 10.333 1.69 | 10.417

1.69 10.500

1.69 | 10.583 1.69 | 10.667

1.69 10.750 1.69 10.833

1.69 10.917

4.43 | 19.83 4.43 | 19.92

4.43 | 20.00

3.17120.25

3.17 | 20.42

3.17 | 20.67

3.17 | 20.83

3.17 21.00

3.17 | 21.08 3.17 | 21.17

3.17 | 21.25

3.17 | 21.50 3.17 | 21.58

3.17 | 21.67

1.90 | 22.50

1.90 | 22.58 1.90 | 22.67

1.90 | 22.92

1.90 | 23.25

1.90

1.27

1.27

1.27

1.27

1.27

```
- TRANSFORMED HYETOGRAPH -
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
         1.16 | 6.083 | 2.11 | 12.083 | 15.22 | 18.08 | 1.16 | 6.167 | 2.11 | 12.167 | 15.21 | 18.17
0.083
0.250
          1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25
                                                                         1.90
          1.16 | 6.333
1.16 | 6.417
1.16 | 6.500
                              2.11 |12.233 | 15.21 | 18.23
2.11 |12.417 | 15.21 | 18.42
2.11 |12.500 | 15.21 | 18.50
0.333
0.500
                                                                         1.90
0.583
          1.16 | 6.583
                              2.11 |12.583
2.11 |12.667
                                                   7.81 | 18.58
7.81 | 18.67
0.667
                                                                        1.90
          1.16 | 6.750
1.16 | 6.833
                              2.11 |12.750
2.11 |12.833
0.750
                                                    7.81 | 18.75
0.833
                                                    7.81 | 18.83
0.917
          1.16 | 6.917
1.16 | 7.000
1.16 | 7.083
                              2.11 112.917
                                                   7.81 | 18.92
7.81 | 19.00
5.70 | 19.08
                                                                        1.90
                               2.11 |13.000
1.083
                              2.11 | 13.083
                                                                        1.90
1.167
1.250
          1.16 | 7.167
1.16 | 7.250
                              2.11 |13.167
2.11 |13.250
                                                    5.70 | 19.17
5.70 | 19.25
          1.16 | 7.333
1.16 | 7.417
                                                    5.70 | 19.33
5.70 | 19.42
1.333
                              2.11 | 13.333
                                                                        1.90
                               2.11 13.417
          1.16 | 7.417

1.16 | 7.500

1.16 | 7.583

1.16 | 7.667

1.16 | 7.750

1.16 | 7.833

1.16 | 7.917
1.500
                               2 11 113 500
                                                    5 70 | 19 50
                                                                        1.90
1.583
                               2.11 |13.583
                               2.11 | 13.667 | 2.11 | 13.750
1.667
                                                    4.43 | 19.67
4.43 | 19.75
1.750
 .833
                               2.11 |13.833
                                                    4.43 19.83
1.917
                               2.11 | 13.917
                                                    4.43 | 19.92
                                                                        1.90
2.000
          1.16 | 8.000
1.37 | 8.083
                              2.11 | 14.000 | 4.43 | 20.00
                              2.85 |14.083
2.083
                                                   3.17 | 20.08
                              2.85 |14.167
2.85 |14.250
2 167
           1.37 | 8.167
                                                    3.17 | 20.17
           1.37 | 8.250
2.333
           1.37 | 8.333
                               2.85 14.333
                                                    3.17 | 20.33
                                                                        1.27
          1.37 | 8.417
1.37 | 8.500
                               2.85 14.417
2.417
                              2.85 14.500
                                                   3.17 | 20.50
2.500
                                                                        1.27
          1.37 | 8.583
1.37 | 8.667
                              2.85 |14.583
2.85 |14.667
                                                  3.17 | 20.58
3.17 | 20.67
2.583
                                                                       1.27
2.750
          1.37 | 8.750 | 2.85 | 14.750 | 3.17 | 20.75 | 1.27
```

```
3.333 1.37 | 9.333 3.38 | 15.333 3.17 | 21.33
3.417 1.37 | 9.417 3.38 | 15.417 3.17 | 21.42
   |ID=1 DT=5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
                          IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                                          3.500
                                                                                                                                                                                                    1.37 | 9.500
                                                                                                                                                                                                                      3.38 | 15.500
                                                                                                                                                                                                                                          3.17 | 21.50
                                                                                                                                                                                                                                                             1.27
      Surface Area (ha)= 1.16

Dep. Storage (mm)= 2.00

Average Slope (%)= 1.00
                                                                                                                                                                                                                                          3.17 | 21.58
3.17 | 21.67
                                                                                                                                                                                          3.583
                                                                                                                                                                                                    1.37 | 9.583
                                                                                                                                                                                                                       3.80 15.583
                                                                                                                                                                                                                       3.80 | 15.667
      Average Slope (%)= 1.00
Length (m)= 300.00
Mannings n = 0.013
                                                       1.00
                                                                                                                                                                                          3.750
                                                                                                                                                                                                    1.37 | 9.750
                                                                                                                                                                                                                      3.80 115.750
                                                                                                                                                                                                                                          3.17 | 21.75
                                                                                                                                                                                                    1.37 | 9.833
                                                                                                                                                                                                                       3.80 | 15.833
                                                                                                                                                                                          3.833
                                                  0.250
                                                                                                                                                                                          3.917
                                                                                                                                                                                                                       3.80 | 15.917
                                                                                                                                                                                                                                          3.17 | 21.92
                                                                                                                                                                                                                                                             1.27
                                                                                                                                                                                                                       3.80 | 16.000 | 3.17 | 22.00 | 4.86 | 16.083 | 1.90 | 22.08 | 4.86 | 16.167 | 1.90 | 22.17
                                                                                                                                                                                                    1.37 |10.000
1.69 |10.083
          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                          4.083
                                                                                                                                                                                          4.167
                                                                                                                                                                                                    1.69 10.167
                                                                                                                                                                                                     1.69 10.250
                                                                                                                                                                                                                       4.86 |16.250
4.86 |16.333
                ---- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.083 1.16 | 6.083 2.11 | 12.083 15.22 | 18.08 1.90 |
0.167 1.16 | 6.167 2.11 | 12.167 15.21 | 18.17 1.90
                                                                                                                                                                                                                                           1.90 | 22.33
                                                                                                                                                                                          4.333
                                                                                                                                                                                                    1.69 [10.333
                                                                                                                                                                                                                                                              1.27
                                                                                                                                                                                          4.417
                                                                                                                                                                                                    1.69 | 10.417 | 4.86 | 16.417 | 1.90 | 22.42 | 1.69 | 10.500 | 4.86 | 16.500 | 1.90 | 22.50
                                                                                                                                                                                          4.500
                                                                                                                                                                                                                      6.55 | 16.583
6.55 | 16.667
6.55 | 16.750
                                                                                                                                                                                                    1.69 | 10.583
1.69 | 10.667
                                                                                                                                                                                          4 583
                                                                                                                                                                                                                                          1.90 | 22.58
                                                                                                                                                                                          4.667
                          1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25

1.16 | 6.333 | 2.11 | 12.333 | 15.21 | 18.33

1.16 | 6.417 | 2.11 | 12.417 | 15.21 | 18.42
                0.250
                                                                                    1 90
                                                                                                                                                                                          4.750
                                                                                                                                                                                                    1.69 110.750
                                                                                                                                                                                                                                           1.90 | 22.75
                                                                                                                                                                                                                                                              1.27
                                                                                                                                                                                                    1.69 | 10.833
1.69 | 10.917
                                                                                                                                                                                                                       6.55 |16.833 | 6.55 |16.917
                                                                                                                                                                                                                                           1.90 | 22.83
                                                                                                                                                                                          4.833
                                                                                                                                                                                          4.917
                0.417
                          1.16 | 6.500 | 2.11 | 12.500 | 15.21 | 18.50 | 1.16 | 6.583 | 2.11 | 12.583 | 7.81 | 18.58 | 1.16 | 6.667 | 2.11 | 12.667 | 7.81 | 18.67
                0.500
                                                                                   1.90
                                                                                                                                                                                          5.000
                                                                                                                                                                                                    1.69 11.000 6.55 17.000 1.90 23.00
                                                                                                                                                                                                                                                              1.27
                                                                                                                                                                                          5.083
                                                                                                                                                                                                     1.69 | 11.083 | 10.14 | 17.083
                                                                                                                                                                                                                                            1.90 | 23.08
                                                                                                                                                                                                    1.69 | 11.167 | 10.14 | 17.167 | 1.90 | 23.17
                0.667
                                                                                   1.90
                                                                                                                                                                                          5.167
                                                                                                                                                                                                                                                              1.27
                                                                                                                                                                                                    1.69 | 11.250 | 10.14 | 17.250 | 1.90 | 23.25

1.69 | 11.333 | 10.14 | 17.333 | 1.90 | 23.33

1.69 | 11.417 | 10.14 | 17.417 | 1.90 | 23.42
                          1.16 | 6.750
1.16 | 6.833
                                                               7.81 | 18.75
7.81 | 18.83
                                                                                                                                                                                          5.333
                0.833
                                           2.11 12.833
                                                                                   1.90
               0.917
1.000
                          1.16 | 6.917
1.16 | 7.000
                                           2.11 |12.917
2.11 |13.000
                                                               7.81 | 18.92
7.81 | 19.00
                                                                                                                                                                                          5 417
                                                                                                                                                                                                   1.69 | 11.417 | 10.14 | 17.417 | 1.90 | 23.42 | 1.69 | 11.500 | 10.14 | 17.500 | 1.90 | 23.50 | 1.69 | 11.583 | 43.93 | 17.583 | 1.90 | 23.58 | 1.69 | 11.667 | 43.93 | 17.667 | 1.90 | 23.67 | 1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75
                          1.16 | 7.083
1.16 | 7.167
1.16 | 7.250
                                                               5.70 | 19.08
5.70 | 19.17
5.70 | 19.25
                1.083
                                           2.11 | 13.083
                                                                                   1.90
                                                                                                                                                                                          5.583
                                                                                                                                                                                                                                                              1.27
                                                                                                                                                                                           5.667
                                           2.11 13.250
                1.250
                                                                                   1.90
                                                                                                                                                                                          5.750
                                                                                                                                                                                                                                                              1.27
                1.333
                          1.16 | 7.333
1.16 | 7.417
                                            2.11 |13.333
2.11 |13.417
                                                                5.70 | 19.33
5.70 | 19.42
                                                                                                                                                                                          5.833 1.69 |11.833 116.57 |17.833 1.90 | 23.83
5.917 1.69 |11.917 116.58 |17.917 1.90 | 23.92
                1.417
                                                                                   1.90
                         1.16 | 7.417

1.16 | 7.500

1.16 | 7.583

1.16 | 7.667

1.16 | 7.750

1.16 | 7.833

1.16 | 7.917
                                                               5.70 | 19.50
4.44 | 19.58
4.43 | 19.67
                1.500
1.583
                                           2.11 |13.500
2.11 |13.583
                                                                                                                                                                                          6.000 1.69 | 12.000 116.58 | 18.000 1.90 | 24.00 1.27
                                                                                                                                                                                                                  116.58 50.65
                                                                                                                                                                                 Max.Eff.Inten.(mm/hr)=
                1.667
                                            2.11 | 13.667
                                                                                   1.90
                                                                                                                                                                                 over (min) 5.00 45.00
Storage Coeff. (min)= 4.64 (ii) 42.85 (ii)
Unit Hyd. Tpeak (min)= 5.00 45.00
                                           2.11 |13.750
2.11 |13.833
                                                               4.43 | 19.75
4.43 | 19.83
                1.750
                                                                                   1.90
                1.833
                                                                                                                                                                                                                    5.00 45.00
0.22 0.03
*TOTALS*
                                                               4.43 19.92
                1.917
                                            2.11 13.917
                                                                                   1.90
                          1.16 | 8.000
                                            2.11 |14.000
                                                                                                                                                                                 Unit Hyd. peak (cms)=
                          1.37 | 8.083
                                                               3.17 | 20.08
                2.083
                                           2.85 | 14.083
                                                                                                                                                                                1.37 | 8.167
1.37 | 8.250
                                           2.85 | 14.167
2.85 | 14.250
                2.167
                                                                3.17 | 20.17
                                                                                                                                                                                                                                                  0.317 (iii)
                2.250
                                                                3.17 | 20.25
                          1.37 | 8.333
1.37 | 8.417
1.37 | 8.500
                                                               3.17 | 20.33
3.17 | 20.42
3.17 | 20.50
                                                                                                                                                                                                                                                      80.01
                                           2.85 | 14.333
2.85 | 14.417
                2.333
                2.417
                2.500
                                            2.85 | 14.500
                          1.37 | 8.583
                                            2.85 |14.583
2.85 |14.667
                                                               3.17 | 20.58
3.17 | 20.67
                2.583
                                                                                                                                                                             ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                2.667
                2.750
                          1.37 | 8.750
                                            2.85 |14.750
                                                                3.17 | 20.75
                          1.37 | 8.833
                                            2.85 |14.833
                                                                                                                                                                                  (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                               3.17 | 20.92
3.17 | 21.00
                                                                                                                                                                                 CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
                2.917
                          1.37 | 8.917
                                            2 85 114 917
                                                                                   1.27
                          1.37 | 9.000
                                            2.85 |15.000
                                                               3.17 | 21.08
                3.083
                          1.37 | 9.083
                                            3.38 | 15.083
                                                                                   1.27
                          1.37 | 9.167 | 3.38 | 15.167 | 3.17 | 21.17 | 1.37 | 9.250 | 3.38 | 15.250 | 3.17 | 21.25
                3 167
                                                                                                                                                                                 (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
ADD HYD ( 0042)
    0.167
                                                                                                                                                                                                   1.16 | 6.250 | 2.11 | 12.250 | 15.21 | 18.25
1.16 | 6.333 | 2.11 | 12.333 | 15.21 | 18.33
                                                                                                                                                                                          0.333
                                                                                                                                                                                                                                                              1.90
                                                                                                                                                                                                    1.16 | 6.417
1.16 | 6.500
                                                                                                                                                                                                                      2.11 |12.417 | 15.21 | 18.42
2.11 |12.500 | 15.21 | 18.50
                                                                                                                                                                                          0.417
                                                                                                                                                                                                                                         7.81 | 18.58
7.81 | 18.67
7.81 | 18.75
7.81 | 18.83
7.81 | 18.92
         ID = 3 ( 0042): 3.54 0.495 12.00 69.05
                                                                                                                                                                                          0.583
                                                                                                                                                                                                    1.16 | 6.583
                                                                                                                                                                                                                      2.11 |12.583
                                                                                                                                                                                                    1.16 | 6.667
                                                                                                                                                                                                                      2.11 |12.667
                                                                                                                                                                                          0.667
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                          0.750
                                                                                                                                                                                                                                                             1.90
                                                                                                                                                                                          0.833
                                                                                                                                                                                                    1.16 | 6.833
1.16 | 6.917
                                                                                                                                                                                                                      2.11 |12.833
2.11 |12.917
                                                                                                                                                                                                                                                             1.90
                                                                                                                                                                                          0.917
                                                                                                                                                                                                    1.16 | 7.000
1.16 | 7.083
1.16 | 7.167
                                                                                                                                                                                                                                          7.81 | 19.00
5.70 | 19.08
5.70 | 19.17
                                                                                                                                                                                          1.000
                                                                                                                                                                                                                      2.11 13.000
                                                                                                                                                                                                                      2.11 |13.083
2.11 |13.167
   ADD HYD ( 0042)
    3+2=1 | AREA QPEAK TPEAK R.V.
                                                                                                                                                                                                                                                             1.90
                                                                                                                                                                                          1.167
                                                                                                                                                                                                   1.16 | 7.167

1.16 | 7.250

1.16 | 7.333

1.16 | 7.417

1.16 | 7.500

1.16 | 7.583
       (ha) (cms) (hrs) (mm)

ID1=3 ( 0042): 3.54 0.495 12.00 69.05

+ ID2=2 ( 0215): 15.80 1.124 12.58 66.31
                                                                                                                                                                                                                      2.11 |13.250
2.11 |13.333
                                                                                                                                                                                                                                          5.70 | 19.25
5.70 | 19.33
5.70 | 19.42
                                                                                                                                                                                          1.250
                                                                                                                                                                                                                                                             1.90
                                                                                                                                                                                          1.333
                                                                                                                                                                                          1 417
                                                                                                                                                                                                                      2 11 113 417
                                                                                                                                                                                                                                         5.70 | 19.50
4.44 | 19.58
                                                                                                                                                                                          1.583
                                                                                                                                                                                                                      2.11 13.583
        ID = 1 ( 0042): 19.34 1.300 12.50 66.81
                                                                                                                                                                                                                                                             1.90
                                                                                                                                                                                                    1.16 | 7.667
1.16 | 7.750
                                                                                                                                                                                                                      2.11 |13.667
2.11 |13.750
                                                                                                                                                                                                                                          4.43 | 19.67
4.43 | 19.75
                                                                                                                                                                                          1.667
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                          1.750
                                                                                                                                                                                                                                                             1.90
                                                                                                                                                                                           1.833
```

RESERVOIR( 0025) OVERFLOW IS OFF

0.3900

CALIR

| IN= 2---> OUT= 1 | | DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE

0.8100

PEAK FLOW REDUCTION [Qout/Qin](%)= 48.41

MAXIMUM STORAGE USED (ha.m.)= 0.4543

NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

0.5932

1.1965

(min) = 65.00

- (cms) (ha.m.) | (cms) (ha.m.) 0.0000 0.0000 | 0.6300 0.4548 0.2600 0.1908 | 0.7100 0.5242

0.2842

0.4900 0.3533 | 1.4000

TIME SHIFT OF PEAK FLOW

```
1.16 | 7.833
1.16 | 7.917
                          2.11 |13.833
2.11 |13.917
                                             4.43 | 19.83
4.43 | 19.92
         1.16 | 8.000
                                            4.43 | 20.00
2.000
                          2.11 14.000
2.083
         1.37 | 8.083
1.37 | 8.167
                          2.85 |14.083
2.85 |14.167
                                             3.17 | 20.08
2.167
2.250
         1.37 | 8.250
                          2.85 | 14.250
                                             3.17 | 20.25
2.333
         1.37 | 8.333
                           2.85 |14.333
2.417
         1.37 | 8.417
                           2.85 114,417
                                             3.17 | 20.42
2.500
2.583
         1.37 | 8.500
1.37 | 8.583
                          2.85 | 14.500
2.85 | 14.583
                                             3.17 | 20.50
                                             3.17 | 20.58
2.667
         1.37 | 8.667
                           2.85 14 667
                                             3.17 | 20.67
                           2.85 |14.750
2.833
         1.37 | 8.833
                          2.85 | 14.833
                                             3.17 | 20.83
          1.37 | 8.917
                           2.85 |14.917
3.000
         1.37 | 9.000
                           2.85 | 15.000
                                             3.17 | 21.00
         1.37 | 9.083
1.37 | 9.167
1.37 | 9.250
                          3.38 |15.083
3.38 |15.167
                                             3.17 | 21.08
3.17 | 21.17
3.083
3.250
                           3.38 | 15.250
                                             3.17 | 21.25
         1.37 | 9.333
1.37 | 9.417
                           3.38 |15.333
3.38 |15.417
                                             3.17 | 21.33
3.17 | 21.42
3.333
3.417
3.500
         1.37 | 9.500
                           3.38 | 15.500
                                             3.17 | 21.50
3.17 | 21.58
         1.37 | 9.583
                           3.80 15.583
                                             3.17 | 21.67
3.17 | 21.75
3.667
         1.37 | 9.667
                           3.80 | 15.667
          1.37 | 9.750
                           3.80 | 15.750
3.833
         1.37 | 9.833
                           3.80 | 15.833
                                             3.17 | 21.83
                                                               1.27
                          3.80 | 15.917 | 3.17 | 21.92
3.80 | 16.000 | 3.17 | 22.00
3 917
         1.37 9.917
         1.37 10.000
4.000
        1.69 | 10.083 | 4.86 | 16.083 | 1.90 | 22.08 | 1.69 | 10.167 | 4.86 | 16.167 | 1.90 | 22.17
4.083
                                                               1.27
4.250
        1.69 10.250 4.86 16.250 1.90 22.25
```

```
2.11 | 12.500 | 15.21 | 18.50
2.11 | 12.583 | 7.81 | 18.58
2.11 | 12.667 | 7.81 | 18.67
                                                                   6.55 |16.583
6.55 |16.667
                                                                                                  1.90 | 22.58
                                                                                                                                                                                                                                                                                                       1.16 | 6.667
                        4.667
                                        1.69 10.667
                        4.750
                                       1.69 110 750 6 55 116 750 1.90 1.22 75
                                                                                                                                                                                                                                                                                       0.750
                                                                                                                                                                                                                                                                                                     1.16 | 6.750
                                                                                                                                                                                                                                                                                                                                 2.11 [12.750]
                                                                                                                                                                                                                                                                                                                                                               7.81 | 18.75
                                                                    6.55 | 16.833
                                                                                                                                                                                                                                                                                                      1.16 6.833
                                                                                                                                                                                                                                                                                                                                 2.11 |12.833
                                                                                                                                                                                                                                                                                                                                                               7.81 | 18.83
7.81 | 18.92
                                                                                                                                                                                                                                                                                                      1.16 6.917
                        4.917
                                        1.69 10.917
                                                                    6.55 16.917
                                                                                                  1.90 | 22.92
                                                                                                                                                                                                                                                                                       0.917
                                                                                                                                                                                                                                                                                                                                                                                            1.90
                                                                                                                                                                                                                                                                                                     1.16 | 7.000
1.16 | 7.083
1.16 | 7.167
                                       1.69 | 11.000 | 6.55 | 17.000 | 1.69 | 11.083 | 10.14 | 17.083
                                                                                                                                                                                                                                                                                                                                 2.11 |13.000
2.11 |13.083
                                                                                                                                                                                                                                                                                                                                                               7.81 | 19.00
5.70 | 19.08
                                                                                                                                                                                                                                                                                        1.083
                        5.083
                                                                                                  1.90 | 23.08
                                                                                                                              1.27
                        5.167
                                       1.69 11.167 10.14 17.167
                                                                                                  1.90 | 23.17
                                                                                                                                                                                                                                                                                       1.167
                                                                                                                                                                                                                                                                                                                                  2.11 13.167
                                                                                                                                                                                                                                                                                                                                                               5.70 | 19.17
                                                                   10.14 17.250
                                                                                                                                                                                                                                                                                                      1.16 | 7.250
1.16 | 7.333
                                        1.69 11.250
                                                                                                                                                                                                                                                                                                                                                               5.70 | 19.33
                        5 333
                                       1.69 111.333 10.14 17.333 1.90 | 23.33
                                                                                                                              1.27
                                                                                                                                                                                                                                                                                        1.333
                                                                                                                                                                                                                                                                                                                                  2.11 | 13.333
                                                                                                                                                                                                                                                                                        1.417
                                        1.69 |11.417 | 10.14 |17.417
                                                                                                                                                                                                                                                                                                     1.16 | 7.417
1.16 | 7.500
                                                                                                                                                                                                                                                                                                                                 2.11 |13.417
2.11 |13.500
                                                                                                                                                                                                                                                                                                                                                             5.70 | 19.42
5.70 | 19.50
                                       1.69 11.500 10.14 17.500 1.90 | 23.50
                                                                                                                                                                                                                                                                                        1.500
                        5.500
                                                                                                                              1.27
                                                                                                                                                                                                                                                                                                     1.16 | 7.583
1.16 | 7.667
1.16 | 7.750
                                       1.69 |11.583 43.93 |17.583
1.69 |11.667 43.93 |17.667
                                                                                                 1.90 | 23.58
1.90 | 23.67
                                                                                                                                                                                                                                                                                                                                                             4.44 | 19.58
4.43 | 19.67
                        5 583
                                                                                                                                                                                                                                                                                        1.583
                                                                                                                                                                                                                                                                                                                                 2.11 13.583
                                                                                                                                                                                                                                                                                                                                   2.11 |13.667
                        5.667
                                       1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75 | 1.69 | 11.833 | 116.57 | 17.833 | 1.90 | 23.83 | 1.69 | 11.917 | 116.58 | 17.917 | 1.90 | 23.92
                        5.750
                                                                                                                              1 27
                                                                                                                                                                                                                                                                                        1.750
                                                                                                                                                                                                                                                                                                                                  2.11 [13.750]
                                                                                                                                                                                                                                                                                                                                                               4.43 | 19.75
                                                                                                                                                                                                                                                                                                      1.16 | 7.833
                                                                                                                                                                                                                                                                                                                                 2.11 |13.833
2.11 |13.917
                                                                                                                                                                                                                                                                                        1.833
                        5.917
                        6.000 1.69 | 12.000 116.58 | 18.000 1.90 | 24.00 1.27
                                                                                                                                                                                                                                                                                       2.000
                                                                                                                                                                                                                                                                                                      1.16 | 8.000
                                                                                                                                                                                                                                                                                                                                 2.11 14.000
                                                                                                                                                                                                                                                                                                                                                             4.43 | 20.00
3.17 | 20.08
                                                                                                                                                                                                                                                                                                                                 2.85 | 14.083
2.85 | 14.167
                                                                                                                                                                                                                                                                                                       1.37 | 8.083
           Unit Hyd Qpeak (cms)= 0.245
                                                                                                                                                                                                                                                                                       2.167
                                                                                                                                                                                                                                                                                                       1.37 | 8.167
                                                                                                                                                                                                                                                                                                                                                               3.17 | 20.17
                                                                                                                                                                                                                                                                                                      1.37 | 8.250
1.37 | 8.333
                                                                                                                                                                                                                                                                                                                                 2.85 |14.250
          PEAK FLOW (cms)= 0.293 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 63.181
TOTAL RANFALL (mm)= 105.602
RUNOFF COEFFICIENT = 0.598
                                                                                                                                                                                                                                                                                        2.333
                                                                                                                                                                                                                                                                                                                                 2.85 | 14.333
                                                                                                                                                                                                                                                                                                                                                               3.17 | 20.33
                                                                                                                                                                                                                                                                                                                                                               3.17 | 20.42
3.17 | 20.50
                                                                                                                                                                                                                                                                                       2 417
                                                                                                                                                                                                                                                                                                       1 37 | 8 417
                                                                                                                                                                                                                                                                                                                                  2 85 114 417
                                                                                                                                                                                                                                                                                                                                  2.85 |14.500
                                                                                                                                                                                                                                                                                       2.583
                                                                                                                                                                                                                                                                                                      1.37 | 8.583
                                                                                                                                                                                                                                                                                                                                 2.85 | 14.583
                                                                                                                                                                                                                                                                                                                                                               3.17 | 20.58
                                                                                                                                                                                                                                                                                                      1.37 | 8.667
1.37 | 8.750
                                                                                                                                                                                                                                                                                                                                 2.85 |14.667
2.85 |14.750
                                                                                                                                                                                                                                                                                        2.667
                                                                                                                                                                                                                                                                                       2.750
                                                                                                                                                                                                                                                                                                                                                               3.17 | 20.75
           (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                       2.833
                                                                                                                                                                                                                                                                                                     1.37 | 8.833
1.37 | 8.917
                                                                                                                                                                                                                                                                                                                                 2.85 | 14.833 | 3.17 | 20.83 | 2.85 | 14.917 | 3.17 | 20.92
                                                                                                                                                                                                                                                                                        2.917
                                                                                                                                                                                                                                                                                        3.000
                                                                                                                                                                                                                                                                                                       1.37 | 9.000
                                                                                                                                                                                                                                                                                                                                  2.85 | 15.000
                                                                                                                                                                                                                                                                                                                                                               3.17 | 21.00
                                                                                                                                                                                                                                                                                                      1.37 | 9.083
1.37 | 9.167
                                                                                                                                                                                                                                                                                                                                 3.38 |15.083
3.38 |15.167
                                                                                                                                                                                                                                                                                                                                                               3.17 | 21.08
3.17 | 21.17
     CALIB
                                                                                                                                                                                                                                                                                        3.167
     |STANDHYD ( 0220)| Area (ha)= 5.63
|ID=1 DT= 5.0 min | Total Imp(%)= 42.00 Dir. Conn (%)= 34.00
                                                                                                                                                                                                                                                                                                                                 3.38 | 15.250 | 3.17 | 21.25
3.38 | 15.333 | 3.17 | 21.33
                                                                                                                                                                                                                                                                                       3.250
                                                                                                                                                                                                                                                                                                      1.37 | 9.250
                                                                                                                                                                                                                                                                                                       1.37 9.333
                                                                                                                                                                                                                                                                                       3.417
                                                                                                                                                                                                                                                                                                       1.37 | 9.417
                                                                                                                                                                                                                                                                                                                                  3.38 | 15.417
                                                                                                                                                                                                                                                                                                                                                               3.17 | 21.42
                                                                                                                                                                                                                                                                                                     1.37 | 9.500
1.37 | 9.583
                                                                                                                                                                                                                                                                                                                                  3.38 | 15.500 | 3.17 | 21.50
                                       IMPERVIOUS PERVIOUS (i)
          3.583
                                                                                                                                                                                                                                                                                                                                  3.80 15.583
                                                                                                                                                                                                                                                                                                                                                              3.17 | 21.58
                                                                                                                                                                                                                                                                                                                                 3.80 | 15.667 | 3.17 | 21.67 | 3.80 | 15.750 | 3.17 | 21.75
                                                                                                                                                                                                                                                                                       3 667
                                                                                                                                                                                                                                                                                                      1.37 | 9.667
                                                                                                                                                                                                                                                                                                       1.37 | 9.750
                                                                                                                                                                                                                                                                                       3.750
                                                                                                                                                                                                                                                                                                                                 3.80 | 15.833 | 3.17 | 21.83 | 3.80 | 15.917 | 3.17 | 21.92
                                                                                                                                                                                                                                                                                       3.833
                                                                                                                                                                                                                                                                                                      1.37 | 9.833
                                                                                                                                                                                                                                                                                                       1.37 9.917
                                                                                                                                                                                                                                                                                                       1,37 10,000
                                                                                                                                                                                                                                                                                                                                   3.80 | 16.000 | 3.17 | 22.00
                                                                                                                                                                                                                                                                                        4.000
               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                       4.083
                                                                                                                                                                                                                                                                                                      1.69 10.083 4.86 16.083 1.90 22.08
                                                                                                                                                                                                                                                                                                                                   4.86 |16.167
                                                                                                                                                                                                                                                                                       4.167
                                                                                                                                                                                                                                                                                                       1.69 10.167
                                                                                                                                                                                                                                                                                       4.250
                                                                                                                                                                                                                                                                                                       1.69 10.250
                                                                                                                                                                                                                                                                                                                                   4.86 16.250
                                                                                                                                                                                                                                                                                                                                                                1.90 | 22.25
                                                                                                                                                                                                                                                                                                                                                                                             1.27
                                                                                                                                                                                                                                                                                                                                   4.86 | 16.333
                                                                                                                                                                                                                                                                                                       1.69 10.333
                                                  TRANSFORMED HYETOGRAPH -
                       TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                       4.417
                                                                                                                                                                                                                                                                                                       1.69 10.417
                                                                                                                                                                                                                                                                                                                                   4.86 | 16.417 | 1.90 | 22.42
                                                                                                                                                                                                                                                                                                                                                                                             1.27
                                                                                                                                                                                                                                                                                                      1.69 | 10.500 | 4.86 | 16.500 | 1.90 | 22.50 | 1.69 | 10.583 | 6.55 | 16.583 | 1.90 | 22.58
                                                                                                                                                                                                                                                                                                                                                                                             1.27
                                                                                                                                                                                                                                                                                       4.583
                                                                                                                                                                                                                                                                                       4 667
                                                                                                                                                                                                                                                                                                       1.69 110.667 6.55 116.667
                                                                                                                                                                                                                                                                                                                                                               1.90 | 22.67
                                                                                                                                                                                                                                                                                                     1.69 | 10.750 | 6.55 | 16.750 | 1.90 | 22.75
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed
                        4.833 1.69 | 10.833 6.55 | 16.833 1.90 | 22.83 1.27
4.917 1.69 | 10.917 6.55 | 16.917 1.90 | 22.92 1.27
                                                                                                                                                                                                                                                                                          MAXIMUM STORAGE USED (ha.m.)= 0.1038
                                       1.69 | 11.000 | 6.55 | 17.000 | 1.90 | 23.00 | 1.27
                                       1.69 |11.083 | 10.14 |17.083
                                                                                                  1.90 | 23.08
                        5.083
                                                                                                                              1.27
                        5.167
                                        1.69 | 11.167 | 10.14 | 17.167
                                                                                                  1.90 | 23.17
                                        1.69 |11.250 10.14 |17.250
                                                                                                                                                                                                                                                                   5.333
                                       1.69 111.333 10.14 117.333 1.90 | 23.33
                                       1.69 |11.417 | 10.14 |17.417 | 1.69 |11.500 | 10.14 |17.500 |
                                                                                                 1.90 | 23.42
1.90 | 23.50
                                                                                                                                                                                                                                                                           (ha) (cms) (hrs) (mm)

ID1=1 ( 0225): 3.98 0.293 12.50 63.18

+ ID2=2 ( 0025): 19.34 0.629 13.58 66.80
                        5.417
                         5.500
                                      1.69 | 11.583 | 43.93 | 17.583 | 1.90 | 23.58 | 1.27 | 1.69 | 11.667 | 43.93 | 17.667 | 1.90 | 23.67 | 1.27 | 1.69 | 11.750 | 43.93 | 17.750 | 1.90 | 23.75 | 1.27
                        5.583
                        5.750
                                                                                                                                                                                                                                                                            ID = 3 ( 0002): 23.32 0.788 13.08 66.18
                                       1.69 |11.833 | 116.57 |17.833 | 1.90 | 23.83 | 1.27 | 1.69 |11.917 | 116.58 |17.917 | 1.90 | 23.92 | 1.27
                                                                                                                                                                                                                                                                         NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                        5.917
                        6.000 1.69 12.000 116.58 18.000 1.90 24.00 1.27
           Max.Eff.Inten.(mm/hr)= 116.58
                                                                                    99.30
          Max.E.H.niten.(min/mr)= 116.58 99.30 over (min) 5.00 15.00 Storage Coeff. (min)= 3.38 (ii) 10.46 (ii) Unit Hyd. Tpeak (min)= 5.00 15.00 Unit Hyd. peak (cms)= 0.26 0.99 *TOTALS*
                                                                                                                                                                                                                                                                   | ADD HYD ( 0002)|
| 3 + 2 = 1 | AREA QPEAK TPEAK R.V.
                                                                                                                                                                                                                                                                           (ha) (cms) (hrs) (nm)

ID1=3 ( 0002): 23.32 0.788 13.08 66.18

+ ID2=2 ( 0050): 5.63 0.581 12.17 78.27

        **TOTALS**

        PEAK FLOW (cms)=
        0.62
        0.62
        1.181 (iii)

        TIME TO PEAK (hrs)=
        12.00
        12.08
        12.00

        RUNOFF VOLUME (mm)=
        103.60
        65.24
        78.28

        TOTAL RAINFALL (mm)=
        105.60
        105.60
        105.60

        RUNOFF COEFFICIENT
        0.98
        0.62
        0.74

                                                                                                                                                                                                                                                                            ID = 1 ( 0002): 28.95 1.159 12.50 68.54
                                                                                                                                                                                                                                                                         NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
     ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
             (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                                                                                                                                                                                                                                            V V I SSSSS U U A L
                                                                                                                                                                                                                                                                            V V I SSSS U U AA L
V V I SS U U AA L
V V I SS U U AAAAA L
V V I SS U U A A L
VV I SSSS UUUUU A A LLLLL
            CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                  THAN THE STORAGE COEFFICIENT.
           (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                            OOO TITTI TITTI H H Y Y M M OOO TM
                                                                                                                                                                                                                                                                   O O T T H H YY MMM O O
O O T T H H Y M M O O
OOO T T H H Y M M OO
Developed and Distributed by Smart City Water Inc
      RESERVOIR( 0050) OVERFLOW IS OFF
     -- (cms) (ha.m.) | (cms) (ha.m.)
0.0000 0.0000 | 0.5800 0.1023
0.2500 0.0493 | 0.6600 0.1189
                                                                                                                                                                                                                                                                    Copyright 2007 - 2022 Smart City Water Inc
                                   0.3700 0.0684 0.7600
0.4600 0.0822 0.7800
                                                                                                  0.1366
                                                                                                                                                                                                                                                                                        ***** DETAILED OUTPUT *****
                                                                                               0.1400
                                           AREA QPEAK TPEAK R.V.
        (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0220) 5.630 1.181 12.00 78.28
OUTFLOW: ID= 1 ( 0050) 5.630 0.581 12.17 78.27
                                                                                                                                                                                                                                                                      Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat
```

1.90

Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\c82dc5cf-60f0-46f0-b6b5-4027a005d6d8\scen

Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\c82dc5cf-60f0-46fb-b6b5-4027a005d6d8\scen

0.500

1.16 6.500

1.16 | 6.583

4.86 16.500

PEAK FLOW REDUCTION [Qout/Qin](%)= 49.19

(min)= 10.00

TIME SHIFT OF PEAK FLOW

1.90 | 22.50

1.69 10.500

1.69 |10.583

4.500

DATE: 03/11/2024 TIME: 11:39:28 USER: COMMENTS \* \*\* SIMULATION : SCS\_2yr \*\* READ STORM | Filename: C:\Users\nyokich\AppD | atal\(\text{LocalTemp}\) | 5e49fc0a-79f7-4237-8582-77f9360bb4e5\(\frac{1}{5}\) 461c2b |
| Ptotal= 60.00 mm | Comments: SCS\_2yr TIME RAIN TIME RAIN TIME RAIN TIME RAIN 11ME RAIN | 11ME R 0.66 | 7.00 | 1.20 | 13.00 | 3.24 | 19.00 | 0.66 | 7.25 | 1.20 | 13.25 | 3.24 | 19.25 1.00 1.08 1.25 1.08 1.50 0.66 | 7.50 | 1.20 | 13.50 | 2.52 | 19.50 | 0.66 | 7.75 | 1.20 | 13.75 | 2.52 | 19.75 1.08 0.72 2.00 0.78 | 8.00 | 1.62 | 14.00 | 1.80 | 20.00 2.25 2.50 0.78 | 8.25 0.78 | 8.50 1.62 | 14.25 1.62 | 14.50 1.80 | 20.25 1.80 | 20.50 2.75 0.78 | 8.75 | 1.62 | 14.75 1.80 | 20.75 0.72 3.00 1.92 | 15.00 1.92 | 15.25 1.80 | 21.00 1.80 | 21.25 0.78 | 9.00 0.78 | 9.25 0.78 | 9.50 | 2.16 | 15.50 | 1.80 | 21.50 | 0.78 | 9.75 | 2.16 | 15.75 | 1.80 | 21.75 3.50 0.96 | 10.00 | 2.76 | 16.00 | 1.08 | 22.00 | 0.96 | 10.25 | 2.76 | 16.25 | 1.08 | 22.25 4.00 0.72 4.50 0.96 | 10.50 3.72 | 16.50 1.08 | 22.50 0.72 0.96 | 10.75 3.72 | 16.75 5.76 | 17.00 1.08 | 22.75 0.96 | 11.25 | 5.76 | 17.25 | 1.08 | 23.25 | 0.72 5.25 0.96 | 11.50 | 24.96 | 17.50 1.08 | 23.50 0.96 | 11.75 | 66.24 | 17.75 | 1.08 | 23.75 CALIB | NASHYD ( 0210)| Area (ha)= 6.83 Curve Number (CN)= 83.0 [i]e:///V...%20Updated%20E4%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%2OOutput/Proposed%20VO%20VO%20Detailed%2OOutput/Proposed%20VO%20VO%20Detailed%2OOutput/Proposed%20VO%20VO%20Detailed%2OOutput/Proposed%2OOutput/Proposed%20VO%2

|ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00 ...... U.H. Tp(hrs)= 0.54 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. -- TRANSFORMED HYETOGRAPH TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN 0.083 1.08 1.08 0.333 0.66 | 6.333 1.20 12.333 8.64 | 18.33 1.08 0.66 | 6.417 1.20 12.417 0.500 0.66 6.500 1.20 | 12.500 | 8.64 | 18.50 1.08 0.66 | 6.583 1.20 | 12.583 1.20 | 12.667 4.44 | 18.58 4.44 | 18.67 0.583 1.08 0.667 1.08 0.66 | 6.750 0.66 | 6.833 0.66 | 6.917 4.44 | 18.75 4.44 | 18.83 4.44 | 18.92 0.750 1.20 112.750 1.08 0.833 1.20 12.833 1.20 | 12.917 0.917 1.08 4.44 | 19.00 3.24 | 19.08 1.000 0.66 | 7.000 0.66 | 7.083 1.20 | 13.000 1.20 | 13.083 1.08 1.083 1.08 0.66 7.167 1.167 1.20 | 13.167 3.24 | 19.17 1.08 0.66 | 7.250 0.66 | 7.333 1.333 1.20 13.333 3.24 | 19.33 1.08 1.417 0.66 | 7.417 0.66 | 7.500 1.20 |13.417 1.20 |13.500 3.24 | 19.42 3.24 | 19.50 1.08 1.08 1.583 0.66 7.583 1.20 | 13.583 | 2.52 | 19.58 1.08 0.66 | 7.667 0.66 | 7.750 1.20 13.667 1.20 | 13.750 1.750 2,52 | 19.75 1.08 1.833 0.66 | 7.833 0.66 | 7.917 1.20 | 13.833 1.20 | 13.917 2.52 | 19.83 2.52 | 19.92 1.917 1.08 0.66 | 8.000 0.78 | 8.083 0.78 | 8.167 1.20 |14.000 1.62 |14.083 1.62 |14.167 2.52 | 20.00 1.80 | 20.08 2.000 1.08 2.167 1.80 | 20.17 0.72 0.78 | 8.250 0.78 | 8.333 1.62 | 14.250 1.62 | 14.333 1.80 | 20.25 1.80 | 20.33 2.250 2.333 2.417 0.78 | 8.417 1.62 114.417 1.80 | 20.42 0.72 0.78 | 8.500 0.78 | 8.583 1.62 14.500 2.583 1.62 | 14.583 1.80 | 20.58 0.72 2.667 0.78 | 8,667 1.62 | 14.667 1.80 | 20.67 2.750 0.78 | 8.750 1.62 | 14.750 1.80 | 20.75 0.72 0.78 | 8.833 0.78 | 8.917 0.78 | 2.000 1.62 | 14.833 1.62 | 14.917 2.833 1.80 | 20.83 2.917 1.80 | 20.92 3.000 1.62 | 15.000 1.80 | 21.00 0.78 | 9.083 0.78 | 9.167 1.92 |15.083 1.92 |15.167 1.80 | 21.08 1.80 | 21.17 3.083 3.167 1.92 |15.250 1.92 |15.333 3.250 0.78 | 9.250 1.80 | 21.25 0.78 9.333 1.80 | 21.33 3.333 3.417 0.78 | 9.417 1.92 15.417 1.80 | 21.42 0.72 3.500 0.78 9.500 1.92 | 15.500 2.16 | 15.583 1.80 | 21.50 3.583 0.78 | 9.583 1.80 | 21.58 0.72 3.667 0.78 9.667 2.16 15.667 1.80 21.67 0.72 3.750 0.78 9.750 2.16 15.750 1.80 21.75 0.72

3.833 0.78 | 9.833 2.16 | 15.833 1.80 | 21.83 0.72 3.917 0.78 | 9.917 2.16 | 15.917 1.80 | 21.92 0.72 4.167 0.96 110.167 2.76 | 16.167 1.08 | 22.17 0.96 | 10.250 0.96 | 10.333 2.76 |16.250 2.76 |16.333 1.08 | 22.25 1.08 | 22.33 4.333 4.417 4.500 0.96 |10.417 0.96 |10.500 2.76 |16.417 2.76 |16.500 1.08 | 22.42 1.08 | 22.50 4.583 0.96 | 10.583 3.72 116.583 1.08 | 22.58 0.96 10.667 3.72 | 16.667 | 1.08 | 22.67 3.72 | 16.750 | 1.08 | 22.75 4.750 4.833 0.96 |10.833 3.72 | 16.833 3.72 | 16.917 1.08 | 22.83 1.08 | 22.92 4.917 0.96 |11.000 0.96 |11.083 0.96 |11.167 3.72 |17.000 5.76 |17.083 5.76 |17.167 1.08 | 23.00 1.08 | 23.08 1.08 | 23.17 5,000 5.083 5.167 0.96 | 11.67 | 5.76 | 17.16 | 1.08 | 23.17 |
0.96 | 11.250 | 5.76 | 17.250 | 1.08 | 23.25 |
0.96 | 11.333 | 5.76 | 17.333 | 1.08 | 23.33 |
0.96 | 11.417 | 5.76 | 17.417 | 1.08 | 23.42 |
0.96 | 11.500 | 5.76 | 17.500 | 1.08 | 23.50 |
0.96 | 11.583 | 24.96 | 17.583 | 1.08 | 23.58 | 5 250 0.72 5.333 5 417 5.583 0.72 0.96 |11.667 | 24.96 |17.667 | 0.96 |11.750 | 24.96 |17.750 | 1.08 | 23.67 5.667 5.750 0.72 
 5.833
 0.96 | 11.833
 66.24 | 17.833
 1.08 | 23.83
 0.72

 5.917
 0.96 | 11.917
 66.24 | 17.917
 1.08 | 23.92
 0.72

 6.000
 0.96 | 12.000
 66.24 | 18.000
 1.08 | 24.00
 0.72
 0.72 Unit Hyd Qpeak (cms)= 0.483 PEAK FLOW (cms)= 0.245 (i)
TIME TO PEAK (hrs)= 12 RUNOFF VOLUME (mm)= 28.264 TOTAL RAINFALL (mm)= 60.000 RUNOFF COEFFICIENT = 0.471 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. STANDHYD ( 0205)| Area (ha)= 7.90 ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00 IMPERVIOUS PERVIOUS (i) Surface Area (ha)= 1.58 6.32

Dep. Storage (mm)= 2.00 5.00

Average Slope (%)= 2.00 5.00

Length (m)= 229.49 250.00

Mannings n = 0.013 0.250 5.00 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.

- TRANSFORMED HYETOGRAPH 1.20 | 12.333 | 8.64 | 18.33 1.20 | 12.417 | 8.64 | 18.42 1.20 | 12.500 | 8.64 | 18.50 0.333 0.66 | 6.333 1.08 0.66 | 6.417 0.417 1.08 0.500 1.08 4.44 | 18.58 4.44 | 18.67 0.583 0.66 | 6.583 1.20 112.583 1.08 0.66 | 6.667 1.20 12.667 0.750 0.66 6.750 1.20 12.750 4.44 | 18.75 1.08 0.66 | 6.833 1.20 12.833 4.44 | 18.83 4.44 | 18.92 0.833 1.20 12.917 0.917 0.66 | 6.917 1.08 1.000 0.66 | 7.000 0.66 | 7.083 0.66 | 7.167 1.20 | 13.000 1.20 | 13.083 4.44 | 19.00 3.24 | 19.08 1.167 1.20 | 13.167 3.24 | 19.17 1.08 1.250 0.66 | 7.250 0.66 | 7.333 1.20 | 13.250 1.20 | 13.333 3.24 | 19.25 3.24 | 19.33 1.08 0.66 | 7.417 0.66 | 7.500 1.20 | 13.417 1.20 | 13.500 3.24 | 19.42 3.24 | 19.50 1.417 1.08 1.500 1.08 1.20 113.583 2.52 | 19.58 1.08 1.20 | 13.667 2.52 19.67 1.20 | 13.750 2.52 | 19.75 1.08 0.66 | 7.833 0.66 | 7.917 0.66 | 8.000 1.20 |13.833 1.20 |13.917 2.52 | 19.83 2.52 | 19.92 1.833 1.917 2.52 | 20.00 2.000 1.20 | 14.000 1.08 2.083 0.78 | 8.083 0.78 | 8.167 1.62 | 14.083 1.62 | 14.167 1.80 | 20.08 1.80 | 20.17 2.167 0.72 1.62 | 14.250 1.62 | 14.333 2.250 0.78 | 8.250 1.80 | 20.25 1.80 | 20.33 2.333 0.78 | 8.333 2.417 0.78 | 8.417 1.62 14.417 1.80 | 20.42 0.72 2.500 2.583 0.78 | 8.500 0.78 | 8.583 1.62 14.500 1.62 14.583 1.80 | 20.58 0.72 2.667 2.750 0.78 | 8.667 0.78 | 8.750 1.62 | 14.667 1.62 | 14.750 1.80 | 20.67 1.80 | 20.75 0.72 1.62 | 14.833 1.62 | 14.917 1.80 | 20.83 1.80 | 20.92 2.833 0.78 | 8.833 0.78 | 8.917 3.000 0.78 | 9.000 1 62 15 000 1.80 | 21.00 3.083 0.78 | 9.083 1.92 |15.083 1.80 | 21.08 0.78 | 9.167 0.78 | 9.250 3.167 1,92 | 15.167 1,92 | 15.250 1.80 | 21.17 1.80 | 21.25 3.250 1.92 |15.333 1.92 |15.417 3.333 0.78 9.333 1.80 | 21.33 3.417 0.78 | 9.417 1.80 | 21.42 0.72 3.500 0.78 | 9.500 0.78 | 9.583 1.92 | 15.500 2.16 | 15.583 1.80 | 21.50 3.583 1.80 | 21.58 3 667 0.78 9.667 2.16 15.667 1.80 | 21.67 0.72 0.78 | 9.750 2.16 |15.750 1.80 | 21.75 3.833 0.78 9.833 2.16 115.833 1.80 | 21.83 0.72 0.78 | 9.917 | 2.16 | 15.85 | 1.80 | 21.85 | 0.78 | 19.917 | 2.16 | 15.917 | 1.80 | 21.92 | 0.78 | 10.000 | 2.16 | 16.000 | 1.80 | 22.00 | 0.96 | 10.083 | 2.76 | 16.083 | 1.08 | 22.08 | 0.96 | 10.167 | 2.76 | 16.167 | 1.08 | 22.17 3.917 4.000 0.72 4.083 0.72 4.167 4.250 0.96 10.250 2.76 16.250 1.08 22.25

```
1.08 | 22.42 | 0.72
                           4.500
                                           0.96 110.500
                                                                            2.76 | 16,500
                                                                                                            1.08 | 22.50
                           4.583
                                           0.96 10.583
                                                                            3.72 16.583
                                                                                                            1.08 | 22.58
                                           0.96 10.667
                                                                            3.72 | 16.667
                           4.750
                                          0.96 110.750
                                                                           3.72 [16.750]
                                                                                                           1.08 | 22.75
                           4.833
                                           0.96 | 10.833
                                                                            3.72 16.833
                                                                                                            1.08 | 22.83
                                           0.96 110.917
                           4.917
                                                                            3,72 | 16,917
                                                                                                            1.08 | 22.92
                                          0.96 |11.000
0.96 |11.083
                                                                           3.72 | 17.000
5.76 | 17.083
                                                                                                           1.08 | 23.00
1.08 | 23.08
                           5.000
5.083
                           5.167
                                           0.96 11.167
                                                                            5.76 17.167
                                                                                                           1.08 | 23.17
                                                                                                                                           0.72
                                          0.96 |11.250
0.96 |11.333
                                                                          5.76 | 17.250
5.76 | 17.333
                                                                                                            1.08 | 23.25
                                                                                                            1.08 | 23.33
                           5.333
                           5.417
                                         0.96 | 11.417 | 5.76 | 17.417 | 1.08 | 23.42 | 0.96 | 11.500 | 5.76 | 17.500 | 1.08 | 23.50
                           5.500
                                          0.96 | 11.583 | 24.96 | 17.583 | 0.96 | 11.667 | 24.96 | 17.667 | 0.96 | 11.750 | 24.96 | 17.750 |
                                                                                                            1.08 | 23.58
1.08 | 23.67
                           5 583
                           5.750
                                                                                                            1.08 | 23.75
                                                                                                                                            0.72
                           5.833
                                          0.96 | 11.833 | 66.24 | 17.833 | 1.08 | 23.83 | 0.96 | 11.917 | 66.24 | 17.917 | 1.08 | 23.92
                           6.000 0.96 | 12.000 66.24 | 18.000 1.08 | 24.00
          Storage Coeff. (min) = 66.24 22.13 over (min) 5.00 35.00 Storage Coeff. (min) = 4.03 (ii) 33.46 (ii) Unit Hyd. Tpeak (min) = 5.00 35.00 Unit Hyd. peak (cms) = 0.24 0.03 PEAK FLOW
            PEAK FLOW (cms)= 0.14 0.22
TIME TO PEAK (hrs)= 12.00 12.42
           IME 10 PEAK (lns)= 12.00 12.42 12.00 RUNOFF VOLUME (mm)= 58.00 24.33 27.70 TOTAL RAINFALL (mm)= 60.00 60.00 60.00 RUNOFF COEFFICIENT = 0.97 0.41 0.46
      ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
     ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
                        YOU SHOULD CONSIDER SPLITTING THE AREA.
               (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
            CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
            (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
     | ADD HYD ( 0003)|
| 1 + 2 = 3 | AREA QPEAK TPEAK R.V.
              (ha) (cms) (hrs) (mm)

ID1=1 ( 0205): 7.90 0.242 12.00 27.70

+ ID2=2 ( 0210): 6.83 0.245 12.42 28.26
                ID = 3 ( 0003): 14.73 0.487 12.42 27.96
[ile:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                           3.333 0.78 | 9.333
3.417 0.78 | 9.417
                                                                         1.92 |15.333
1.92 |15.417
                                                                                                         1.80 | 21.33 0.72
1.80 | 21.42 0.72
                           3.500 0.78 | 9.500
                                                                         1.92 | 15.500
                                                                                                          1.80 [21.50 0.72
                                                                          2.16 |15.583
                           3.667
                                           0.78 | 9.667
                                                                          2.16 | 15.667
                                                                                                           1.80 | 21.67
                                                                                                                                         0.72
```

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NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
| NASHYD ( 0200) | Area (ha)= 20.32 Curve Number (CN)= 80.0 | ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                                     -- U.H. Tp(hrs)= 0.43
             NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                    -- TRANSFORMED HYETOGRAPH --
                       TIME RAIN | TIME R
                                         0.66 | 6.250
0.66 | 6.333
0.66 | 6.417
                                                                                                                   8.64 | 18.25
8.64 | 18.33
8.64 | 18.42
                       0.250
                                                                              1.20 112.250
                                                                                                                                                       1.08
                        0.333
                                                                               1.20 |12.333
                                                                               1.20 | 12.417
                       0.417
                                                                                                                                                       1.08
                                                                              1.20 | 12.500 | 8.64 | 18.50 | 1.20 | 12.583 | 4.44 | 18.58 | 1.20 | 12.667 | 4.44 | 18.67
                       0.500 0.66 6.500
                                                                                                                                                       1.08
                       0.583
                                          0.66 | 6.583
                                                                                                                                                        1.08
                       0.667
                                          0.66 6.667
                                                                                                                                                       1.08
                                                                              1.20 | 12.750 | 4.44 | 18.75
1.20 | 12.833 | 4.44 | 18.83
                       0.833
                                          0.66 | 6.833
                                                                                                                                                       1.08
                       0.917
1.000
                                          0.66 | 6.917
                                                                               1.20 | 12.917
1.20 | 13.000
                                                                                                                 4.44 | 18.92
4.44 | 19.00
                                                                                                                                                        1.08
                                         0.66 | 7.083
0.66 | 7.167
0.66 | 7.250
                       1.083
                                                                               1.20 113.083
                                                                                                                   3.24 | 19.08
3.24 | 19.17
                                                                                                                                                       1.08
                                                                                1.20 13.167
                                                                               1.20 | 13.250
                                                                                                                 3.24 | 19.25
                        1.250
                                                                                                                                                       1.08
                        1,333
                                         0.66 | 7.333
0.66 | 7.417
                                                                               1.20 | 13.333
1.20 | 13.417
                                                                                                                  3.24 | 19.33
3.24 | 19.42
                        1.417
                                                                                                                                                       1.08
                                         0.66 | 7.500
0.66 | 7.583
0.66 | 7.667
                                                                                                                  3.24 | 19.50
2.52 | 19.58
2.52 | 19.67
                                                                               1.20 |13.500
1.20 |13.583
                        1.500
                                                                                                                                                       1.08
                           .583
                       1.667
                                                                                1.20 | 13.667
                                                                                                                                                       1.08
                                         0.66 | 7.750
0.66 | 7.833
0.66 | 7.917
                                                                               1.20 | 13.750 | 2.52 | 19.75
1.20 | 13.833 | 2.52 | 19.83
1.20 | 13.917 | 2.52 | 19.92
                        1.750
                                                                                                                                                       1.08
                        1.833
                                                                                                                                                        1.08
                       1.917
                                                                                                                                                       1.08
                                          0.66 8.000
                                                                                1.20 14.000
                                         0.78 | 8.083
                       2.083
                                                                               1.62 | 14.083
                                                                                                                   1.80 | 20.08
                                                                                                                                                      0.72
                                                                               1.62 | 14.167
1.62 | 14.250
                       2.167
                                         0.78 | 8.167
                                                                                                                   1.80 | 20.17
                       2.250
                                          0.78 | 8.250
                                                                                                                    1.80 | 20.25
                                                                                                                                                      0.72
                                         0.78 | 8.333
0.78 | 8.417
                                                                               1.62 | 14.333
1.62 | 14.417
                       2.333
                                                                                                                   1.80 | 20.33
                        2.417
                                                                                                                    1.80 | 20.42
                       2.500
                                          0.78 | 8.500
                                                                                1.62 14.500
                                                                                                                   1.80 | 20.50
                                         0.78 | 8.583
0.78 | 8.667
                                                                              1.62 |14.583
1.62 |14.667
                                                                                                                   1.80 | 20.58
                       2.583
                       2.667
                                                                               1.62 | 14.750
1.62 | 14.833
                       2.750
                                          0.78 | 8.750
                                                                                                                    1.80 | 20.75
                                          0.78 | 8.833
                                                                                                                   1.80 | 20.83
                       2.917
                                          0.78 | 8.917
                                                                                1 62 114 917
                                                                                                                   1.80 | 20.92
                                                                                                                                                      0.72
                                          0.78 | 9.000
                                                                                1.62 |15.000
                                                                                                                   1.80 | 21.00
                       3.083
                                          0.78 | 9.083
                                                                              1.92 | 15.083
                                                                                                                   1.80 | 21.08
                                                                                                                                                      0.72
                                                                            1.92 | 15.167 | 1.80 | 21.17 | 0.72 | 1.92 | 15.250 | 1.80 | 21.25 | 0.72
                       3 167
                                          0.78 9.167
                       3.250 0.78 9.250
```

```
0.78 | 9.750
0.78 | 9.833
                                           2.16 | 15.750
2.16 | 15.833
              3.833
                                                                1.80 | 21.83
                                                                                   0.72
                        0.78 | 9.917
0.78 | 10.000
                                           2.16 |15.917
2.16 |16.000
                                                                1.80 | 21.92
1.80 | 22.00
              3 917
                                            2.76 | 16.083 | 1.08 | 22.08
2.76 | 16.167 | 1.08 | 22.17
2.76 | 16.250 | 1.08 | 22.25
              4.083
                       0.96 | 10.083
                       0.96 10.167
              4.250
              4.333
                        0.96 |10.333
0.96 |10.417
                                            2.76 | 16.333
2.76 | 16.417
                                                                1.08 | 22.33
1.08 | 22.42
              4.417
                        0.96 |10.500
0.96 |10.583
0.96 |10.667
              4 500
                                            2.76 16.500
                                                                 1.08 | 22.50
                                            3.72 |16.583
3.72 |16.667
                                                                1.08 | 22.58
              4.583
              4.667
                        0.96 10.750
0.96 10.833
                                            3.72 | 16.750 | 1.08 | 22.75
3.72 | 16.833 | 1.08 | 22.83
              4.750
                                                                                    0.72
              4.833
              4 917
                        0.96 [10.917
                                            3.72 [16.917]
                                                                 1 08 | 22 92
                       0.96 11.000
                                            3.72 | 17.000 | 1.08 | 23.00 | 5.76 | 17.083 | 1.08 | 23.08
              5.083
                                                                                    0.72
                        0.96 |11.167
0.96 |11.250
                                            5.76 | 17.167 | 1.08 | 23.17
5.76 | 17.250 | 1.08 | 23.25
              5.167
              5.250
                       0.96 |11.333
0.96 |11.417
0.96 |11.500
                                            5.76 | 17.333 | 1.08 | 23.33
5.76 | 17.417 | 1.08 | 23.42
5.76 | 17.500 | 1.08 | 23.50
              5 333
              5.500
              5 583
                       0.96 |11.583 24.96 |17.583
0.96 |11.667 24.96 |17.667
                                                                 1.08 | 23.58
1.08 | 23.67
                                                                                     0.72
              5.667
              5.750
                       0.96 111.750 24.96 17.750
                                                                 1.08 | 23.75
                                                                                     0.72
                       0.96 | 11.833 | 66.24 | 17.833 | 1.08 | 23.83 | 0.96 | 11.917 | 66.24 | 17.917 | 1.08 | 23.92
              5.917
              6.000 0.96 | 12.000 66.24 | 18.000 1.08 | 24.00
    Unit Hyd Qpeak (cms)= 1.805
    PEAK FLOW (cms)= 0.762 (i)
TIME TO PEAK (hrs)= 12.333
RUNOFF VOLUME (mm))= 25.525
TOTAL RAINFALL (mm)= 60.000
RUNOFF COEFFICIENT = 0.425
    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
CALIB
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
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- TRANSFORMED HYETOGRAPH
1.20 | 12.333 | 8.64 | 18.33
1.20 | 12.417 | 8.64 | 18.42
1.20 | 12.500 | 8.64 | 18.50
0.333
         0.66 | 6.333
                                                                  1.08
          0.66 | 6.417
0.417
                                                                  1.08
0.500
                                                                  1.08
                            1.20 | 12.583 | 4.44 | 18.58 | 1.20 | 12.667 | 4.44 | 18.67
0.583
         0.66 | 6.583
                                                                  1.08
          0.66 | 6.667
0.750 0.66 6.750
                            1.20 12.750
                                              4.44 | 18.75
                                                                  1.08
0.833
          0.66 | 6.833
                            1.20 | 12.833
1.20 | 12.917
                                               4.44 | 18.83
4.44 | 18.92
0.917
          0.66 | 6.917
                                                                  1.08
         0.66 | 7.000
0.66 | 7.083
0.66 | 7.167
                             1.20 | 13.000
1.20 | 13.083
                                               4.44 | 19.00
3.24 | 19.08
1.000
1.083
1.167
                             1.20 | 13.167
                                               3.24 | 19.17
                                                                  1.08
1.250
         0.66 | 7.250
0.66 | 7.333
                            1.20 | 13.250
1.20 | 13.333
                                               3.24 | 19.25
3.24 | 19.33
                                                                  1.08
         0.66 | 7.417
0.66 | 7.500
                            1.20 | 13.417
1.20 | 13.500
                                               3.24 | 19.42
3.24 | 19.50
1.417
                                                                  1.08
                                                                  1.08
1.583 0.66 7.583
                            1.20 113.583
                                               2.52 | 19.58
                                                                  1.08
         0.66 | 7.667
0.66 | 7.750
                             1.20 | 13.667
 1.667
1.750
                             1.20 | 13.750
                                               2.52 | 19.75
                                                                  1.08
         0.66 | 7.833
0.66 | 7.917
0.66 | 8.000
                             1.20 |13.833
1.20 |13.917
                                               2.52 | 19.83
2.52 | 19.92
 1.833
1.917
                                               2.52 | 20.00
2.000
                            1.20 | 14.000
                                                                  1.08
2.083
         0.78 | 8,083
                            1.62 | 14.083
1.62 | 14.167
                                               1.80 | 20.08
          0.78 | 8.167
                                               1.80 | 20.17
2.167
                                                                  0.72
                            1.62 | 14.250
1.62 | 14.333
2.250 0.78 8.250
                                               1.80 | 20.25
2.333
         0.78 | 8.333
                                               1.80 | 20.33
2.417 0.78 8.417
                            1.62 14.417
                                               1.80 | 20.42
                                                                 0.72
2.500
2.583
         0.78 | 8.500
0.78 | 8.583
                             1.62 14.500
                             1.62 | 14.583
                                               1.80 | 20.58
                                                                 0.72
2.667
2.750
         0.78 | 8.667
0.78 | 8.750
                            1.62 | 14.667
1.62 | 14.750
                                               1.80 | 20.67
1.80 | 20.75
                                                                 0.72
                                               1.80 | 20.83
1.80 | 20.92
2.833
         0.78 | 8.833
                            1.62 | 14.833
          0.78 | 8.917
                             1.62 14.917
3.000
          0.78 | 9.000
                            1.62 15 000
                                               1.80 | 21.00
                                                                 0.72
 3.083
          0.78 | 9.083
                             1.92 |15.083
                                               1.80 | 21.08
         0.78 | 9.167
0.78 | 9.250
3.167
                             1,92 | 15.167
1,92 | 15.250
                                               1.80 | 21.17
1.80 | 21.25
3.250
3.333
          0.78 9.333
                             1.92 15.333
                                               1.80 | 21.33
3.417
          0.78 | 9.417
                             1.92 | 15.417
                                               1.80 | 21.42
                                                                 0.72
3.500
         0.78 | 9.500
0.78 | 9.583
                            1.92 | 15.500
2.16 | 15.583
                                               1.80 | 21.50
3.583
                                               1.80 | 21.58
3 667
         0.78 9.667
                            2.16 15.667
                                               1.80 | 21.67
                                                                 0.72
          0.78 | 9.750
                             2.16 |15.750
                                               1.80 | 21.75
3.833
         0.78 9.833
                            2.16 115.833
                                               1.80 | 21.83
                                                                 0.72
         0.78 | 9.917 | 2.16 | 15.85 | 1.80 | 21.85 | 0.78 | 19.917 | 2.16 | 15.917 | 1.80 | 21.92 | 0.78 | 10.000 | 2.16 | 16.000 | 1.80 | 22.00 | 0.96 | 10.083 | 2.76 | 16.083 | 1.08 | 22.08 | 0.96 | 10.167 | 2.76 | 16.167 | 1.08 | 22.17
3.917
4.000
                                                                  0.72
4.083
                                                                  0.72
4.250 0.96 10.250 2.76 16.250 1.08 22.25
```

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0.96 | 11.417 | 5.76 | 17.417 | 1.08 | 23.42 | 0.96 | 11.500 | 5.76 | 17.500 | 1.08 | 23.50
                                                                                                                                                                                                                          0.66 | 7.417
0.66 | 7.500
                  5.500
                                                                                                                                                                                                                1.500
                                                                                                                                                                                                                                                1.20 | 13.500 | 3.24 | 19.50
                                                                                                                                                                                                                                                                                           1.08
                            0.96 | 11.583 | 24.96 | 17.583 | 0.96 | 11.667 | 24.96 | 17.667 | 0.96 | 11.750 | 24.96 | 17.750 |
                                                                         1.08 | 23.58
1.08 | 23.67
                                                                                                                                                                                                                          0.66 | 7.583
0.66 | 7.667
                                                                                                                                                                                                                                                1.20 | 13.583
1.20 | 13.667
                                                                                                                                                                                                                                                                     2.52 | 19.58
2.52 | 19.67
                  5 583
                                                                                                                                                                                                                1.583
                                                                                                                                                                                                                1.667
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                          0.66 | 7.750
0.66 | 7.833
0.66 | 7.917
                  5.750
                                                                         1.08 | 23.75
                                                                                              0.72
                                                                                                                                                                                                                1 750
                                                                                                                                                                                                                                                 1 20 113 750
                                                                                                                                                                                                                                                                      2.52 | 19.75
                                                                                                                                                                                                                                                                                           1.08
                  5.833
                            0.96 |11.833 | 66.24 |17.833 | 1.08 | 23.83 | 0.96 |11.917 | 66.24 |17.917 | 1.08 | 23.92
                                                                                                                                                                                                                                                                     2.52 | 19.83
                                                                                                                                                                                                                                                 1.20 | 13.917
                                                                                                                                                                                                                1.917
                                                                                                                                                                                                                                                                                           1.08
                  6.000 0.96 | 12.000 66.24 | 18.000 1.08 | 24.00
                                                                                                                                                                                                                2.000 0.66 8.000
                                                                                                                                                                                                                                                1.20 14.000 2.52 20.00
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                           0.78 | 8.083
                                                                                                                                                                                                                                                 1.62 |14.083
                                                                                                                                                                                                                2.083
                                                                                                                                                                                                                                                                      1.80 | 20.08
        Unit Hyd Qpeak (cms)= 0.757
                                                                                                                                                                                                                2.167
                                                                                                                                                                                                                           0.78 | 8.167
                                                                                                                                                                                                                                                 1.62 14.167
                                                                                                                                                                                                                                                                      1.80 | 20.17
                                                                                                                                                                                                                                                                                           0.72
       PEAK FLOW (cms)= 0.201 (i)
TIME TO PEAK (hrs)= 12.000
RUNOFF VOLUME (mm)= 23.010
TOTAL RAINFALL (mm)= 60.000
RUNOFF COEFFICIENT = 0.384
                                                                                                                                                                                                                2.333
                                                                                                                                                                                                                          0.78 | 8.333
                                                                                                                                                                                                                                                1.62 114.333
                                                                                                                                                                                                                                                                      1.80 | 20.33
                                                                                                                                                                                                                           0.78 | 8.417
0.78 | 8.500
                                                                                                                                                                                                                                                1.62 | 14.417
1.62 | 14.500
                                                                                                                                                                                                                                                                      1.80 | 20.42
1.80 | 20.50
                                                                                                                                                                                                                2.417
                                                                                                                                                                                                                2.500
                                                                                                                                                                                                                2.583
                                                                                                                                                                                                                          0.78 | 8.583
                                                                                                                                                                                                                                                1.62 114.583
                                                                                                                                                                                                                                                                      1.80 | 20.58
                                                                                                                                                                                                                                                 1.62 14.667
                                                                                                                                                                                                                                                1.62 | 14.750
                                                                                                                                                                                                                2.750
                                                                                                                                                                                                                          0.78 | 8.750
                                                                                                                                                                                                                                                                      1.80 | 20.75
                                                                                                                                                                                                                                                                                          0.72
        (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                2.833
                                                                                                                                                                                                                          0.78 | 8.833
0.78 | 8.917
                                                                                                                                                                                                                                                1.62 | 14.833
1.62 | 14.917
                                                                                                                                                                                                                                                                      1.80 | 20.83
1.80 | 20.92
                                                                                                                                                                                                                2.917
                                                                                                                                                                                                                          0.78 | 9.000
0.78 | 9.083
0.78 | 9.167
                                                                                                                                                                                                                                                1.62 | 15.000
1.92 | 15.083
1.92 | 15.167
                                                                                                                                                                                                                                                                      1.80 | 21.00
1.80 | 21.08
                                                                                                                                                                                                                3 000
                                                                                                                                                                                                                3.167
                                                                                                                                                                                                                                                                      1.80 | 21.17
   | STANDHYD ( 0202)| Area (ha)= 4.57
|ID=1 DT=5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
                                                                                                                                                                                                                          0.78 | 9.250
                                                                                                                                                                                                                                                1.92 | 15.250
1.92 | 15.333
                                                                                                                                                                                                                                                                      1.80 | 21.25
1.80 | 21.33
                                                                                                                                                                                                                3.250
                                                                                                                                                                                                                3.417
                                                                                                                                                                                                                           0.78 9.417
                                                                                                                                                                                                                                                1.92 115 417
                                                                                                                                                                                                                                                                      1.80 | 21.42
                                                                                                                                                                                                                3.500 0.78 | 9.500
3.583 0.78 | 9.583
                             IMPERVIOUS PERVIOUS (i)
       2.16 | 15.583
                                                                                                                                                                                                                                                                      1.80 | 21.58
                                                                                                                                                                                                                                               2.16 | 15.667
2.16 | 15.750
                                                            5.00
                                                                                                                                                                                                                3.667
                                                                                                                                                                                                                           0.78 9.667
                                                              5.00
                                                                                                                                                                                                                3.750
                                                                                                                                                                                                                           0.78 | 9.750
                                                                                                                                                                                                                                                                      1.80 | 21.75
                                                                                                                                                                                                                          0.78 | 9.833
0.78 | 9.917
                                                                                                                                                                                                                                               2.16 | 15.833
2.16 | 15.917
                                                                                                                                                                                                                                                                     1.80 | 21.83
1.80 | 21.92
                                                                                                                                                                                                                3.833
                                                                                                                                                                                                                3.917
                                                                                                                                                                                                                4.000
                                                                                                                                                                                                                           0.78 10.000
                                                                                                                                                                                                                                                 2.16 | 16.000 | 1.80 | 22.00
                                                                                                                                                                                                                          0.96 | 10.083
0.96 | 10.167
                                                                                                                                                                                                                                                2.76 | 16.083 | 1.08 | 22.08
2.76 | 16.167 | 1.08 | 22.17
           NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                4.083
                                                                                                                                                                                                                4.167
                                                                                                                                                                                                                4.250
                                                                                                                                                                                                                           0.96 110.250
                                                                                                                                                                                                                                                 2.76 | 16.250 | 1.08 | 22.25
                                                                                                                                                                                                                           0.96 | 10.333
                                                                                                                                                                                                                                                 2.76 | 16.333 | 1.08 | 22.33
                                    TRANSFORMED HYETOGRAPH
                 4.417
                                                                                                                                                                                                                           0.96 110 417
                                                                                                                                                                                                                                                 2.76 16.417 1.08 22.42 0.72
                                                                                                                                                                                                                                                2.76 | 16.500
3.72 | 16.583
                                                                                                                                                                                                                           0.96 10.500
                                                                                                                                                                                                                                                                       1.08 | 22.50
                                                                                                                                                                                                                4.583
                                                                                                                                                                                                                          0.96 10.583
                                                                                                                                                                                                                                                                      1.08 | 22.58
                                                                                                                                                                                                                4.667 0.96 | 10.667 3.72 | 16.667 1.08 | 22.67 4.750 0.96 | 10.750 3.72 | 16.750 1.08 | 22.75
file://V1...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                  0.0000 0.0000 | 0.1020
                                                                                                                                                                                                                         0.0400 0.1208 | 0.1160
                                                                                                                                                                                                                                                                      0.3268
                  0.0640
                                                                                                                                                                                                                                     0.1775
                                                                                                                                                                                                                                                       0.1330
                                                                                                                                                                                                                                                                       0.3659
                                                                                                                                                                                                                         0.0790 0.2218 | 0.0000
                                                                                                                                                                                                                                                                       0.0000
                  5.167
                             0.96 111.167
                                                   5.76 117.167
                                                                         1.08 | 23.17
                            0.96 |11.250
0.96 |11.333
                                                  5.76 | 17.250 | 1.08 | 23.25
5.76 | 17.333 | 1.08 | 23.33
                                                                                                                                                                                                                              AREA QPEAK TPEAK R.V.
                                                                                                                                                                                                    (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0040) 7.740 0.479 12.00 29.34
OUTFLOW: ID= 1 ( 0032) 7.740 0.041 14.58 29.24
                  5.333
                             0.96 |11,417
0.96 |11.500
                                                   5.76 | 17.417 | 1.08 | 23.42 | 0.72 | 5.76 | 17.500 | 1.08 | 23.50 | 0.72
                  5.417
                  5.583
                            0.96 | 11.583 24.96 | 17.583
                                                                         1.08 | 23.58
                  5.667 0.96 11.667 24.96 17.667 1.08 23.67 0.72
5.750 0.96 11.750 24.96 17.750 1.08 23.75 0.72
                                                                                                                                                                                                                   PEAK FLOW REDUCTION [Qout/Qin](%)= 8.46
TIME SHIFT OF PEAK FLOW (min)=155.00
                                                                                                                                                                                                                  TIME SHIFT OF PEAK FLOW (min)=155.00
MAXIMUM STORAGE USED (ha.m.)= 0.1220
                  5 833
                            0.96 | 11.833 | 66.24 | 17.833 | 1.08 | 23.83 | 0.96 | 11.917 | 66.24 | 17.917 | 1.08 | 23.92
                  5.917
                  6.000 0.96 12.000 66.24 18.000 1.08 24.00 0.72
       Max.Eff.Inten.(mm/hr)= 00.24
over (min) 5.00 66.00
Storage Coeff. (min)= 4.88 (ii) 59.47 (ii)
Unit Hyd. peak (cms)= 5.00 60.00
Unit Hyd. peak (cms)= 0.22 0.02
**TOTALS**
                                                                                                                                                                                                  | ADD HYD ( 0001)|
                                                                                                                                                                                                    1 + 2 = 3 | AREA QPEAK TPEAK R.V.
                                                                                                                                                                                                       (ha) (cms) (hrs) (mm)

ID1=1 ( 0200): 20.32 0.762 12.33 25.53
+ ID2=2 ( 0032): 7.74 0.041 14.58 29.24
        PEAK FLOW (cms)= 0.26 0.06
TIME TO PEAK (hrs)= 12.00 12.83
                                                                                  12.00
                                                                                                                                                                                                        ID = 3 ( 0001): 28.06 0.792 12.33 26.55
        RUNOFF VOLUME (mm)= 58.00 22.31 33.73
TOTAL RAINFALL (mm)= 60.00 60.00 60.00
RUNOFF COEFFICIENT = 0.97 0.37 0.56
                                                                                                                                                                                                      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
   **** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                                                 (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
        CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
              THAN THE STORAGE COEFFICIENT.
                                                                                                                                                                                                          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
        (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                 -- TRANSFORMED HYETOGRAPH --
                                                                                                                                                                                                                 TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                                                                                                                                                                                                                 hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
   1.20 | 12.083 | 8.65 | 18.08
1.20 | 12.167 | 8.64 | 18.17
1.20 | 12.250 | 8.64 | 18.25
                                                                                                                                                                                                                          0.66 | 6.083
                                                                                                                                                                                                                0.167
                                                                                                                                                                                                                0.250 0.66 6.250
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                0.333
                                                                                                                                                                                                                           0.66 | 6.333
                                                                                                                                                                                                                                                1.20 | 12.333 | 8.64 | 18.33
                                                                                                                                                                                                                0.417
                                                                                                                                                                                                                           0.66 | 6.417
                                                                                                                                                                                                                                                1.20 | 12.417
                                                                                                                                                                                                                                                                      8.64 | 18.42
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                0.500 0.66 6.500
0.583 0.66 6.583
                                                                                                                                                                                                                                                1.20 | 12.500 | 8.64 | 18.50
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                                               1.20 | 12.583 | 4.44 | 18.58 | 1.20 | 12.667 | 4.44 | 18.67 | 1.20 | 12.750 | 4.44 | 18.75 |
          ID = 3 ( 0040): 7.74 0.479 12.00 29.34
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                0.667 0.66 6.667
                                                                                                                                                                                                                                                                                           1.08
       NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                            0.66 | 6.750
                                                                                                                                                                                                                                                                                            1.08
                                                                                                                                                                                                                0.833
                                                                                                                                                                                                                          0.66 6.833
                                                                                                                                                                                                                                                 1.20 12.833 4.44 18.83
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                           0.66 | 6.917
0.66 | 7.000
                                                                                                                                                                                                                                                1.20 | 12.917 | 4.44 | 18.92
1.20 | 13.000 | 4.44 | 19.00
    RESERVOIR( 0032) OVERFLOW IS OFF
                                                                                                                                                                                                                1.000
                                                                                                                                                                                                                                                                                           1.08
    | N=2--> OUT=1 |
| DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                                                                                                                                                                                                                          0.66 | 7.083
0.66 | 7.167
                                                                                                                                                                                                                                               1.20 | 13.083 | 3.24 | 19.08
1.20 | 13.167 | 3.24 | 19.17
                                                                                                                                                                                                                1.083
                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                                                                                           1.08
                                (cms) (ha.m.) | (cms) (ha.m.)
                                                                                                                                                                                                                1.250 0.66 | 7.250 1.20 | 13.250 3.24 | 19.25 1.08
```

1.20 12.500

1.20 |12.583 1.20 |12.667

1.20 112 750

1.20 |12.833

1.20 12.917

1.20 13.000

1.20 | 13.083

1.20 13.167

1.20 |13.250

1.20 | 13.333

0.500

0.583

0.750

0.917

1.083

1.167

1.333

0.66 | 6.500

0.66 | 6.583

0.66 | 6.750

0.66 | 6.917

0.66 | 7.000 0.66 | 7.083

0.66 | 7.167 0.66 | 7.250

0.66 | 7.333

1.08

1.08

1.08

1.08

1.08

1.08

1.08

1.08

8.64 | 18.50

4.44 | 18.58 4.44 | 18.67

4 44 | 18 75

4.44 | 18.92

3.24 | 19.08

3.24 19.17

3.24 | 19.33

2.76 16,500

3.72 16.583

3.72 | 16.667

3.72 16.833

3,72 | 16,917

3.72 | 17.000 5.76 | 17.083

5.76 17.167

5.76 | 17.250 5.76 | 17.333

3.72 | 16.750 | 1.08 | 22.75

1.08 | 22.50

1.08 | 22.58

1.08 | 22.92

1.08 | 23.00 1.08 | 23.08

1.08 | 23.17

1.08 | 23.33

0.72

4.500

4.583

4.750

4.833

4.917

5.000 5.083

5.167

5.333

5.417

0.96 110,500

0.96 10.583

0.96 110.750

0.96 | 10.833

0.96 110.917

0.96 |11.000 0.96 |11.083

0.96 11.167

0.96 11.250

0.96 111.333

```
    5.833
    0.96 | 11.833
    66.24 | 17.833
    1.08 | 23.83
    0.72

    5.917
    0.96 | 11.917
    66.24 | 17.917
    1.08 | 23.92
    0.72

    6.000
    0.96 | 12.000
    66.24 | 18.000
    1.08 | 24.00
    0.72

                      1.333 0.66 | 7.333
                                                             1.20 | 13 333
                                                                                      3.24 | 19.33
3.24 | 19.42
                                   0.66 | 7.417
                      1.417
                                                              1.20 |13.417
                      1.500
                                                              1.20 | 13.500
                                                                                       3.24 | 19.50
2.52 | 19.58
                                                                                                                  1.08
                       1.583
                                    0.66 7.583
                                                              1.20 13.583
                                  0.66 | 7.667
                                                              1.20 |13.667
                                                                                                                                                                                                                                                 Unit Hyd Opeak (cms)= 0.862
                      1.750
                                                              1.20 113.750
                                                                                       2.52 | 19.75
                                                                                                                  1.08
                                                                                                                                                                                                                                                 PEAK FLOW (cms)= 0.470 (i)
TIME TO PEAK (ltrs)= 12.583
RUNOFF VOLUME (mm)= 28.264
TOTAL RAINFALL (mm)= 60.000
                       1.833
                                   0.66 | 7.833
                                                              1.20 |13.833
                                                                                       2.52 | 19.83 | 2.52 | 19.92
                      1.917
                                                              1.20 | 13.917
                                                                                                                  1.08
                                   0.66 | 8.000
0.78 | 8.083
                                                             1.20 |14.000
1.62 |14.083
                                                                                       2.52 | 20.00
1.80 | 20.08
                      2.000
2.083
                      2.167
                                    0.78 | 8.167
                                                              1.62 14.167
                                                                                        1.80 | 20.17
                                                                                                                0.72
                                                                                                                                                                                                                                                 RUNOFF COEFFICIENT = 0.471
                                    0.78 | 8.250
                                  0.78 | 8.333
                                                              1.62 | 14.333
                      2.333
                                                                                        1.80 | 20.33
                                                                                                                0.72
                                                                                                                                                                                                                                                 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                      2.417
                                  0.78 | 8.417
0.78 | 8.500
                                                             1.62 | 14.417
1.62 | 14.500
                                                                                        1.80 | 20.42
                      2.500
                                                                                        1.80 | 20.50
                                  0.78 | 8.583
0.78 | 8.667
                                                             1.62 |14.583
1.62 |14.667
                                                                                       1.80 | 20.58
1.80 | 20.67
                      2 583
                                                                                                                                                                                                                                            2.750
                                    0.78 | 8.750
                                                              1.62 14.750
                                                                                        1.80 | 20.75
                      2.833
                                   0.78 | 8.833
                                                              1.62 |14.833
                                                                                        1.80 | 20.83
1.80 | 20.92
                      3.000
                                  0.78 | 9.000
0.78 | 9.083
                                                              1.62 | 15.000
                                                                                        1.80 | 21.00
                                                                                       1.80 | 21.08
                      3.083
                                                              1.92 |15.083
                                                                                                                                                                                                                                                      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                              1.92 | 15.167
                                                                                        1.80 | 21.17
                      3.167
                                    0.78 | 9.167
                                                                                                                0.72
                                  0.78 | 9.250
0.78 | 9.333
                                                             1.92 |15.250
1.92 |15.333
                                                                                        1.80 | 21.25
                      3.333
                                                                                                                                                                                                                                                                                   -- TRANSFORMED HYETOGRAPH --
                                                                                        1.80 | 21.33
                                                            1.92 | 15.417
1.92 | 15.500
2.16 | 15.583
                                   0.78 | 9.417
0.78 | 9.500
                                                                                                                                                                                                                                                              TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                      3.417
                                                                                        1.80 | 21.42

    0.083
    0.66 | 6.083
    1.20 | 12.083
    8.65 | 18.08
    1.08

    0.167
    0.66 | 6.167
    1.20 | 12.167
    8.64 | 18.17
    1.08

    0.250
    0.66 | 6.250
    1.20 | 12.250
    8.64 | 18.25
    1.08

                      3.583
                                    0.78 | 9.583
                                                                                        1.80 | 21.58
                                   0.78 | 9.667
0.78 | 9.750
                                                            2.16 | 15.667
2.16 | 15.750
                                                                                      1.80 | 21.67
1.80 | 21.75
                       3.667
                      3.750
                                                                                                                0.72
                      3.833
                                  0.78 | 9.833
0.78 | 9.917
                                                            2.16 | 15.833
2.16 | 15.917
                                                                                      1.80 | 21.83
1.80 | 21.92
                                                                                                                                                                                                                                                             0.333
                                                                                                                                                                                                                                                                          0.66 | 6.333
0.66 | 6.417
                                                                                                                                                                                                                                                                                                    1.20 | 12.333 | 8.64 | 18.33 | 1.20 | 12.417 | 8.64 | 18.42
                      3.917
                                                                                                                                                                                                                                                             0.417
                                                                                                                                                                                                                                                                                                                                                         1.08
                                                                                                                                                                                                                                                                                                    1.20 | 12.417 | 8.64 | 18.42 | 12.0 | 12.508 | 8.64 | 18.50 | 1.20 | 12.583 | 4.44 | 18.58 | 1.20 | 12.667 | 4.44 | 18.67 | 1.20 | 12.750 | 4.44 | 18.83 | 1.20 | 12.917 | 4.44 | 18.92
                                                             2.16 | 16.000
2.76 | 16.083
2.76 | 16.167
                                                                                                                                                                                                                                                                          0.66 | 6.500
0.66 | 6.583
0.66 | 6.667
                      4.000
                                    0.78 10.000
                                                                                        1.80 | 22.00
                                                                                                                  0.72
                                                                                                                                                                                                                                                             0.500
                                                                                                                                                                                                                                                                                                                                                         1.08
                                   0.96 10.083
                                                                                       1.08 | 22.08
1.08 | 22.17
                      4.167
                                                                                                                                                                                                                                                             0.667
                                                                                                                                                                                                                                                                                                                                                         1.08
                                                             2.76 | 16.250 | 1.08 | 22.25
2.76 | 16.333 | 1.08 | 22.33
                                                                                                                                                                                                                                                                          0.66 | 6.750
                      4.250
                                   0.96 10.250
                                                                                                                 0.72
                                                                                                                                                                                                                                                             0.750
                                                                                                                                                                                                                                                                                                                                                         1.08
                                    0.96 |10.333
                                                                                                                                                                                                                                                             0.833
                                                                                                                                                                                                                                                                                                                                                          1.08
                                                                                         1.08 | 22.42
                      4.417
                                    0.96 10.417
                                                              2.76 16.417
                                                                                                                                                                                                                                                             0.917
                                                                                                                                                                                                                                                                          0.66 6.917
                                                                                                                                                                                                                                                                                                                                                         1.08
                                  0.96 |10.500
0.96 |10.583
                                                             2.76 | 16.500 | 1.08 | 22.50
3.72 | 16.583 | 1.08 | 22.58
                                                                                                                                                                                                                                                                          0.66 | 7.000
0.66 | 7.083
                                                                                                                                                                                                                                                                                                     1.20 | 13.000
                      4.583
                                                                                                                                                                                                                                                                                                                             3.24 | 19.08
                                                                                                                                                                                                                                                             1.083
                                                                                                                                                                                                                                                                                                    1.20 | 13.083
                                                                                                                                                                                                                                                                                                                                                         1.08
                                  0.96 |10.667
0.96 |10.750
                                                             3.72 | 16.667 | 1.08 | 22.67
3.72 | 16.750 | 1.08 | 22.75
                                                                                                                                                                                                                                                                          0.66 | 7.167
0.66 | 7.250
                                                                                                                                                                                                                                                                                                     1.20 | 13.167 | 3.24 | 19.17 | 1.20 | 13.250 | 3.24 | 19.25
                      4 667
                                                                                                                 0.72
                                                                                                                                                                                                                                                              1.167
                      4.750
                                                                                                                                                                                                                                                              1.250
                                                                                                                                                                                                                                                                                                                                                         1.08
                                                                                                                                                                                                                                                                          0.66 | 7.333
0.66 | 7.417
0.66 | 7.500
                                                                                                                                                                                                                                                                                                                             3.24 | 19.33
3.24 | 19.42
3.24 | 19.50
                                                             3.72 | 16.833 | 1.08 | 22.83
3.72 | 16.917 | 1.08 | 22.92
                      4.833
                                   0.96 10.833
                                                                                                                                                                                                                                                              1.333
                                                                                                                                                                                                                                                                                                     1.20 | 13.333
                                                                                                                                                                                                                                                                                                                                                         1.08
                                    0.96 10.917
                                                                                                                                                                                                                                                                                                     1.20 | 13.417
                                                                                                                                                                                                                                                              1.417
                                                                                                                                                                                                                                                                                                                                                         1.08
                      5.000
                                    0.96 |11.000
                                                              3.72 117.000
                                                                                        1.08 | 23.00
                                                                                                                                                                                                                                                              1.500
                                                                                                                                                                                                                                                                                                     1.20 13.500
                                                                                                                                                                                                                                                                                                                                                         1.08
                                                                                                                                                                                                                                                                          0.66 | 7.583
                                                                                                                                                                                                                                                                                                    1.20 |13.583
1.20 |13.667
                                                                                                                                                                                                                                                                                                                             2.52 | 19.58
                      5 083
                                  0.96 111.083
                                                              5.76 17.083 1.08 23.08
                                                                                                                 0.72
                                                                                                                                                                                                                                                              1.583
                                                                                                                                                                                                                                                                                                                                                          1.08
                                    0.96 |11.167
                                                              5.76 17.167
                                                                                         1.08 | 23.17
                      5.167
                                                                                                                                                                                                                                                              1.667
                                                                                                                                                                                                                                                                                                                                                         1.08
                                                                                                                                                                                                                                                                          0.66 | 7.750
0.66 | 7.833
                      5.250
                                    0.96 111.250
                                                              5.76 17.250
                                                                                         1.08 | 23.25
                                                                                                                                                                                                                                                              1.750
                                                                                                                                                                                                                                                                                                     1.20 113.750
                                                                                                                                                                                                                                                                                                                               2.52 | 19.75
                                                                                                                                                                                                                                                                                                                                                         1.08
                                                                                                                                                                                                                                                                                                     1.20 13.833
                                    0.96 |11.333
                                                              5.76 |17.333
                                                                                         1.08 | 23.33
                                                                                                                                                                                                                                                                                                                               2.52 19.83
                       5.333
                                                              5.76 117.417
                      5.417
                                    0.96 111.417
                                                                                        1.08 | 23.42
                                                                                                                                                                                                                                                             1.917
                                                                                                                                                                                                                                                                          0.66 | 7.917
                                                                                                                                                                                                                                                                                                     1 20 13 917
                                                                                                                                                                                                                                                                                                                               2.52 | 19.92
                                                                                                                                                                                                                                                                                                                                                         1.08
                                   0.96 | 11.500 | 5.76 | 17.500 | 1.08 | 23.50 | 0.96 | 11.583 | 24.96 | 17.583 | 1.08 | 23.58
                                                                                                                                                                                                                                                                           0.66 8.000
                                                                                                                                                                                                                                                                                                     1.20 |14.000
                                                                                                                                                                                                                                                                                                                               2.52 | 20.00
                      5 500
                      5.583
                                                                                                                                                                                                                                                                          0.78 8.083
                                                                                                                                                                                                                                                                                                                               1.80 | 20.08
                                                                                                                                                                                                                                                             2.083
                                                                                                                                                                                                                                                                                                    1.62 | 14.083
                                                                                                                                                                                                                                                                                                                                                        0.72
                      5.667
                                    0.96 111 667 24 96 117 667 1.08 23 67
                                                                                                                                                                                                                                                             2 167
                                                                                                                                                                                                                                                                           0.78 8.167
                                                                                                                                                                                                                                                                                                     1.62 14.167
                                                                                                                                                                                                                                                                                                                               1.80 | 20.17
                       5.750 0.96 11.750 24.96 17.750 1.08 23.75 0.72
                                                                                                                                                                                                                                                             2.250 0.78 | 8.250
                                                                                                                                                                                                                                                                                                    1.62 |14.250 | 1.80 | 20.25 | 0.72
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Propose
                     2.333 0.78 | 8.333
2.417 0.78 | 8.417
                                                            1.62 |14.333
1.62 |14.417
                                                                                      1.80 | 20.33 0.72
1.80 | 20.42 0.72
                                                                                                                                                                                                                                                 (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                      2.500 0.78 | 8.500
                                                             1.62 | 14.500
                                                                                       1.80 | 20.50 0.72
```

```
1.62 |14.583
              2.667
                             0.78 | 8.667
                                                           1.62 | 14.667
                                                                                        1.80 | 20.67
                                                                                                                   0.72
                            0.78 | 8.750
0.78 | 8.833
                                                          1.62 |14.750
1.62 |14.833
                                                                                                                                                                                                                                                                 STANDHYD ( 0204)| Area (ha)= 1.93
              2.833
                                                                                        1.80 | 20.83
                                                                                                                                                                                                                                                               |ID= 1 DT= 5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
                                                                                                                   0.72
                             0.78 | 8.917
0.78 | 9.000
                                                           1.62 |14.917
1.62 |15.000
                                                                                       1.80 | 20.92
1.80 | 21.00
              2917
                                                                                                                                                                                                                                                                                                   IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                                                                                                                    3.083
                            0.78 | 9.083
                                                           1.92 | 15.083
                                                                                        1.80 | 21.08
                             0.78 9.167
                                                           1.92 | 15.167
              3.250
                            0.78 | 9.250
                                                          1.92 | 15.250
                                                                                        1.80 | 21.25
                                                                                                                                                                                                                                                                                                                                               1.00
              3.333
                            0.78 | 9.333
0.78 | 9.417
                                                          1.92 |15.333
1.92 |15.417
                                                                                        1.80 | 21.33
                                                                                        1.80 | 21.42
              3.417
              3.500
                             0.78 | 9.500
                                                           1.92 | 15.500
                                                                                        1.80 | 21.50
                             0.78 | 9.583
                                                         2.16 |15.583
2.16 |15.667
               3.583
                                                                                        1.80 | 21.58
                                                                                                                                                                                                                                                                          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                        1.80 | 21.67
              3.667
                            0.78 | 9.750
0.78 | 9.833
0.78 | 9.917
                                                         2.16 | 15.750
2.16 | 15.833
              3.750
                                                                                        1.80 | 21.75
                                                                                                                   0.72
              3.833
                                                                                        1.80 | 21.83
                                                                                                                                                                                                                                                                                                           - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                                                                                                                                 TIME RAIN | TIME R
              3 917
                                                         2 16 115 917
                                                                                       1 80 | 21 92
                            0.78 | 10.000 | 2.16 | 16.000 | 1.80 | 22.00 | 0.96 | 10.083 | 2.76 | 16.083 | 1.08 | 22.08
              4.083
                             0.96 |10.167
0.96 |10.250
                                                          2.76 | 16.167 | 1.08 | 22.17
2.76 | 16.250 | 1.08 | 22.25
              4.167
              4.250
                                                                                                                                                                                                                                                                                   0.250
                                                                                                                                                                                                                                                                                                 0.66 | 6.250
                                                                                                                                                                                                                                                                                                                               1.20 | 12.250
                                                                                                                                                                                                                                                                                                                                                             8.64 | 18.25
                                                                                                                                                                                                                                                                                                                                                                                          1.08
              4.333
4.417
                             0.96 |10.333
0.96 |10.417
0.96 |10.500
                                                          2.76 |16.333
2.76 |16.417
                                                                                        1.08 | 22.33
1.08 | 22.42
                                                                                                                                                                                                                                                                                  1.20 | 12.333 | 8.64 | 18.33
1.20 | 12.417 | 8.64 | 18.42
                                                                                                                                                                                                                                                                                                                                                                                           1.08
                                                                                        1.08 | 22.50
              4.500
                                                           2.76 116.500
                                                                                                                                                                                                                                                                                                                               1.20 | 12.500 | 8.64 | 18.50
                                                                                                                                                                                                                                                                                                                                                                                          1.08
              4 583
                            0.96 |10.583
0.96 |10.667
                                                          3.72 |16.583
3.72 |16.667
                                                                                        1.08 | 22.58
                                                                                                                     0.72
                                                                                                                                                                                                                                                                                   0.583
                                                                                                                                                                                                                                                                                                 0.66 | 6.583
                                                                                                                                                                                                                                                                                                                               1.20 | 12.583
1.20 | 12.667
                                                                                                                                                                                                                                                                                                                                                           4.44 | 18.58
4.44 | 18.67
              4.667
                                                                                                                                                                                                                                                                                   0.667
                                                                                                                                                                                                                                                                                                                                                                                           1.08
                                                                                                                                                                                                                                                                                                                               1.20 | 12.667 | 4.44 | 18.67 | 1.20 | 12.750 | 4.44 | 18.75 | 1.20 | 12.833 | 4.44 | 18.83 | 1.20 | 12.917 | 4.44 | 18.92 | 1.20 | 13.000 | 4.44 | 19.00 | 1.20 | 13.083 | 3.24 | 19.08
                                                          3.72 | 16.750 | 1.08 | 22.75
3.72 | 16.833 | 1.08 | 22.83
                                                                                                                                                                                                                                                                                   0.750 0.66 6.750
0.833 0.66 6.833
              4.750
                             0.96 10.750
                                                                                                                                                                                                                                                                                                                                                                                          1.08
                             0.96 |10.833
                                                                                                                                                                                                                                                                                                                                                                                          1.08
              4.917
                             0.96 10.917
                                                           3.72 | 16.917 | 1.08 | 22.92
                                                                                                                                                                                                                                                                                   0.917
                                                                                                                                                                                                                                                                                                 0.66 | 6.917
0.66 | 7.000
0.66 | 7.083
                                                                                                                                                                                                                                                                                                                                                                                          1.08
                                                           3.72 | 17.000
5.76 | 17.083
5.76 | 17.167
              5.000
                            0.96 |11.000
0.96 |11.083
                                                                                        1.08 | 23.00
              5.083
                                                                                         1.08 | 23.08
                                                                                                                                                                                                                                                                                   1.083
                                                                                                                                                                                                                                                                                                                                                                                          1.08
              5.167
                             0.96 111.167
                                                                                        1.08 | 23.17
1.08 | 23.25
                                                                                                                                                                                                                                                                                                  0.66 | 7.167
0.66 | 7.250
                                                                                                                                                                                                                                                                                                                               1.20 | 13.167
1.20 | 13.250
                                                                                                                                                                                                                                                                                                                                                            3.24 | 19.17
3.24 | 19.25
                                                                                                                                                                                                                                                                                   1.167
                             0.96 |11.250
                                                           5.76 |17.250
                                                                                                                                                                                                                                                                                                                                                                                          1.08
                                                          5.76 | 17.333
5.76 | 17.417
5.76 | 17.500
                                                                                                                                                                                                                                                                                                 0.66 | 7.333
0.66 | 7.417
                                                                                                                                                                                                                                                                                                                                                           3.24 | 19.33
3.24 | 19.42
              5.333
                            0.96 11.333
                                                                                        1.08 | 23.33
                                                                                                                                                                                                                                                                                   1.333
                                                                                                                                                                                                                                                                                                                                1.20 | 13.333
                                                                                                                                                                                                                                                                                                                                                                                          1.08
                             0.96 11.417
                                                                                         1.08 | 23.42
                                                                                                                                                                                                                                                                                                                                1.20 | 13.417
               5.417
                                                                                                                                                                                                                                                                                   1.417
                                                                                                                                                                                                                                                                                                 0.66 | 7.500
0.66 | 7.583
0.66 | 7.667
0.66 | 7.750
                                                                                                                                                                                                                                                                                                                                                           3.24 | 19.50
2.52 | 19.58
2.52 | 19.67
2.52 | 19.75
              5.500
                             0.96 111.500
                                                                                         1.08 | 23.50
                                                                                                                                                                                                                                                                                   1.500
                                                                                                                                                                                                                                                                                                                                1 20 13 500
                                                                                                                                                                                                                                                                                                                                                                                          1.08
                                                                                         1.08 | 23.58
1.08 | 23.67
1.08 | 23.75
                           0.96 |11.583 | 24.96 |17.583 |
0.96 |11.667 | 24.96 |17.667
               5.583
                                                                                                                                                                                                                                                                                    1.583
                                                                                                                                                                                                                                                                                                                                1.20 |13.583
                                                                                                                                                                                                                                                                                   1.667
                                                                                                                                                                                                                                                                                                                                1.20 113.667
                                                                                                                                                                                                                                                                                                                                                                                          1.08
               5.750
                            0.96 11.750 24.96 17.750
                                                                                                                                                                                                                                                                                   1.750
                                                                                                                                                                                                                                                                                                                                1.20 13.750
                                                                                                                                                                                                                                                                                                                                                                                          1.08
                           0.96 |11.833 | 66.24 |17.833 |
0.96 |11.917 | 66.24 |17.917
                                                                                         1.08 | 23.83
1.08 | 23.92
                                                                                                                                                                                                                                                                                                 0.66 | 7.833
                                                                                                                                                                                                                                                                                                                               1.20 | 13.833
                                                                                                                                                                                                                                                                                                                                                            2.52 19.83
              5.833
                                                                                                                                                                                                                                                                                    1.833
                                                                                                                                                                                                                                                                                   1.917
                                                                                                                                                                                                                                                                                                                                                                                          1.08
              6.000 0.96 12.000 66.24 18.000 1.08 24.00 0.72
                                                                                                                                                                                                                                                                                   2.000
                                                                                                                                                                                                                                                                                                 0.66 | 8.000
0.78 | 8.083
                                                                                                                                                                                                                                                                                                                               1.20 | 14.000 | 2.52 | 20.00
1.62 | 14.083 | 1.80 | 20.08
                                                                                                                                                                                                                                                                                                                                                                                          1.08
                                                                                                                                                                                                                                                                                   2.083
                                                                                                                                                                                                                                                                                                                               1.62 | 14.167
1.62 | 14.250
Unit Hyd Qpeak (cms)= 0.256
                                                                                                                                                                                                                                                                                   2 167
                                                                                                                                                                                                                                                                                                 0.78 | 8.167
                                                                                                                                                                                                                                                                                                                                                             1.80 | 20.17
                                                                                                                                                                                                                                                                                                   0.78 | 8.250
                                                                                                                                                                                                                                                                                                                                                             1.80 | 20.25
PEAK FLOW (cms)= 0.079 (i)
TIME TO PEAK (hrs)= 12.083
RUNOFF VOLUME (mm)= 22.351
TOTAL RAINFALL (mm)= 60.000
RUNOFF COEFFICIENT = 0.373
                                                                                                                                                                                                                                                                                   2.333
                                                                                                                                                                                                                                                                                                 0.78 | 8.333
                                                                                                                                                                                                                                                                                                                                1.62 14.333
                                                                                                                                                                                                                                                                                                                                                             1.80 | 20.33
                                                                                                                                                                                                                                                                                                                                                                                          0.72
                                                                                                                                                                                                                                                                                                                              1.62 | 14.417
1.62 | 14.500
                                                                                                                                                                                                                                                                                                  0.78 | 8.417
                                                                                                                                                                                                                                                                                                                                                             1.80 | 20.42
                                                                                                                                                                                                                                                                                   2.417
                                                                                                                                                                                                                                                                                                 0.78 | 8.500
                                                                                                                                                                                                                                                                                                                                                             1.80 | 20.50
                                                                                                                                                                                                                                                                                   2.500
                                                                                                                                                                                                                                                                                                                                                                                         0.72
                                                                                                                                                                                                                                                                                  2.583 0.78 8.583
2.667 0.78 8.667
                                                                                                                                                                                                                                                                                                                              1.62 | 14.583 | 1.80 | 20.58
1.62 | 14.667 | 1.80 | 20.67
                                                                                                                                                                                                                                                                                                                                                                                         0.72
                                                                                                                                                                                                                                                                                   2.750 0.78 | 8.750 1.62 | 14.750 1.80 | 20.75 0.72
```

```
1.80 | 20.83 | 0.72
1.80 | 20.92 | 0.72
                                                                                                                                                                                                                                                           CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                      2 833 0 78 | 8 833
                                                              1.62 114.833
                                    0.78 | 8.917
                                                                1.62 14.917
                      3,000
                                    0.78 | 9.000
                                                                1.62 | 15.000
                                                                                           1.80 | 21.00
                                                                                                                   0.72
                                                                                                                                                                                                                                                                  THAN THE STORAGE COEFFICIENT.
                                                               1.92 |15.083
1.92 |15.167
                                    0.78 | 9.083
                                                                                                                                                                                                                                                          (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
                                    0.78 | 9.167
                      3.250 0.78 | 9.250
                                                               1.92 115.250
                                                                                           1.80 | 21.25
                      3.333
                                    0.78 | 9.333
                                                                1.92 |15.333
                                                                1.92 15.417
                      3.417
                                    0.78 | 9.417
                                                                                           1.80 | 21.42
                                   0.78 | 9.500
0.78 | 9.583
                                                               1.92 |15.500
2.16 |15.583
                      3.500
3.583
                                                                                           1.80 | 21.50
                                                                                                                                                                                                                                                       ADD HYD (0042)

1+ 2 = 3 | AREA QPEAK TPEAK R.V.

(ba) (cms) (hrs) (mm)

ID1=1 (0203): 1.61 0.079 12.08 22.35

+ ID2= 2 (0204): 1.93 0.167 12.00 40.23
                                                                                           1.80 | 21.58
                      3,667
                                    0.78 9.667
                                                               2.16 115.667
                                                                                           1.80 | 21.67
                                                              2.16 | 15.750
2.16 | 15.833
                                    0.78 | 9.833
                      3.833
                                                                                           1.80 | 21.83
                      3.917
                                   0.78 | 9.917 | 2.16 | 15.917 | 1.80 | 21.92 | 0.78 | 10.000 | 2.16 | 16.000 | 1.80 | 22.00
                      4.000
                                                                                                                                                                                                                                                             ID = 3 ( 0042): 3.54 0.235 12.00 32.10
                                   0.96 | 10.083
0.96 | 10.167
                                                               2.76 | 16.083 | 1.08 | 22.08
2.76 | 16.167 | 1.08 | 22.17
                      4.083
                      4.167
                                                                                                                                                                                                                                                          NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                      4.250
                                    0.96 110.250
                                                                2.76 16.250
                                                                                            1.08 | 22.25
                      4.333
                                    0.96 |10.333
0.96 |10.417
                                                               2.76 | 16.333 2.76 | 16.417
                                                                                           1.08 | 22.33
                      4.500
                                    0.96 110 500
                                                                2.76 | 16.500 | 1.08 | 22.50
                                                                                                                                                                                                                                                     ADD HYD ( 0042)
                                                                                                                                                                                                                                                        3 + 2 = 1 | AREA QPEAK TPEAK R.V.
                      4.583
                                    0.96 | 10.583
                                                                3.72 |16.583
                                                                                            1.08 | 22.58
                                                                                                                                                                                                                                                           (ha) (cms) (hrs) (mm)

ID1= 3 ( 0042): 3.54 0.235 12.00 32.10

+ ID2= 2 ( 0215): 15.80 0.470 12.58 28.26
                                    0.96 10.667
                      4.667
                                                                3.72 16.667
                                                                                           1.08 | 22.67
                      4.750
                                   0.96 | 10.750
0.96 | 10.833
                                                               3.72 | 16.750 | 1.08 | 22.75
3.72 | 16.833 | 1.08 | 22.83
                      4.833
                                                               3.72 |16.917 | 1.08 | 22.92 | 0.72
3.72 |17.000 | 1.08 | 23.00 | 0.72
                      4 917
                                    0.96 10.917
                                    0.96 11.000
                                                                                                                                                                                                                                                             ID = 1 ( 0042): 19.34 0.533 12.50 28.97
                      5.083
                                   0.96 111.083
                                                                5.76 17.083
                                                                                           1.08 | 23.08
                                   0.96 |11.167
0.96 |11.250
                                                               5.76 | 17.167 | 1.08 | 23.17
5.76 | 17.250 | 1.08 | 23.25
                                                                                                                                                                                                                                                          NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                       5.167
                      5.250
                      5.333
                                   0.96 111.333
                                                               5.76 | 17.333 | 1.08 | 23.33 | 0.72 | 5.76 | 17.417 | 1.08 | 23.42 | 0.72
                                    0.96 11.417
                                                                                                                                                                                                                                                      RESERVOIR( 0025)| OVERFLOW IS OFF
                      5.417
                                   0.96 11.500 5.76 17.500
                                                                                                                                                                                                                                                       IN= 2---> OUT= 1 |
DT= 5.0 min | OUTFLOW STORAGE | OUTFLOW STORAGE
                      5.500
                                                                                           1.08 | 23.50
                        5.583
                                   0.96 | 11.583 | 24.96 | 17.583 | 0.96 | 11.667 | 24.96 | 17.667
                                                                                            1.08 | 23.58
                                                                                                                                                                                                                                                                                         (cms) (ha.m.) | (cms) (ha.m.)
0000 0.0000 | 0.6300 0.4548
0600 0.1908 | 0.7100 0.5242
                      5.667
                                                                                                                                                                                                                                                                                  0.0000 0.0000 |
0.2600 0.1908 |
                      5.750 0.96 11.750 24.96 17.750 1.08 23.75 0.72
5.833 0.96 11.833 66.24 17.833 1.08 23.83 0.72
                                    0.96 | 11.833 | 66.24 | 17.833 | 1.08 | 23.83 | 0.96 | 11.917 | 66.24 | 17.917 | 1.08 | 23.92
                      5.917
                                                                                                                                                                                                                                                                                  0.3900 0.2842 | 0.8100
                                                                                                                                                                                                                                                                                                                                             0.5932
                      6.000 0.96 12.000 66.24 18.000 1.08 24.00 0.72
                                                                                                                                                                                                                                                                                   0.4900 0.3533 | 1.4000
                                                                                                                                                                                                                                                                                                                                             1.1965

    Max.Eff.Inten.(mm/hr)=
    66.24
    15.61

    over (min)
    5.00
    70.00

    Storage Coeff. (min)=
    5.82 (ii)
    67.02 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    70.00

    Unit Hyd. peak (cms)-
    0.20
    0.02

    *TOTALS*

                                                                                                                                                                                                                                                        AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) (nm) (nstLow: ID=2 ( 0042) 19.340 0.533 12.50 28.97 ( 0UTFLOW: ID=1 ( 0025) 19.340 0.261 13.67 28.96
                                                                                                                                                                                                                                                                          PEAK FLOW REDUCTION [Qout/Qin](%)= 48.98
TIME SHIFT OF PEAK FLOW (min)= 70.00
         PEAK FLOW (cms)= 0.16 0.0
TIME TO PEAK (hrs)= 12.00 13.4
RUNOFF VOLUME (mm)= 58.00
TOTAL RAINFALL (mm)= 60.00
RUNOFF COEFFICIENT = 0.97
                                                                0.16 0.02
                                                                                                                                                                                                                                                                           MAXIMUM STORAGE USED (ha.m.)= 0.1915
                                                                                   13.00
                                                                                                         12.00
                                                                                            23.86
                                                                                                                 40.23
                                                                                           60.00
                                                                                                                 60.00
                                                                                                                                                                                                                                                     | NASHYD ( 0225)| Area (ha)= 3.98 Curve Number (CN)= 81.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
            (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed
                    ...... U.H. Tp(hrs)= 0.62
              NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
```

```
4.250
                                                                                                                                                                                                                                                                           0.96 10.250
                                                                                                                                                                                                                                                                                                        2.76 16.250
                                                                                                                                                                                                                                                                                                                                      1.08 | 22.25
                       - TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                           0.96 | 10.333
                                                                                                                                                                                                                                                                                                        2.76 |16.333
TIME RAIN | TIME R
                                                                                                                                                                                                                                                            4.417
                                                                                                                                                                                                                                                                          0.96 110.417
                                                                                                                                                                                                                                                                                                        2.76 [16.417
                                                                                                                                                                                                                                                                                                                                     1.08 | 22.42
                                                                                                                                                                                                                                                                          0.96 | 10.500 | 0.96 | 10.583
                                                                                                                                                                                                                                                                                                       2.76 | 16.500
3.72 | 16.583
                                                                                                                                                                                                                                                                                                                                    1.08 | 22.50
                                                                                                                                                                                                                                                            4.583
0.167
              0.66 | 6.167 | 1.20 | 12.167 | 8.64 | 18.17
                                                                                                   1.08
                                                                                                                                                                                                                                                            4.667
                                                                                                                                                                                                                                                                           0.96 10.667
                                                                                                                                                                                                                                                                                                        3.72 116.667
                                                                                                                                                                                                                                                                                                                                    1.08 | 22.67
1.20 | 12.250 | 8.64 | 18.25
1.20 | 12.333 | 8.64 | 18.33
                                                                                                                                                                                                                                                                           0.96 | 10.750
                                                                                                                                                                                                                                                                                                        3.72 |16.750
                                                                                                   1.08
                                                                                                                                                                                                                                                            4.833 0.96 10.833
                                                                                                                                                                                                                                                                                                       3.72 16.833 1.08 22.83
0.417
              0.66 | 6.417
                                           1.20 | 12.417
1.20 | 12.500
                                                                      8.64 | 18.42
8.64 | 18.50
                                                                                                                                                                                                                                                                                                       3.72 |16.917
3.72 |17.000
0.500
                                                                                                    1.08
                                                                                                                                                                                                                                                                          0.96 111.000
                                                                                                                                                                                                                                                             5.000
                                                                                                                                                                                                                                                                                                                                     1.08 | 23.00
                                                                       4.44 | 18.58
4.44 | 18.67
                                                                                                                                                                                                                                                             5.083
5.167
                                                                                                                                                                                                                                                                          0.96 |11.083
0.96 |11.167
                                                                                                                                                                                                                                                                                                        5.76 |17.083
5.76 |17.167
                                                                                                                                                                                                                                                                                                                                     1.08 | 23.08
1.08 | 23.17
0.583
              0.66 6.583
                                           1.20 112.583
0.667
              0.66 | 6.667
                                           1.20 |12.667
1.20 |12.750
                                                                       4.44 | 18.75
                                                                                                                                                                                                                                                                                                        5.76 17.250 1.08 23.25
                                                                                                    1.08
                                                                                                                                                                                                                                                             5.250
                                                                                                                                                                                                                                                                          0.96 11.250
             0.66 | 6.833
0.66 | 6.917
0.66 | 7.000
                                           1.20 | 12.833 | 4.44 | 18.83
1.20 | 12.917 | 4.44 | 18.92
                                                                                                                                                                                                                                                                          0.96 |11.333
0.96 |11.417
                                                                                                                                                                                                                                                                                                       5.76 | 17.333
5.76 | 17.417
0.833
                                                                                                    1.08
                                                                                                                                                                                                                                                             5.333
                                                                                                                                                                                                                                                                                                                                     1.08 | 23.33
0.917
                                                                                                                                                                                                                                                                                                                                     1.08 | 23.42
                                                                                                                                                                                                                                                             5,417
                                                                                                                                                                                                                                                                          0.96 | 11.500 | 5.76 | 17.500 | 1.08 | 23.50 | 0.96 | 11.583 | 24.96 | 17.583 | 1.08 | 23.58
1.000
                                           1.20 13.000 4.44 19.00
                                                                                                    1 08
                                                                                                                                                                                                                                                             5 500
              0.66 | 7.083
                                           1.20 |13.083 | 3.24 | 19.08
1.20 |13.167 | 3.24 | 19.17
1.167
                                                                                                   1.08
                                                                                                                                                                                                                                                            5.667 0.96 111.667 24.96 117.667
                                                                                                                                                                                                                                                                                                                                     1.08 | 23.67
1.250
              0.66 | 7.250
0.66 | 7.333
                                           1.20 |13.250
1.20 |13.333
                                                                      3.24 | 19.25
3.24 | 19.33
                                                                                                                                                                                                                                                                           0.96 11.750 24.96 17.750

    5.833
    0.96 | 11.833
    66.24 | 17.833
    1.08 | 23.83

    5.917
    0.96 | 11.917
    66.24 | 17.917
    1.08 | 23.92

    6.000
    0.96 | 12.000
    66.24 | 18.000
    1.08 | 24.00

                                                                                                    1.08
                                                                                                                                                                                                                                                                                                                                                                  0.72
1.417
1.500
              0.66 | 7.417
0.66 | 7.500
0.66 | 7.583
                                           1.20 | 13.417 | 3.24 | 19.42 | 1.20 | 13.500 | 3.24 | 19.50 | 1.20 | 13.583 | 2.52 | 19.58
1.583
                                                                                                   1.08
1.667
              0.66 | 7.667
                                           1.20 |13.667
1.20 |13.750
                                                                       2.52 | 19.67
2.52 | 19.75
                                                                                                   1.08
                                                                                                                                                                                                                                               Unit Hyd Qpeak (cms)= 0.245
1.750
                                                                                                    1.08
                                                                                                                                                                                                                                              PEAK FLOW (cms)= 0.120 (i)
TIME TO PEAK (hrs)= 12.500
RUNOFF VOLUME (mm)= 26.400
TOTAL RAINFALL (mm)= 60.000
RUNOFF COEFFICIENT = 0.440
                                           1.20 | 13.833 | 2.52 | 19.83
1.20 | 13.917 | 2.52 | 19.92
1.833
              0.66 7.833
               0.66 | 7.917
2.000
              0.66 | 8.000
                                           1.20 14.000 2.52 20.00
                                                                                                   1.08
2.083
              0.78 | 8.083
                                           1.62 14.083
                                                                      1.80 | 20.08
1.80 | 20.17
               0.78 | 8.167
                                           1.62 | 14.167
2.167
2.250
              0.78 | 8.250
                                           1.62 14.250
                                                                        1.80 | 20.25
2.333
               0.78 | 8.333
                                            1.62 |14.333
                                                                                                                                                                                                                                               (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
              0.78 | 8.417
2.417
                                           1.62 14.417
                                                                        1.80 | 20.42
               0.78 | 8.500
                                            1.62 | 14.500
                                                                        1.80 | 20.50
2.583
              0.78 | 8.583
                                           1.62 | 14.583
                                                                        1.80 | 20.58
              0.78 | 8.667
0.78 | 8.750
0.78 | 8.833
                                           1.62 | 14.667
1.62 | 14.750
1.62 | 14.833
2.667
2.750
                                                                       1.80 | 20.67
1.80 | 20.75
                                                                                                                                                                                                                                         | STANDHYD ( 0220)| Area (ha)= 5.63
|ID=1 DT=5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00
2.833
                                                                        1.80 | 20.83
              0.78 | 8.917
0.78 | 9.000
                                           1.62 | 14.917
1.62 | 15.000
                                                                       1.80 | 20.92
1.80 | 21.00
2.917
                                                                                                                                                                                                                                                                            IMPERVIOUS PERVIOUS (i)
3.000
                                                                                                                                                                                                                                               Surface Area (ha)= 2.36
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
3.083
              0.78 | 9.083
                                           1.92 | 15.083 | 1.80 | 21.08
1.92 | 15.167 | 1.80 | 21.17
                                                                                                                                                                                                                                                                                                                    3.27
5.00
               0.78 | 9.167
                                                                                                                                                                                                                                               Average Slope (%)= 2.00

Length (m)= 250.00

Mannings n = 0.013
3.250
              0.78 | 9.250
                                           1.92 | 15.250
                                                                        1.80 | 21.25
                                                                                                                                                                                                                                                                                                                      2.00
3.333
               0.78 9.333
                                            1.92 |15.333
                                                                       1.80 | 21.33
3.417
               0.78 | 9.417
                                           1.92 | 15.417
                                                                        1.80 | 21.42
                                                                                                   0.72
                                                                                                                                                                                                                                               Mannings n
                                                                                                                                                                                                                                                                                                                 0.250
                                         1.92 | 15.500 | 1.80 | 21.50 | 2.16 | 15.583 | 1.80 | 21.58
3.500
              0.78 9.500
3.583
              0.78 | 9.583
                                                                                                                                                                                                                                                   NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
3.667
              0.78 9.667
                                          2.16 | 15.667 | 1.80 | 21.67
                                                                                                  0.72
                                          2.16 15.750
                                                                      1.80 | 21.75
3.833 0.78 | 9.833 2.16 | 15.833 1.80 | 21.83 0.72
                                                                                                                                                                                                                                                                              ---- TRANSFORMED HYETOGRAPH ----
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```
hrs mm/hr | 0.083 | 0.66 | 6.083 | 1.20 | 12.083 | 8.65 | 1
                     0.083
                                                                                     8.65 | 18.08 | 1.08
                                   0.66 | 6.167
                                                            1.20 12.167
                                                            1.20 |12.250
                     0.333 0.66 6.333
                                                            1.20 12.333 8.64 18.33
                                                                                                                1.08
                                                                                                                                                                                                                                                           4 833
                                                                                                                                                                                                                                                                        0.96 110 833
                                   0.66 | 6.417
                                                             1.20 | 12.417
                                                                                                                                                                                                                                                                         0.96 10.917
                                                                                       8.64 18.50
                     0.500
                                  0.66 | 6.500
                                                             1.20 | 12.500
                                                                                                                 1.08
                                                                                                                                                                                                                                                            5.000
                                                                                                                                                                                                                                                                        0.96 111.000
                     0.583
                                 0.66 | 6.583
0.66 | 6.667
                                                             1.20 |12.583
1.20 |12.667
                                                                                      4.44 | 18.58
4.44 | 18.67
                                                                                                                                                                                                                                                                        0.96 |11.083
                                                                                                                                                                                                                                                             5.083
                                                                                                                 1.08
                                                                                                                                                                                                                                                           5.167
                                                                                                                                                                                                                                                                        0.96 11.167
                     0.750
                                  0.66 6.750
                                                             1.20 12.750
                                                                                      4.44 18.75
                                                                                                                1.08
                                                                                                                                                                                                                                                            5.250
                                                                                                                                                                                                                                                                        0.96 11.250
                                   0.66 | 6.833
                                                             1.20 12.833
                     0.833
                                                                                                                                                                                                                                                            5.333
                                                                                                                                                                                                                                                                         0.96 11.333
                                                                                       4.44 | 18.92
                     0.917
                                   0.66 | 6.917
                                                             1.20 | 12.917
                                                                                                                 1.08
                     1.000
1.083
                                  0.66 | 7.000
0.66 | 7.083
                                                            1.20 |13.000
1.20 |13.083
                                                                                     4.44 | 19.00
3.24 | 19.08
                                                                                                                 1.08
                                  0.66 | 7.167
0.66 | 7.250
                                                            1.20 | 13.167 | 3.24 | 19.17 | 1.20 | 13.250 | 3.24 | 19.25
                     1.167
                                                                                                                1.08
                     1.333
                                  0.66 7.333
                                                             1.20 113.333
                                                                                      3.24 | 19.33
                                                                                                                 1.08
                     1.417
1.500
                                   0.66 | 7.417
                                                            1.20 |13.417
1.20 |13.500
                                                                                     3.24 | 19.42
3.24 | 19.50
                                                                                    2.52 | 19.58
2.52 | 19.67
2.52 | 19.75
                     1.583
                                  0.66 | 7.583
                                                             1.20 | 13.583
                                                                                                                1.08
                                  0.66 | 7.667
                      1.667
                                                             1.20 |13.667
                                                                                                                                                                                                                                                Max.Eff.Inten.(mm/hr)=
                     1.750
                                                                                                                                                                                                                                                          over (min) 5.00
                                                             1.20 | 13.750
                                                                                                                 1.08
                     1.833
                                  0.66 | 7.833
                                                            1.20 | 13.833 | 2.52 | 19.83
1.20 | 13.917 | 2.52 | 19.92
                     1.917
                                                                                                                1.08
                                                            1.20 |14.000
1.62 |14.083
                                                                                     2.52 | 20.00
1.80 | 20.08
                     2.000
                                  0.66 8.000
                                                                                                                1.08
                                   0.78 | 8.083
                     2.167
                                   0.78 | 8.167
                                                             1.62 14.167
                                                                                       1.80 | 20.17
                                                                                                               0.72
                     2.250
                                  0.78 | 8.250
0.78 | 8.333
                                                            1.62 | 14.250
1.62 | 14.333
                                                                                      1.80 | 20.33
                     2.417
                                 0.78 | 8.417
0.78 | 8.500
                                                            1.62 | 14.417
1.62 | 14.500
                                                                                       1.80 | 20.42
                                                                                       1.80 | 20.50
                     2.500
                     2.583
                                  0.78 | 8.583
                                                             1.62 14.583
                                                                                       1.80 | 20.58
                                                                                                               0.72
                     2.667
2.750
                                  0.78 | 8.667
0.78 | 8.750
                                                            1.62 | 14.667
1.62 | 14.750
                                                                                      1.80 | 20.67
1.80 | 20.75
                                  0.78 | 8.833
0.78 | 8.917
                                                            1.62 |14.833
1.62 |14.917
                                                                                     1.80 | 20.83
1.80 | 20.92
                     2.833
                                                                                                              0.72
                     3.000
                                  0.78 | 9.000
                                                             1.62 | 15.000
                                                                                       1.80 | 21.00
                                  0.78 | 9.083
                                                            1.92 |15.083
1.92 |15.167
                     3.083
                                                                                      1.80 | 21.08
                     3.167
                                                                                       1.80 | 21.17
                     3.250 0.78 | 9.250
3.333 0.78 | 9.333
                                                            1.92 |15.250
1.92 |15.333
                                                                                      1.80 | 21.25 0.72
                                                                                      1.80 | 21.33
                                                                                                               0.72
                     3.417
                                   0.78 | 9.417
                                                             1.92 | 15.417
                                                                                      1.80 | 21.42
                                                            1.92 | 15.500 | 1.80 | 21.50 | 0.72 | 2.16 | 15.583 | 1.80 | 21.58 | 0.72
                                  0.78 | 9.500
                                  0.78 | 9.583
                     3.583
                                                           2.16 |15.667
2.16 |15.750
                     3 667
                                   0.78 | 9.667
                                                                                      1.80 | 21.67
                                   0.78 | 9.750
                                                                                       1.80 | 21.75
                     3.833
                                  0.78 9.833
                                                           2.16 15.833 1.80 21.83
                                   0.78 | 9.917
                                                            2.16 |15.917
                                                                                      1.80 | 21.92
                                 0.78 | 10.000 | 2.16 | 16.000 | 1.80 | 22.00 | 0.96 | 10.083 | 2.76 | 16.083 | 1.08 | 22.08 | 0.96 | 10.167 | 2.76 | 16.167 | 1.08 | 22.17
                     4.000
                                                                                                                0.72
                     4.083
                     4.167
                     4.250
                                  0.96 110 250
                                                             2.76 116.250 1.08 1.22.25
                     4.333 0.96 | 10.333 2.76 | 16.333 1.08 | 22.33 0.72
file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
       PEAK FLOW REDUCTION [Qout/Qin](%)= 45.68
                         TIME SHIFT OF PEAK FLOW
                                                                                           (min) = 15.00
                        MAXIMUM STORAGE USED (ha.m.)= 0.0498
                                                                                                                                                                                                                                          DATE: 03/11/2024
                                                                                                                                                                                                                                          USER:
     | 1+ 2= 3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1=1 (0225): 3.98 0.120 12.50 26.40 | + ID2=2 (0025): 19.34 0.261 13.67 28.96
            ID = 3 ( 0002): 23.32 0.323 13.17 28.52
        NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
     ADD HYD ( 0002)]
3 + 2 = 1 | AREA QPEAK TPEAK R.V.
(ha) (cms) (lurs) (mm)
ID1=3 ( 0002): 23.32 0.323 13.17 28.52
+ ID2=2 ( 0050): 5.63 0.251 12.25 38.03
            ID = 1 ( 0002): 28.95 0.497 12.58 30.37
         NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                                                             1.00
```

TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN

```
4.583
                      0.96 10.583
                                          3.72 16.583
                                                               1.08 | 22.58
                      0.96 |10.667
0.96 |10.750
                                          3.72 |16.667
3.72 |16.750
                                                              1.08 | 22.67
                                           3 72 116 833 1 08 1 22 83
                                           3.72 16.917
                                           3.72 17.000
                                                               1.08 | 23.00
                                                                                 0.72
                                           5.76 |17.083
5.76 |17.167
                                                               1.08 | 23.17
                                          5.76 | 17.250 | 1.08 | 23.25
5.76 | 17.333 | 1.08 | 23.33
             5.535 0.96 | 11.535 5.76 | 17.535 1.08 | 23.55 5.417 0.96 | 11.417 5.76 | 17.417 | 1.08 | 23.42 5.500 0.96 | 11.500 5.76 | 17.500 1.08 | 23.50 5.583 0.96 | 11.583 24.96 | 17.583 1.08 | 23.58 5.667 0.96 | 11.672 24.96 | 17.675 1.08 | 23.67 5.750 0.96 | 11.750 24.96 | 17.750 1.08 | 23.75
                                                                                  0.72
            5.833 0.96 | 11.833 66.24 | 17.833 1.08 | 23.83 0.72

5.917 0.96 | 11.917 66.24 | 17.917 1.08 | 23.92 0.72

6.000 0.96 | 12.000 66.24 | 18.000 1.08 | 24.00 0.72
                                        66.24
                                            15.00
   Storage Coeff. (min)= 4.24 (ii) 14.11 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
   Unit Hyd. Tpeak (mm)=
Unit Hyd. peak (cms)=
0.24
0.08
*TOTALS*
   PEAK FLOW (cms)= 0.35 0.23 0.549 (iii)
TIME TO PEAK (hrs)= 12.00 12.08 12.00
RUNOFF VOLUME (mm)= 58.00 27.75 38.04
TOTAL RANFALL (mm)= 60.00 60.00
RUNOFF COEFFICIENT = 0.97 0.46 0.63
***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
     (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
    CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
   THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
RESERVOIR( 0050) OVERFLOW IS OFF
0.0000 0.0000 | 0.5800 0.1023
0.2500 0.0493 | 0.6600 0.1189
                     0.3700 0.0684 0.7600
                                                               0.1366
                          AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm)
  Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\87bcda0a-
5e6b-4127-8cd9-fd4e452cecad/scen
Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-
26df3e227620\87bcda0a-5e6b-4127-8cd9-fd4e452cecad\scen
```

TIME: 11:39:27 READ STORM | Filename: C:\Users\nyokich\AppD TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN 
 hrs
 mm/hr |
 hrs
 hrs</ 1.27 | 6.75 | 2.30 | 12.75 | 8.52 | 18.75 | 1.27 | 7.00 | 2.30 | 13.00 | 6.22 | 19.00 2.07 1.27 | 7.25 | 2.30 | 13.25 | 6.22 | 19.25 | 1.27 | 7.50 | 2.30 | 13.50 | 4.84 | 19.50 1.27 | 7.75 | 2.30 | 13.75 | 4.84 | 19.75 | 1.50 | 8.00 | 3.11 | 14.00 | 3.46 | 20.00 1.75 2.00 2.25 1.50 | 8.25 | 3.11 | 14.25 | 3.46 | 20.25 | 1.50 | 8.50 | 3.11 | 14.50 | 3.46 | 20.50 1 38 1.50 | 8.75 | 3.11 | 14.75 | 3.46 | 20.75 | 1.50 | 9.00 | 3.69 | 15.00 | 3.46 | 21.00 3.00 1.50 | 9.25 | 3.69 | 15.25 | 3.46 | 21.25 | 1.50 | 9.50 | 4.15 | 15.50 | 3.46 | 21.50 3.50 3.75 1.50 | 9.75 | 4.15 | 15.75 | 3.46 | 21.75 | 1.38 | 1.84 | 10.00 | 5.30 | 16.00 | 2.07 | 22.00 | 1.38 4.00 1.84 | 10.25 | 5.30 | 16.25 | 2.07 | 22.25 | 1.84 | 10.50 | 7.14 | 16.50 | 2.07 | 22.50 | 1.84 | 10.75 | 7.14 | 16.75 | 2.07 | 22.75 4.25 1.38 1.38 4.75 1.38 1.84 | 11.00 | 11.06 | 17.00 | 2.07 | 23.00 | 1.84 | 11.25 | 11.06 | 17.25 | 2.07 | 23.25 1.38 1.84 | 11.50 | 47.92 | 17.50 | 2.07 | 23.50 1.84 | 11.75 | 127.18 | 17.75 | 2.07 | 23.75 | 1.38

Input filename: C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat

(v 6.2.2015)

I SSSSS UUUUU A A LLLLL

O O T T H H YY MM M O O
O O T T H H Y Y M M O O
OOO T T H H Y M M OOO
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OOO TITIT TITIT H H Y Y M M OOO TM

\*\*\*\*\* DETAILED OUTPUT \*\*\*\*\*

```
3.417 1.50 | 9.417 3.69 | 15.417 3.46 | 21.42 3.500 1.50 | 9.500 3.69 | 15.500 3.46 | 21.50
                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                                  4.15 | 15.583
4.15 | 15.667
4.15 | 15.750
                                                                                                                                                                                                                                                                                                       3.583
                                                                                                                                                                                                                                                                                                                      1.50 | 9.583
                                                                                                                                                                                                                                                                                                                                                                                  3.46 | 21.58
                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                      1.50 | 9.667
      CALIB
    3.46 21.75
                                                                                                                                                                                                                                                                                                      3 833
                                                                                                                                                                                                                                                                                                                      1 50 | 9 833
                                                                                                                                                                                                                                                                                                                                                   4.15 | 15.833
                                                                                                                                                                                                                                                                                                                                                                                  3 46 | 21 83
                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                       1.50 9.917 4.15 15.917
                                                                                                                                                                                                                                                                                                                                                    4.15 |16.000
5.30 |16.083
5.30 |16.167
                                                                                                                                                                                                                                                                                                       4.000
                                                                                                                                                                                                                                                                                                                      1.50 10.000
                                                                                                                                                                                                                                                                                                                                                                                  3.46 | 22.00
                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                      1.84 |10.083
1.84 |10.167
                                                                                                                                                                                                                                                                                                                                                                                  2.07 | 22.08
                NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                       4.083
                                                                                                                                                                                                                                                                                                      4.167
                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                      4.250
                                                                                                                                                                                                                                                                                                                      1.84 10.250
                                                                                                                                                                                                                                                                                                                                                     5.30 | 16.250 | 2.07 | 22.25
5.30 | 16.333 | 2.07 | 22.33
                                                  - TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                                                                       1.84 10.333
                        TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                    5.30 | 16.417 | 2.07 | 22.42
5.30 | 16.500 | 2.07 | 22.50
7.14 | 16.583 | 2.07 | 22.58
                                                                                                                                                                                                                                                                                                      4.417
                                                                                                                                                                                                                                                                                                                      1.84 10.417
                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                      4.583
                                                                                                                                                                                                                                                                                                                      1.84 10.583
                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                        1.84 | 10.667
1.84 | 10.750
                                                                                                                                                                                                                                                                                                                                                     7.14 | 16.667
7.14 | 16.750
                                                                                                                                                                                                                                                                                                                                                                                  2.07 | 22.67
                                                                                                                                                                                                                                                                                                      4.667
                                                                                                                                                                                                                                                                                                      4.750
                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                                      1.84 | 10.833
1.84 | 10.917
1.84 | 11.000
                                                                                                                                                                                                                                                                                                                                                    7.14 | 16.833 | 2.07 | 22.83
7.14 | 16.917 | 2.07 | 22.92
7.14 | 17.000 | 2.07 | 23.00
                         0.333
                                         1.27 | 6.333
                                                                     2.30 12.333 16.59 18.33
                                                                                                                                   2.07
                                                                                                                                                                                                                                                                                                      4 833
                                                                                                                                                                                                                                                                                                                                                                                                                   1 38
                                        1.27 | 6.533
1.27 | 6.417
1.27 | 6.500
1.27 | 6.583
1.27 | 6.667
                                                                     2.30 | 12.417 | 16.59 | 18.42 | 2.30 | 12.500 | 16.59 | 18.50
                                                                                                                                                                                                                                                                                                       5.000
                         0.583
                                                                     2.30 | 12.583 | 8.53 | 18.58
2.30 | 12.667 | 8.52 | 18.67
                                                                                                                                 2.07
                                                                                                                                                                                                                                                                                                      5.083
                                                                                                                                                                                                                                                                                                                      1.84 | 11.083 | 11.06 | 17.083 | 2.07 | 23.08 | 1.84 | 11.167 | 11.06 | 17.167 | 2.07 | 23.17
                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                     2.30 | 12.667 | 8.52 | 18.67
2.30 | 12.750 | 8.52 | 18.75
                                                                                                                                                                                                                                                                                                       5.167
                         0.750
                                         1.27 | 6.750
                                                                                                                                   2.07
                                                                                                                                                                                                                                                                                                      5.250
                                                                                                                                                                                                                                                                                                                      1.84 | 11.250 | 11.06 | 17.250
                                                                                                                                                                                                                                                                                                                                                                                    2.07 | 23.25
                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                        1.27 | 6.750

1.27 | 6.833

1.27 | 6.917

1.27 | 7.000

1.27 | 7.083

1.27 | 7.167

1.27 | 7.250

1.27 | 7.333
                         0.833
                                                                     2.30 | 12.833 | 8.52 | 18.83
2.30 | 12.917 | 8.52 | 18.92
                                                                                                                                                                                                                                                                                                                      2.07 | 23.33 | 2.07 | 23.42
                         0.917
                                                                                                                                                                                                                                                                                                      5.417
                                                                                                                                                                                                                                                                                                                                                                                                                   1.38

        5.417
        1.84 | 11.417
        11.06 | 17.417
        2.07 | 23.42

        5.500
        1.84 | 11.500
        11.06 | 17.500
        2.07 | 23.50

        5.583
        1.84 | 11.583
        47.92 | 17.583
        2.07 | 23.56

        5.667
        1.84 | 11.667
        47.92 | 17.667
        2.07 | 23.67

        5.750
        1.84 | 11.750
        47.92 | 17.760
        2.07 | 23.75

        5.833
        1.84 | 11.833 | 12.71 | 17.833
        2.07 | 23.83

        5.917
        1.84 | 11.917 | 127.18 | 17.917
        2.07 | 23.92

        6.000
        1.84 | 12.000 | 127.18 | 18.000
        2.07 | 24.00

                                                                     2.30 |13.000
2.30 |13.083
                                                                                                    8.52 | 19.00
6.22 | 19.08
                         1.000
                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                         1.167
                                                                      2.30 | 13.167
                                                                                                     6.22 | 19.17
                                                                                                                                   2.07
                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                     2.30 |13.250 | 6.22 | 19.25
2.30 |13.333 | 6.22 | 19.33
                         1.250
1.333
                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                         1.27 | 7.333
1.27 | 7.417
1.27 | 7.500
1.27 | 7.583
1.27 | 7.667
1.27 | 7.750
                         1.417
                                                                     2.30 |13.417
2.30 |13.500
                                                                                                    6.22 | 19.42
6.22 | 19.50
                                                                                                                                  2.07
                         1.500
                         1.583
                                                                     2.30 13.583
                                                                                                     4.84 | 19.58
                                                                                                                                   2.07
                                                                     2.30 |13.667
2.30 |13.750
                                                                                                    4.84 | 19.67
4.84 | 19.75
                         1.667
1.750
                                                                                                                                                                                                                                                                                        Unit Hyd Qpeak (cms)= 0.483
                                                                                                                                                                                                                                                                                       PEAK FLOW (cms)= 0.660 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 74.856
TOTAL RAINFALL (mm)= 115.199
                                         1.27 | 7.833
1.27 | 7.917
                                                                     2.30 |13.833
2.30 |13.917
                                                                                                   4.84 | 19.83
4.84 | 19.92
                         1.833
                                                                                                                                  2.07
                         1.917
                                         1.27 | 8.000
                                                                                                     4.84 | 20.00
                         2.000
                                                                      2.30 | 14.000
                                         1.50 | 8.083
1.50 | 8.167
                         2.083
                                                                      3.11 |14.083
                                                                                                     3.46 | 20.08
                                                                                                                                    1.38
                         2.167
                                                                      3.11 | 14.167
                                                                                                     3.46 | 20.17
                                                                                                                                    1.38
                                                                                                                                                                                                                                                                                        RUNOFF COEFFICIENT = 0.650
                                         1.50 | 8.250 | 3.11 | 14.250 | 1.50 | 8.333 | 3.11 | 14.333
                                                                                                     3.46 | 20.25
3.46 | 20.33
                         2.250
                                                                                                                                   1.38
                         2.333
                                                                                                                                    1.38
                                                                                                                                                                                                                                                                                        (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                         2.417
                                         1.50 | 8.417
                                                                      3.11 | 14.417
                                                                                                     3.46 | 20.42
                                                                                                                                    1.38
                                         1.50 | 8.500
                                                                     3.11 14.500
                         2.583
                                         1.50 | 8.583
                                                                      3.11 | 14.583
                                                                                                     3.46 | 20.58
                                                                     3.11 |14.667
3.11 |14.750
                         2.667
                                         1.50 | 8.667
                                                                                                     3 46 20 67
                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                   CALIB
                                         1.50 | 8.750
                                                                                                     3.46 20.75
                                                                                                                                                                                                                                                                                   STANDHYD ( 0205) Area (ha)= 7.90
                         2.833
                                         1.50 | 8.833
                                                                      3.11 14.833
                                                                                                     3.46 20.83
                                                                                                                                    1.38
                                                                                                                                                                                                                                                                                 |ID= 1 DT= 5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
                                                                       3.11 |14.917
                                          1.50 | 8.917
                                                                                                     3.46 | 20.92
                                                                                                                                                                                                                                                                                                                       IMPERVIOUS PERVIOUS (i)
                         3.000
                                         1.50 | 9.000
                                                                      3.11 | 15.000
                                                                                                     3.46 | 21.00
                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                                                                             6.32
5.00
                                                                                                                                                                                                                                                                                       Surface Area (ha)= 1.58
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
Length (m)= 229.49
                         3.083
                                         1.50 | 9.083
1.50 | 9.167
                                                                      3.69 | 15.083
3.69 | 15.167
                                                                                                     3.46 | 21.08
3.46 | 21.17
                                                                                                                                    1 38
                         3.167
                                                                                                                                    1.38
                         3.250
                                         1.50 | 9.250
                                                                      3.69 [15.250]
                                                                                                     3.46 | 21.25
                                                                                                                                                                                                                                                                                                                                                                     5.00
                                         1.50 | 9.333 | 3.69 | 15.333 | 3.46 | 21.33
                                                                                                                                                                                                                                                                                                                                                          250.00
file:///V...%20Updated%20EA%20Analysiv/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]

        3.917
        1.50 | 9.917
        4.15 | 15.917
        3.46 | 21.92

        4.000
        1.50 | 10.000
        4.15 | 16.000
        3.46 | 22.00

        4.083
        1.84 | 10.083
        5.30 | 16.083
        2.07 | 22.08

        4.167
        1.84 | 10.167
        5.30 | 16.167
        2.07 | 22.17

           Mannings n
                                             = 0.013 0.250
                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
               NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                     5.30 | 16.250 | 2.07 | 22.25
5.30 | 16.333 | 2.07 | 22.33
                                                                                                                                                                                                                                                                                                      4.250
                                                                                                                                                                                                                                                                                                                       1.84 | 10.250
                                                   TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                                                                       1.84 10.333
```

```
TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                                                                                                    5.30 | 16.417 | 2.07 | 22.42 | 5.30 | 16.500 | 2.07 | 22.50 | 7.14 | 16.583 | 2.07 | 22.58 | 7.14 | 16.667 | 2.07 | 22.67
                                                                                                                                                                                                                                                                                                                                                                       4.417
                                                                                                                                                                                                                                                                                                                                                                                             1.84 10.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 10.500
1.84 | 10.583
                                                                                                                                                                                                                                                                                                                                                                       4.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
0.167
                    | 1.27 | 6.167 | 2.30 | 12.167 | 16.59 | 18.17 |
| 1.27 | 6.250 | 2.30 | 12.250 | 16.59 | 18.25 |
| 1.27 | 6.333 | 2.30 | 12.233 | 16.59 | 18.33 |
| 1.27 | 6.417 | 2.30 | 12.417 | 16.59 | 18.42 |
| 1.27 | 6.500 | 2.30 | 12.500 | 16.59 | 18.50 |
| 1.27 | 6.583 | 2.30 | 12.583 | 8.53 | 18.58 |
| 1.27 | 6.667 | 2.30 | 12.667 | 8.52 | 18.67 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 8.75 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 
                     1.27 | 6.167 | 2.30 | 12.167 | 16.59 | 18.17
                                                                                                                                              2.07
                                                                                                                                                                                                                                                                                                                                                                       4.667
                                                                                                                                                                                                                                                                                                                                                                                             1.84 110.667
                                                                                                                                                                                                                                                                                                                                                                                              1.84 | 10.750
                                                                                                                                                                                                                                                                                                                                                                                                                                     7.14 |16.750
                                                                                                                                                                                                                                                                                                                                                                                                                                   7.14 | 16.833 | 2.07 | 22.83
7.14 | 16.917 | 2.07 | 22.92
7.14 | 17.000 | 2.07 | 23.00
0.333
                                                                                                                                                                                                                                                                                                                                                                       4.833
                                                                                                                                                                                                                                                                                                                                                                                            1.84 10.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.38
0.417
                                                                                                                                                                                                                                                                                                                                                                                              1.84 10.917
                                                                                                                                              2.07
                                                                                                                                                                                                                                                                                                                                                                                             1.84 111.000
0.500
                                                                                                                                                                                                                                                                                                                                                                        5.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.38
                                                                                                                                                                                                                                                                                                                                                                                             1.84 | 11.083 | 11.06 | 17.083 | 1.84 | 11.167 | 11.06 | 17.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.07 | 23.08
2.07 | 23.17
0.583
                                                                                                                                              2.07
                                                                                                                                                                                                                                                                                                                                                                        5.083
0.667
                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 11.250 11.06 | 17.250 2.07 | 23.25
                                                                                                                                                                                                                                                                                                                                                                        5.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                     1.27 | 6.750
1.27 | 6.833
1.27 | 6.917
1.27 | 7.000
1.27 | 7.083
1.27 | 7.167
                                                           2.30 | 12.833 | 8.52 | 18.83
2.30 | 12.917 | 8.52 | 18.92
                                                                                                                                                                                                                                                                                                                                                                        5.333
                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 11.333 | 11.06 | 17.333 | 1.84 | 11.417 | 11.06 | 17.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                              2.07 | 23.33 2.07 | 23.42
0.833
0.917
                                                                                                                                                                                                                                                                                                                                                                        5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1.38
                                                                                                                                                                                                                                                                                                                                                                                            2.07 | 23.50 | 2.07 | 23.58
1.000
                                                           2.30 113.000
                                                                                                     8 52 19 00
                                                                                                                                             2.07
                                                            2.30 |13.083
                                                                                                     6.22 | 19.17
1.167
                                                           2.30 | 13.167
                                                                                                                                             2.07
                                                                                                                                                                                                                                                                                                                                                                       5.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               2.07 | 23.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.38

        5.99 (2)
        1,64 | 11.050 | 47.92 | 17.667 | 2.07 | 23.67

        5.750 | 1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75

        5.833 | 1.84 | 11.833 | 127.17 | 17.833 | 2.07 | 23.83

        5.917 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92

        6.000 | 1.84 | 12.000 | 127.18 | 18.000 | 2.07 | 24.00

                     1.27 | 7.250
1.27 | 7.333
                                                           2.30 |13.250
2.30 |13.333
                                                                                                     6.22 | 19.25
6.22 | 19.33
 1.250
1.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
1.417
1.500
                     1.27 | 7.417
1.27 | 7.500
1.27 | 7.583
                                                           2.30 | 13.417
2.30 | 13.500
                                                                                                     6.22 | 19.42
6.22 | 19.50
1.583
                                                            2.30 113.583
                                                                                                     4.84 19.58
                                                                                                                                             2.07
1.667
                     1.27 | 7.667
1.27 | 7.750
                                                           2.30 |13.667
2.30 |13.750
                                                                                                    4.84 | 19.67
4.84 | 19.75
                                                                                                                                                                                                                                                                                                                                                   Max.Eff.Inten.(mm/hr)= 127.18
over (min) 5.00 25.0
1.750
                                                                                                                                                                                                                                                                                                                                                                                                                                          25.00
                                                                                                                                                                                                                                                                                                                                                  over (min) 5.00 25.00

Storage Coeff. (min)= 3.10 (ii) 20.63 (ii)

Unit Hyd. Tpeak (min)= 5.00 25.00

Unit Hyd. rogal (come)= 0.27 0.05
                     1.27 | 7.833
1.27 | 7.917
                                                                                                    4.84 | 19.83
4.84 | 19.92
1.833
                                                           2.30 113.833
                                                                                                                                             2.07
                                                             2.30 |13.917
2.000
                     1.27 | 8.000
                                                           2.30 | 14.000
                                                                                                    4.84 | 20.00
                                                                                                                                             2.07
                                                                                                                                                                                                                                                                                                                                                   Unit Hyd. peak (cms)= 0.27
                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.05
                                                                                                                                                                                                                                                                                                                                                                                                                                               *TOTALS*
2.083
                     1.50 | 8.083
1.50 | 8.167
                                                           3.11 | 14.083
3.11 | 14.167
                                                                                                     3.46 | 20.08
                                                                                                                                                                                                                                                                                                                                                   PEAK FLOW (cms)= 0.28 0.85 0.883 (iii)
TIME TO PEAK (hrs)= 12.00 12.25 12.25
RUNOFF VOLUME (mm)= 113.20 67.38 71.96
TOTAL RAINFALL (mm)= 115.20 115.20 115.20
RUNOFF COEFFICIENT = 0.98 0.58 0.62
                                                                                                      3.46 | 20.17
2.167
                                                                                                                                              1.38
2.250
                      1.50 | 8.250
                                                            3.11 14.250
                                                                                                      3.46 20.25
                                                                                                                                              1.38
                      1.50 | 8.333
                                                             3.11 |14.333
                                                                                                      3.46 | 20.33
2.333
2.417
                      1.50 | 8.417
                                                            3.11 14.417
                                                                                                      3.46 | 20.42
                                                                                                                                              1.38
                      1.50 | 8.500
                                                             3.11 | 14.500
                                                                                                      3.46 | 20.50
2.583
                      1.50 | 8.583
                                                             3.11 | 14.583
                                                                                                      3.46 | 20.58
                                                                                                                                              1.38
                     1.50 | 8.667
1.50 | 8.750
1.50 | 8.833
                                                           3.11 |14.667
3.11 |14.750
3.11 |14.833
                                                                                                     3.46 | 20.67
3.46 | 20.75
3.46 | 20.83
2.667
                                                                                                                                                                                                                                                                                                                                            ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                                                                                                                                                                                                                                            ***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
2.833
                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                    YOU SHOULD CONSIDER SPLITTING THE AREA.
                     1.50 | 8.917
1.50 | 9.000
                                                            3.11 |14.917
3.11 |15.000
                                                                                                     3.46 | 20.92
3.46 | 21.00
2.917
                                                                                                                                                                                                                                                                                                                                                       (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
3.000
                                                                                                                                              1.38
3.083
                      1.50 9.083
                                                             3.69 | 15.083
                                                                                                     3.46 21.08
                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                    CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL.
                                                                                                      3.46 | 21.17
                      1.50 9.167
                                                              3.69 15.167
3.250
                      1.50 | 9.250
                                                             3 69 (15 250)
                                                                                                      3.46 | 21.25
                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                               THAN THE STORAGE COFFFICIENT.
3.333
                      1.50 9.333
                                                             3.69 | 15.333
                                                                                                      3.46 21.33
                                                                                                                                                                                                                                                                                                                                                    (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
3.417
                      1.50 | 9.417
                                                             3.69 | 15.417
                                                                                                      3.46 | 21.42
                                                                                                                                              1.38
                     1.50 | 9.500
1.50 | 9.583
3 500
                                                             3.69 15.500
                                                                                                      3.46 21.50
                                                                                                                                              1 38
3.583
                                                             4.15 |15.583
                                                                                                     3.46 | 21.58
                                                                                                                                              1.38
                                                            4.15 15.667 3.46 21.67
3,667
                     1.50 9.667
                                                                                                                                             1.38
                                                            4.15 |15.750
                                                                                                     3.46 21.75
                                                                                                                                                                                                                                                                                                                                           | ADD HYD ( 0003)|
                                                                                                                                                                                                                                                                                                                                                1+2=3
3.833
                    1.50 | 9.833 | 4.15 | 15.833 | 3.46 | 21.83 | 1.38
                                                                                                                                                                                                                                                                                                                                                                                                   AREA QPEAK TPEAK R.V.
```

```
2.917 1.50 | 8.917 3.11 | 14.917 3.46 | 20.92
3.000 1.50 | 9.000 3.11 | 15.000 3.46 | 21.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.50 9.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.69 15.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.46 | 21.08
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.50 | 9.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.69 |15.167
3.69 |15.250
                    ID = 3 ( 0003): 14.73 1.506 12.25 73.30
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.46 21.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                     3 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1 50 | 9 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3 69 115 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3 46 | 21 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
              NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.50 | 9.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        3.69 | 15.417
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.50 | 9.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      3.69 15.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.46 21.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     4.15 | 15.583
4.15 | 15.667
                                                                                                                                                                                                                                                                                                                                                                                                                                       3.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.50 | 9.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   3.46 | 21.58
       CALIB
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.50 9.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.46 | 21.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
       NASHYD ( 0200)| Area (ha)= 20.32 Curve Number (CN)= 80.0
|ID=1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.50 | 9.750
1.50 | 9.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.15 | 15.750
4.15 | 15.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.46 | 21.75
3.46 | 21.83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
      ID= 1 DT= 5.0 min
                                                   -- U.H. Tp(hrs)= 0.43
                                                                                                                                                                                                                                                                                                                                                                                                                                     3.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.50 | 9.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.15 | 15.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3.46 | 21.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      4.15 | 15.917 | 3.46 | 21.92 | 4.15 | 16.000 | 3.46 | 22.00 | 5.30 | 16.083 | 2.07 | 22.08 | 5.30 | 16.167 | 2.07 | 22.17 | 5.30 | 16.250 | 2.07 | 22.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.50 |10.000
                      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.84 10.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 10.167
1.84 | 10.250
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.167
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      5.30 | 16.230 | 2.07 | 22.23

5.30 | 16.417 | 2.07 | 22.42

5.30 | 16.500 | 2.07 | 22.50

7.14 | 16.583 | 2.07 | 22.58

7.14 | 16.667 | 2.07 | 22.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 10.333
1.84 | 10.417
1.84 | 10.500
                                                                 --- TRANSFORMED HYETOGRAPH --
                                                                                                                                                                                                                                                                                                                                                                                                                                     4 333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1 38
                                    TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                                                                                                      4.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.84 [10.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.84 |10.667
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       7.14 | 16.750 | 2.07 | 22.75
7.14 | 16.833 | 2.07 | 22.83
7.14 | 16.917 | 2.07 | 22.92
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.84 | 10.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                          1,27 | 6,250 | 2,30 | 12,250 | 16,59 | 18,25 | 1,27 | 6,417 | 2,30 | 12,417 | 16,59 | 18,42 | 1,27 | 6,500 | 2,30 | 12,500 | 16,59 | 18,50 | 1,27 | 6,667 | 2,30 | 12,667 | 8,52 | 18,67 |
                                    0.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.84 10.833
                                    0.417
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.84 10.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.84 | 11.000 | 7.14 | 17.000 | 1.84 | 11.083 | 11.06 | 17.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.07 | 23.00
                                    0.500
                                                                                                                                                                                             2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                      5.000
                                                                                                                                                                                                                                                                                                                                                                                                                                      5.083
                                    0.667
                                                                                                                                                                                            2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                      5.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.84 11.167 11.06 17.167 2.07 123.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                                           1.27 | 6.750
1.27 | 6.833
                                                                                                   2.30 |12.750
2.30 |12.833
                                                                                                                                               8.52 | 18.75
8.52 | 18.83
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 11.250 | 11.06 | 17.250 | 2.07 | 23.25
1.84 | 11.333 | 11.06 | 17.333 | 2.07 | 23.33
                                    0.750
                                    0.833
                                                                                                                                                                                           2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                      5.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                           1.27 | 6.853
1.27 | 6.917
1.27 | 7.000
1.27 | 7.083
1.27 | 7.167
1.27 | 7.250
                                    0.917
                                                                                                   2.30 | 12.917
2.30 | 13.000
                                                                                                                                                8.52 | 18.92
8.52 | 19.00
                                                                                                                                                                                           2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                      5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 11.417 | 11.06 | 17.417 | 1.84 | 11.500 | 11.06 | 17.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    2.07 | 23.42
2.07 | 23.50
                                    1.000
                                                                                                                                                                                                                                                                                                                                                                                                                                      5.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.84 | 11.583 | 47.92 | 17.583 | 2.07 | 23.58

1.84 | 11.667 | 47.92 | 17.667 | 2.07 | 23.67

1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                    1.083
                                                                                                    2.30 13.083
                                                                                                                                                6.22 | 19.08
                                                                                                                                                                                            2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                      5 583
                                                                                                   2.30 |13.167
2.30 |13.250
                                                                                                                                               6.22 | 19.17
6.22 | 19.25
                                    1.250
                                                                                                                                                                                                                                                                                                                                                                                                                                      5.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                          1.27 | 7.250
1.27 | 7.333
1.27 | 7.417
1.27 | 7.500
1.27 | 7.583
1.27 | 7.667
1.27 | 7.750
1.27 | 7.833
                                                                                                   2.30 |13.333
2.30 |13.417
                                                                                                                                               6.22 | 19.33
6.22 | 19.42
                                                                                                                                                                                                                                                                                                                                                                                                                                                          1.84 | 11.833 | 127.17 | 17.833 | 2.07 | 23.83 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                    1.333
                                                                                                                                                                                           2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                     5.833
                                    1.417
                                                                                                                                                                                                                                                                                                                                                                                                                                       5.917
                                    1.500
                                                                                                    2.30 113.500
                                                                                                                                                 6.22 | 19.50
                                                                                                                                                                                            2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                     6.000 1.84 12.000 127.18 18.000 2.07 24.00 1.38
                                                                                                   2.30 |13.583
                                                                                                                                              4.84 | 19.58
4.84 | 19.67
                                     1.583
                                                                                                                                                                                                                                                                                                                                                                                                                Unit Hvd Opeak (cms)= 1.805
                                    1.667
                                                                                                   2.30 |13.750
2.30 |13.833
                                    1.750
                                                                                                                                                4.84 | 19.75
                                                                                                                                                                                           2.07
                                                                                                                                                 4.84 19.83
                                                                                                                                                                                                                                                                                                                                                                                                                PEAK FLOW (cms)= 2.141 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 69.907
TOTAL RAINFALL (mm)= 115.199
                                    1.833
                                                                                                                                                                                            2.07
                                                           1.27 | 7.917
1.27 | 8.000
                                    1.917
                                                                                                    2.30 [13.917
                                                                                                                                                 4.84 | 19.92
                                                                                                                                                                                            2.07
                                                                                                   2.30 |14.000
                                    2.083
                                                            1.50 | 8.083
                                                                                                    3.11 | 14.083
                                                                                                                                                 3.46 | 20.08
                                                                                                    3.11 |14.167
3.11 |14.250
                                    2.167
                                                            1.50 | 8.167
                                                                                                                                                 3.46 | 20.17
                                                                                                                                                                                             1 38
                                                                                                                                                                                                                                                                                                                                                                                                                  RUNOFF COEFFICIENT = 0.607
                                                            1.50 | 8.250
                                    2.250
                                                                                                                                                 3.46 | 20.25
                                    2.333
                                                            1.50 | 8.333
                                                                                                     3.11 14.333
                                                                                                                                                 3.46 | 20.33
                                                                                                                                                                                             1.38
                                                                                                                                                                                                                                                                                                                                                                                                                (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                             1.50 | 8.417
                                                                                                      3.11 |14.417
                                                                                                                                                 3.46 | 20.42
                                    2.500
                                                           1.50 | 8.500
                                                                                                    3.11 114.500
                                                                                                                                                 3.46 | 20.50
                                                                                                                                                                                            1.38
                                    2 583
                                                           1.50 | 8.583
1.50 | 8.667
                                                                                                    3.11 |14.583
3.11 |14.667
                                                                                                                                                3.46 | 20.58
3.46 | 20.67
                                                                                                                                                                                             1.38
                                    2.667
                                                                                                                                                                                             1.38
                                                                                                                                                                                                                                                                                                                                                                                                        | NASHYD ( 0201) | Area (ha)= 3.17 Curve Number (CN)= 77.0 | ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                                    2.750
                                                            1.50 | 8.750
                                                                                                     3.11 [14.750]
                                                                                                                                                 3.46 | 20.75
                                                                                                                                                                                             1.38
                                                           1.50 | 8.833 | 3.11 | 14.833 | 3.46 | 20.83
file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20

        3.917
        1.50 | 9.917
        4.15 | 15.917
        3.46 | 21.92

        4.000
        1.50 | 10.000
        4.15 | 16.000
        3.46 | 22.00

        4.083
        1.84 | 10.083
        5.30 | 16.083
        2.07 | 22.08

        4.167
        1.84 | 10.167
        5.30 | 16.167
        2.07 | 22.17

                                ----- U.H. Tp(hrs)= 0.16
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1 38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.30 |16.250
5.30 |16.333
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.84 | 10.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.07 | 22.25
                                                                        - TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.84 10.333
                                    TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        5.30 | 16.417 | 2.07 | 22.42
5.30 | 16.500 | 2.07 | 22.50
7.14 | 16.583 | 2.07 | 22.58
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.84 10.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                            1.84 | 10.500
1.84 | 10.583
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                    0.167
                                                           1.27 | 6.167 | 2.30 | 12.167 | 16.59 | 18.17
                                                                                                                                                                                            2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                     4.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                             1.84 10.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        7.14 116.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.07 | 22.67
```

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| 1.27 | 6.167 | 2.30 | 12.167 | 16.59 | 18.17 |
| 1.27 | 6.250 | 2.30 | 12.250 | 16.59 | 18.25 |
| 1.27 | 6.333 | 2.30 | 12.233 | 16.59 | 18.33 |
| 1.27 | 6.417 | 2.30 | 12.417 | 16.59 | 18.42 |
| 1.27 | 6.500 | 2.30 | 12.500 | 16.59 | 18.50 |
| 1.27 | 6.583 | 2.30 | 12.583 | 8.53 | 18.58 |
| 1.27 | 6.667 | 2.30 | 12.667 | 8.52 | 18.67 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 |
| 1.27 | 6.750 | 8.75 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 |
| 1.27 | 6.750 | 8.75 | 8.75 
                                                                                                                                                                                                                                                                                               1.84 10.750
                                                                                                                                                                                                                                                                                                                            7.14 |16.750
                                                                                                                                                                                                                                                                                                                           7.14 | 16.833 | 2.07 | 22.83
7.14 | 16.917 | 2.07 | 22.92
7.14 | 17.000 | 2.07 | 23.00
0.333
                                                                                                          2.07
                                                                                                                                                                                                                                                                             4.833
                                                                                                                                                                                                                                                                                             1.84 10.833
                                                                                                                                                                                                                                                                                                                                                                                         1.38
0.417
                                                                                                                                                                                                                                                                                               1.84 10.917
                                                                                                           2.07
                                                                                                                                                                                                                                                                                              1.84 111.000
0.500
                                                                                                                                                                                                                                                                              5.000
                                                                                                                                                                                                                                                                                                                                                                                         1.38
                                                                                                                                                                                                                                                                              5.083
5.167
                                                                                                                                                                                                                                                                                              1.84 | 11.083 | 11.06 | 17.083 | 1.84 | 11.167 | 11.06 | 17.167
                                                                                                                                                                                                                                                                                                                                                           2.07 | 23.08
2.07 | 23.17
0.583
                                                                                                          2.07
0.667
                                                                                                          2.07
                                                                                                                                                                                                                                                                              5.250
                                                                                                                                                                                                                                                                                              1.84 | 11.250 | 11.06 | 17.250
                                                                                                                                                                                                                                                                                                                                                           2.07 | 23.25
                                                                                                                                                                                                                                                                                                                                                                                          1.38
                1.27 | 6.833
1.27 | 6.917
1.27 | 7.000
                                            2.30 |12.833
2.30 |12.917
                                                                           8.52 | 18.83
8.52 | 18.92
                                                                                                                                                                                                                                                                                             1.84 | 11.333 | 11.06 | 17.333 | 1.84 | 11.417 | 11.06 | 17.417
                                                                                                                                                                                                                                                                                                                                                           2.07 | 23.33 2.07 | 23.42
0.833
                                                                                                         2.07
                                                                                                                                                                                                                                                                              5.333
0.917
                                                                                                                                                                                                                                                                              5,417
                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                             2.07 | 23.50 | 2.07 | 23.58
1.000
                                             2 30 113 000
                                                                            8 52 19 00
                                                                                                          2.07
                                                                                                                                                                                                                                                                              5 500
                                                                                                                                                                                                                                                                                                                                                                                           1 38
                1.27 | 7.083
1.27 | 7.167
                                              2.30 |13.083
                                                                                                                                                                                                                                                                               5.583
                                                                            6.22 | 19.17
1.167
                                             2.30 13.167
                                                                                                         2.07
                                                                                                                                                                                                                                                                             5.667
                                                                                                                                                                                                                                                                                                                                                            2.07 | 23.67
                                                                                                                                                                                                                                                                                                                                                                                          1.38
                                                                                                                                                                                                                                                                                            1.84 | 11.667 | 47.92 | 17.750 | 2.07 | 23.75 | 1.84 | 11.833 | 127.17 | 17.833 | 2.07 | 23.83 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92 | 1.84 | 12.000 | 127.18 | 18.000 | 2.07 | 24.00
                1.27 | 7.250
1.27 | 7.333
                                            2.30 |13.250
2.30 |13.333
                                                                            6.22 | 19.25
6.22 | 19.33
 1.250
1.333
                                                                                                          2.07
                                                                                                                                                                                                                                                                             5.833
                                                                                                                                                                                                                                                                                                                                                                                           1.38
1.417
1.500
                1.27 | 7.417
1.27 | 7.500
1.27 | 7.583
                                             2.30 |13.417
2.30 |13.500
                                                                            6.22 | 19.42
6.22 | 19.50
                                                                                                          2.07
                                                                                                                                                                                                                                                                              5.917
1.583
                                             2.30 113.583
                                                                            4.84 19.58
                                                                                                         2.07
1.667
                1.27 | 7.667
1.27 | 7.750
                                             2.30 |13.667
2.30 |13.750
                                                                           4.84 | 19.67
4.84 | 19.75
                                                                                                          2.07
                                                                                                                                                                                                                                                               Unit Hyd Qpeak (cms)= 0.757
1.750
                                                                                                                                                                                                                                                              PEAK FLOW (cms)= 0.580 (i)
TIME TO PEAK (ltrs)= 12.000
RUNOFF VOLUME (mm)= 64.971
TOTAL RAINFALL (mm)= 115.199
RUNOFF COEFFICIENT = 0.564
                1.27 | 7.833
1.27 | 7.917
                                                                           4.84 | 19.83
4.84 | 19.92
1.833
                                            2.30 113.833
                                                                                                         2.07
                                              2.30 |13.917
2.000
                1.27 | 8.000
                                            2.30 | 14.000
                                                                            4.84 | 20.00
                                                                                                         2.07
2.083
                1.50 | 8.083
1.50 | 8.167
                                             3.11 |14.083
3.11 |14.167
                                                                             3.46 | 20.08
2.167
                                                                             3.46 | 20.17
                                                                                                           1.38
2.250
                 1.50 | 8.250
                                              3.11 14.250
                                                                             3.46 | 20.25
                                                                                                           1.38
                 1.50 | 8.333
                                              3.11 |14.333
2.333
                                                                             3.46 | 20.33
                                                                                                                                                                                                                                                               (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
2.417
                 1.50 | 8.417
                                              3.11 14.417
                                                                             3.46 | 20.42
                                                                                                          1.38
                 1.50 | 8.500
                                              3.11 | 14.500
                                                                             3.46 | 20.50
2.500
2.583
                 1.50 | 8.583
                                              3.11 | 14.583
                                                                             3.46 | 20.58
                                                                                                           1.38
                1.50 | 8.667
1.50 | 8.750
1.50 | 8.833
                                             3.11 | 14.667
3.11 | 14.750
3.11 | 14.833
                                                                            3.46 | 20.67
3.46 | 20.75
3.46 | 20.83
2.667
                                                                                                                                                                                                                                                           CALIB
2.750
                                                                                                                                                                                                                                                         | STANDHYD ( 0202)| Area (ha)= 4.57
|ID=1 DT=5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
2.833
                                                                                                           1.38
                1.50 | 8.917
1.50 | 9.000
                                             3.11 |14.917
3.11 |15.000
                                                                            3.46 | 20.92
3.46 | 21.00
2.917
                                                                                                                                                                                                                                                                                               IMPERVIOUS PERVIOUS (i)
3.000
                                                                                                           1.38
                                                                                                                                                                                                                                                              3.083
                 1.50 9.083
                                              3.69 | 15.083
                                                                             3.46 21.08
                                                                                                           1.38
3.167
                 1.50 9.167
                                              3.69 15.167
                                                                             3.46 | 21.17
                                                                                                                                                                                                                                                                                                                                             5.00
3.250
                 1.50 | 9.250
                                              3 69 (15 250)
                                                                             3.46 | 21.25
                                                                                                          1.38
                                                                                                                                                                                                                                                                                                                                            5.00
3.333
                 1.50 9.333
                                              3.69 | 15.333
                                                                             3.46 21.33
                                                                                                                                                                                                                                                                                                                                     500.00
3.417
                 1.50 | 9.417
                                              3.69 | 15.417
                                                                             3.46 | 21.42
                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                    0.250
                1.50 | 9.500
1.50 | 9.583
3 500
                                              3.69 15.500
                                                                             3.46 21.50
                                                                                                           1 38
3.583
                                              4.15 |15.583
                                                                            3.46 | 21.58
                                                                                                           1.38
                                                                                                                                                                                                                                                                    NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                           3.46 | 21.67
3,667
                1.50 9.667
                                             4.15 115.667
                                                                                                         1.38
                                              4.15 15.750
                                                                            3.46 21.75
3.833
               1.50 | 9.833 | 4.15 | 15.833 | 3.46 | 21.83 | 1.38
                                                                                                                                                                                                                                                                                                 ---- TRANSFORMED HYETOGRAPH ----
                                                                                                 d%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
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```
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.083 | 1.27 | 6.083 | 2.30 | 12.083 | 16.60 | 18.08 | 2.07
                                                                                                                                                                                                                                                                                          4.417 1.84 | 10.417 5.30 | 16.417 2.07 | 22.42
4.500 1.84 | 10.500 5.30 | 16.500 2.07 | 22.50
                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                      7.14 | 16.583 | 2.07 | 22.58
7.14 | 16.667 | 2.07 | 22.67
7.14 | 16.750 | 2.07 | 22.75
                        0.083
                                                                                                                                                                                                                                                                                          4.583
                                                                                                                                                                                                                                                                                                          1.84 10.583
                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                       1.27 | 6.167
1.27 | 6.250
                                                                                                                                                                                                                                                                                                         1.84 |10.667
                                                                  2.30 112.167
                                                                                               16.59 | 18.17
                                                                  2.30 |12.250
                                                                                                                                                                                                                                                                                                                                     7.14 |16.833 | 2.07 | 22.83

7.14 |16.917 | 2.07 | 22.92

7.14 |17.000 | 2.07 | 23.00
                        0.333
                                       1.27 | 6.333
                                                                  2.30 112.333 16.59 118.33
                                                                                                                              2.07
                                                                                                                                                                                                                                                                                          4 833
                                                                                                                                                                                                                                                                                                         1 84 110 833
                                                                                                                                                                                                                                                                                                                                                                                                 1 38
                                       1.27 | 6.417
1.27 | 6.500
                                                                  2.30 | 12.417 | 16.59 | 18.42
2.30 | 12.500 | 16.59 | 18.50
                                                                                                                                                                                                                                                                                                          1.84 10.917
                        0.500
                                                                                                                              2.07
                                                                                                                                                                                                                                                                                           5.000
                                                                                                                                                                                                                                                                                                          1.84 | 11.000
                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                       1.27 | 6.583
1.27 | 6.667
1.27 | 6.750
                                                                  2.30 |12.583
2.30 |12.667
                                                                                                8.53 | 18.58
8.52 | 18.67
                                                                                                                                                                                                                                                                                                         2.07 | 23.08
                        0.583
                        0.667
                                                                                                                                                                                                                                                                                           5.167
                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                        0.750
                                                                   2.30 12.750
                                                                                                 8.52 | 18.75
                                                                                                                             2.07
                                                                                                                                                                                                                                                                                           5.250
                                                                                                                                                                                                                                                                                                          1.84 11.250 11.06 17.250
                                                                                                                                                                                                                                                                                                                                                                    2.07 | 23.25
                                       1.27 | 6.833
1.27 | 6.917
                                                                   2.30 |12.833
2.30 |12.917
                                                                                                                                                                                                                                                                                                          1.84 11.333 11.06 17.333
                                                                                                                                                                                                                                                                                                                                                                    2.07 | 23.33
                        0.917
                                                                                                 8.52 | 18.92
                                                                                                                                                                                                                                                                                           5.417
                                                                                                                                                                                                                                                                                                          1.84 | 11.417 | 11.06 | 17.417
                                                                                                                                                                                                                                                                                                                                                                    2.07 | 23.42
                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                        1.84 | 11.500 | 11.06 | 17.417 | 2.07 | 23.50 | 18.4 | 11.503 | 47.92 | 17.583 | 2.07 | 23.58 | 1.84 | 11.583 | 47.92 | 17.687 | 2.07 | 23.67 | 1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75
                        1.000
1.083
                                       1.27 | 7.000
1.27 | 7.083
                                                                  2.30 |13.000
2.30 |13.083
                                                                                                8.52 | 19.00
6.22 | 19.08
                                                                                                                                                                                                                                                                                           5.583
                                                                                                                                                                                                                                                                                                                                                                                                  1.38
                                       1.27 | 7.167
1.27 | 7.250
1.27 | 7.333
                                                                  2.30 |13.167
2.30 |13.250
                                                                                                6.22 | 19.17
6.22 | 19.25
                        1.167
                                                                                                                             2.07
                                                                                                                                                                                                                                                                                           5 667
                                                                                                                                                                                                                                                                                           5.750
                                                                                                                                                                                                                                                                                                                                                                                                   1.38

    5.833
    1.84 | 11.833
    127.17 | 17.833
    2.07 | 23.83
    1.38

    5.917
    1.84 | 11.917
    127.18 | 17.917
    2.07 | 23.92
    1.38

    6.000
    1.84 | 12.000
    127.18 | 18.000
    2.07 | 24.00
    1.38

    1.38
    1.38
    1.38
    1.38
    1.38

                        1.333
                                                                   2.30 113.333
                                                                                                 6.22 | 19.33
                                                                                                                             2.07
                                      1.27 | 7.333
1.27 | 7.417
1.27 | 7.500
1.27 | 7.583
1.27 | 7.667
1.27 | 7.750
                                                                   2.30 |13.417
2.30 |13.500
                                                                                                6.22 | 19.42 | 6.22 | 19.50
                        1.583
                                                                   2.30 [13.583]
                                                                                               4.84 | 19.58
4.84 | 19.67
                                                                                                                             2.07
                                                                  2.30 |13.667
                                                                                                                                                                                                                                                                             Max.Eff.Inten.(mm/hr)=
                                                                                                                                                                                                                                                                                        over (min) 5.00
                                                                                                                                                                                                                                                                                                                                         40.00
                        1.750
                                                                                                4.84 | 19.75
                                                                                                                              2.07
                                       1.27 | 7.833
                        1.833
                                                                  2.30 |13.833
2.30 |13.917
                                                                                                4.84 | 19.83
4.84 | 19.92
                                                                                                                                                                                                                                                                            Storage Coeff. (min)= 3.76 (ii) 35.22 (ii)
Unit Hyd. Tpeak (min)= 5.00 40.00
                                                                                                                                                                                                                                                                            Unit Hyd. Tpeak (mm)=
Unit Hyd. peak (cms)=
0.25
0.03
*TOTALS*
                        1.917
                                                                  2.30 |14.000
3.11 |14.083
                                                                                                4.84 | 20.00
3.46 | 20.08
                        2.000
                                       1.27 | 8.000
                                       1.50 | 8.083
1.50 | 8.167
                        2.083

        PEAK FLOW
        (cms)=
        0.51
        0.25
        0.615 (iii)

        TIME TO PEAK
        (lirs)=
        12.00
        12.50
        12.00

        RUNOFF VOLUME
        (mm)=
        113.20
        65.37
        79.31

        TOTAL RAINFALL
        (mm)=
        115.20
        115.20
        115.20

        RUNOFF COEFFICIENT
        0.98
        0.55
        0.69

                        2.167
                                                                   3.11 14.167
                                                                                                 3.46 | 20.17
                                                                                                                              1.38
                                       1.50 | 8.250
1.50 | 8.333
                                                                  3.11 |14.250
3.11 |14.333
                                                                                                 3.46 | 20.25
                        2.250
                        2.333
                                                                                                 3.46 20.33
                                                                                                                              1.38
                        2.417
                                       1.50 | 8.417
1.50 | 8.500
                                                                  3.11 |14.417
3.11 |14.500
                                                                                                 3.46 | 20.42
                                                                                                                              1.38
                                                                                                 3.46 | 20.50
                        2.500
                                                                                                                              1.38
                        2.583
                                        1.50 | 8.583
                                                                   3.11 14.583
                                                                                                 3.46 20.58
                                                                                                                              1.38
                                       1.50 | 8.667
1.50 | 8.750
                                                                  3.11 |14.667
3.11 |14.750
                                                                                                3.46 | 20.67
3.46 | 20.75
                        2.667
2.750
                                                                                                                                                                                                                                                                       ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
                                                                                                                              1.38
                                       1.50 | 8.833
1.50 | 8.917
                                                                  3.11 |14.833
3.11 |14.917
                                                                                                3.46 | 20.83
3.46 | 20.92
                        2.833
                                                                                                                              1.38
                                                                                                                                                                                                                                                                               (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
                                                                                                                                                                                                                                                                             CN* = 73.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
                                                                   3.11 | 15.000
                        3.000
                                        1.50 | 9.000
                                                                                                 3.46 21.00
                                                                                                                              1.38
                                       1.50 | 9.083
                                                                   3.69 |15.083
3.69 |15.167
                        3.083
                                                                                                 3.46 | 21.08
                                                                                                                                                                                                                                                                                     THAN THE STORAGE COEFFICIENT
                                                                                                                                                                                                                                                                            (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                 3.46 | 21.17
                        3.167
                                                                                                                              1.38
                        3.250
                                       1.50 | 9.250
                                                                  3.69 | 15.250
                                                                                                3.46 21.25
                                                                                                                              1.38
                                       1.50 9.333
                                                                   3.69 15.333
                        3.333
                                                                                                 3.46 21.33
                                                                                                                              1.38
                        3.417
                                        1.50 9.417
                                                                   3.69 115.417
                                                                                                 3.46 | 21.42
                                                                  3.69 | 15.500
4.15 | 15.583
                                        1.50 | 9.500
                                        1.50 | 9.583
                        3.583
                                                                                                 3.46 | 21.58
                                                                                                                                                                                                                                                                       ADD HYD ( 0040)
                                                                                                                                                                                                                                                                          ABD IND ( 0040)]
1+ 2 = 3 | AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)
1D1=1 ( 0201): 3.17 0.580 12.00 64.97
+ ID2=2 ( 0202): 4.57 0.615 12.00 79.31
                        3.667
                                        1.50 9.667
                                                                   4.15 15.667
                                                                                                 3 46 21 67
                                                                                                                              1.38
                                                                   4.15 | 15.750
4.15 | 15.833
                                        1.50 | 9.750
                                                                                                 3.46 | 21.75
                        3.833
                                        1.50 9.833
                                                                                                3.46 | 21.83
                                                                                                                              1.38
                                        1.50 9.917
                                                                   4.15 | 15.917
                                                                                                 3.46 21.92
                                       1.50 |10.000
                                                                   4.15 | 16.000 | 3.46 | 22.00
5.30 | 16.083 | 2.07 | 22.08
5.30 | 16.167 | 2.07 | 22.17
                        4.000
                                                                                                                              1.38
                                       1.84 |10.083
1.84 |10.167
                        4.083
                                                                                                                                                                                                                                                                                ID = 3 ( 0040): 7.74 1.194 12.00 73.44
                        4.167
                                                                                                                                1.38
                                       1.84 | 10.250 | 5.30 | 16.250 | 2.07 | 22.25
1.84 | 10.333 | 5.30 | 16.333 | 2.07 | 22.33
                        4.250
                                                                                                                                                                                                                                                                            NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed
                                                                                                                                                                                                                                                                                          1.083
                                                                                                                                                                                                                                                                                                                                     2.30 13.083
                                                                                                                                                                                                                                                                                                                                                                   6.22 | 19.08
                                                                                                                                                                                                                                                                                                                                                                                               2.07
```

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RESERVOIR( 0032)| OVERFLOW IS OFF
1.27 | 7.083
1.27 | 7.167
                                                                                                                                                                                                         2.30 |13.167
                                                                                                                                                                                                                           6.22 | 19.17
                                                                                                                                                                              1.167
                                                                                                                                                                                                                                             2.07
                                                                                                                                                                                      1.27 | 7.167
1.27 | 7.250
1.27 | 7.333
1.27 | 7.417
1.27 | 7.500
1.27 | 7.583
                   2.30 13.250
                                                                                                                                                                                                                            6.22 | 19.25
                                                                                                                                                                                                         2.30 |13.333
                                                                                                                                                                                                                          6.22 | 19.42
6.22 | 19.50
4.84 | 19.58
4.84 | 19.67
                                                                                                                                                                             1.417
                                                                                                                                                                                                         2.30 113.417
                                                                                                                                                                                                        2.30 | 13.500
2.30 | 13.583
                    0.0640 0.1775
                                            0.1330
                                                           0.3659
                    0.0790 0.2218
                                             0.0000
                                                                                                                                                                              1.583
                                                                                                                                                                                       1.27 | 7.667
1.27 | 7.750
                                                                                                                                                                              1.667
                                                                                                                                                                                                        2 30 13 667
 AREA QPEAK TPEAK R.V.
(ha) (cuss) (hrs) (mm)
INFLOW: ID= 2 ( 0040) 7.740 1.194 12.00 73.44
OUTFLOW: ID= 1 ( 0032) 7.740 0.113 14.00 73.34
                                                                                                                                                                                                         2.30 |13.750
                                                                                                                                                                                       1.27 | 7.833
1.27 | 7.917
1.27 | 8.000
                                                                                                                                                                             1.833
                                                                                                                                                                                                        2.30 13.833
                                                                                                                                                                                                                          4.84 19.83
                                                                                                                                                                                                                                             2.07
                                                                                                                                                                                                        2.30 |13.917
2.30 |14.000
                                                                                                                                                                                                                           4.84 | 19.92
4.84 | 20.00
                                                                                                                                                                              2.000
                                                                                                                                                                                                                                             2.07
                                                                                                                                                                             2.083
2.167
                                                                                                                                                                                       1.50 | 8.083
1.50 | 8.167
                                                                                                                                                                                                         3.11 |14.083
3.11 |14.167
                                                                                                                                                                                                                           3.46 | 20.08
3.46 | 20.17
              PEAK FLOW REDUCTION [Qout/Qin](%)= 9.48
              TIME SHIFT OF PEAK FLOW
              TIME SHIFT OF PEAK FLOW (min)=120.00
MAXIMUM STORAGE USED (ha.m.)= 0.3181
                                                                                                                                                                             2.250
                                                                                                                                                                                       1.50 | 8.250
                                                                                                                                                                                                         3.11 14.250
                                                                                                                                                                                                                           3.46 20.25
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                                       1.50 | 8.333
1.50 | 8.417
                                                                                                                                                                                                         3.11 |14.333
3.11 |14.417
                                                                                                                                                                                                                           3.46 | 20.33
3.46 | 20.42
                                                                                                                                                                             2.333
                                                                                                                                                                             2.417
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                                       1.50 | 8.500
1.50 | 8.583
                                                                                                                                                                                                         3.11 |14.500
3.11 |14.583
                                                                                                                                                                                                                           3.46 | 20.50
3.46 | 20.58
                                                                                                                                                                             2 500
                                                                                                                                                                              2.583
                                                                                                                                                                             2.667
                                                                                                                                                                                       1.50 8.667
                                                                                                                                                                                                         3.11 114.667
                                                                                                                                                                                                                           3.46 | 20.67
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                                        1.50 8.750
                                                                                                                                                                                                         3.11 14.750
| ADD HYD ( 0001)|
 ADD HYD ( 0001)

1+ 2 = 3 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

ID1=1 ( 0200): 20:32 2.141 12:25 69:91

+ ID2= 2 ( 0032): 7.74 0.113 14:00 73:34
                                                                                                                                                                             2.833
                                                                                                                                                                                       1.50 | 8.833
                                                                                                                                                                                                         3.11 14.833
                                                                                                                                                                                                                           3.46 | 20.83
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                                       1.50 | 8.917
1.50 | 9.000
1.50 | 9.083
                                                                                                                                                                                                         3.11 |14.917
3.11 |15.000
                                                                                                                                                                              2.917
                                                                                                                                                                                                                           3.46 | 20.92
                                                                                                                                                                                                                           3.46 | 21.00
                                                                                                                                                                             3.083
                                                                                                                                                                                                         3.69 115.083
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                                        1.50 9.167
                                                                                                                                                                                                         3.69 | 15.167
3.69 | 15.250
                                                                                                                                                                                                                           3.46 21.17
     ID = 3 ( 0001): 28.06 2.220 12.25 70.85
                                                                                                                                                                                        1.50 9.250
                                                                                                                                                                              3.250
                                                                                                                                                                                                                           3.46 | 21.25
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                                       1.50 | 9.333 | 3.69 | 15.333 | 3.46 | 21.33 | 1.50 | 9.417 | 3.69 | 15.417 | 3.46 | 21.42
                                                                                                                                                                             3.333
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
                                                                                                                                                                             3.417
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                             3.500
                                                                                                                                                                                       1.50 | 9.500
                                                                                                                                                                                                        3.69 15.500 3.46 21.50
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                              3.583
                                                                                                                                                                                        1.50 | 9.583
                                                                                                                                                                                                        4.15 | 15.583
4.15 | 15.667
                                                                                                                                                                             3.667
                                                                                                                                                                                       1.50 9.667
                                                                                                                                                                                                                           3.46 21.67
                                                                                                                                                                                                                                             1.38
3 750
                                                                                                                                                                                       1.50 | 9.750
1.50 | 9.833
                                                                                                                                                                                                        4.15 | 15.750
4.15 | 15.833
                                                                                                                                                                                                                          3.46 | 21.75
3.46 | 21.83
                                                                                                                                                                             3.833
ID= 1 DT= 5.0 min |
                                                                                                                                                                             3.917
                                                                                                                                                                                       1.50 | 9.917 | 4.15 | 15.917 | 3.46 | 21.92
                                                                                                                                                                                                                                             1.38
                                                                                                                                                                                        1.50 | 10.000
                                                                                                                                                                                                        4.15 | 16.000 | 3.46 | 22.00
      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                             4.083
                                                                                                                                                                                       1.84 110.083
                                                                                                                                                                                                         5.30 | 16.083 | 2.07 | 22.08
5.30 | 16.167 | 2.07 | 22.17
                                                                                                                                                                                        1.84 10.167
                                                                                                                                                                                                         5.30 | 16.250 | 2.07 | 22.25

5.30 | 16.333 | 2.07 | 22.33

5.30 | 16.417 | 2.07 | 22.42

5.30 | 16.500 | 2.07 | 22.50

7.14 | 16.583 | 2.07 | 22.58

7.14 | 16.667 | 2.07 | 22.67
                                                                                                                                                                             4.250
                                                                                                                                                                                       1.84 | 10.250 | 1.84 | 10.333
                           - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                             4.333
            TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
                                                                                                                                                                                        1.84 | 10.417
                                                                                                                                                                              4.417
                                                                                                                                                                             4.500
                                                                                                                                                                                       1.84 10.500
                                                                                                                                                                                                                                              1.38
           4.583
                                                                                                                                                                                       1.84 10.583
                                                                                                                                                                                       1.84 10.667
                                                                                                                                                                             4.667
                                                                                                                                                                                                                                              1.38
                     1.27 | 6.250
1.27 | 6.333
                                                                                                                                                                                                         7.14 | 16.750 | 2.07 | 22.75
7.14 | 16.833 | 2.07 | 22.83
            0.250
                                      2.30 112.250 16.59 | 18.25
                                                                                                                                                                             4 750
                                                                                                                                                                                       1.84 110 750
                                                                                                                                                                                                                                              1.38
                                      2.30 |12.333 | 16.59 | 18.33
2.30 |12.417 | 16.59 | 18.42
            0.333
                                                                                                                                                                                       1.84 |10.833
1.84 |10.917
            0.417
                      1.27 | 6.417
                                                                                                                                                                             4.917
                                                                                                                                                                                                         7.14 16.917
                                                                                                                                                                                                                            2.07 | 22.92
                                                                                                                                                                                                                                              1.38
                     1.27 | 6.500 | 2.30 | 12.500 | 16.59 | 18.50 | 12.7 | 6.583 | 2.30 | 12.583 | 8.53 | 18.58 | 1.27 | 6.667 | 2.30 | 12.667 | 8.52 | 18.67 | 1.27 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75
                                                                                                                                                                                       1.84 | 11.000 7.14 | 17.000
1.84 | 11.083 11.06 | 17.083
                                                                                                                                                                                                                           2.07 | 23.00
2.07 | 23.08
                                                                           2.07
            0.583
                                                                          2.07
                                                                                                                                                                              5.083
                                                                                                                                                                                                                                               1.38
                                                                                                                                                                                       1.84 | 11.167 | 11.06 | 17.167 | 2.07 | 23.17 | 1.84 | 11.250 | 11.06 | 17.250 | 2.07 | 23.25
            0.667
                                                                           2.07
                                                                                                                                                                             5.167
                                                                                                                                                                                                                                               1.38
            0.833 1.27 | 6.833 2.30 | 12.833 8.52 | 18.83 2.07
                                                                                                                                                                             5.333 1.84 11.333 11.06 17.333 2.07 | 23.33
                                                                                                                                                                                                                                              1.38
```

```
1.917 1.27 | 7.917 2.30 | 13.917 4.84 | 19.92 2.07 2.000 1.27 | 8.000 2.30 | 14.000 4.84 | 20.00 2.07
                          5.417 1.84 | 11.417 11.06 | 17.417 2.07 | 23.42 1.38
                                          1.84 | 11.500 | 11.06 | 17.500 | 2.07 | 23.50

1.84 | 11.583 | 47.92 | 17.583 | 2.07 | 23.50

1.84 | 11.667 | 47.92 | 17.667 | 2.07 | 23.67
                          5.583
                                                                                                                                       1.38
                                                                                                                                                                                                                                                                                                          2.083
                                                                                                                                                                                                                                                                                                                          1.50 | 8.083
                                                                                                                                                                                                                                                                                                                                                       3.11 14.083
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.08
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                          1.50 | 8.167
1.50 | 8.250
                                                                                                                                                                                                                                                                                                                                                       3.11 |14.167
3.11 |14.250
                           5.667
                                           1.84 | 11.750 47.92 | 17.750
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.25
                                        1.84 |11.833 | 127.17 | 17.833 | 2.07 | 23.83 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92
                          5.833
                                                                                                                                       1.38
                                                                                                                                                                                                                                                                                                          2 333
                                                                                                                                                                                                                                                                                                                          1.50 | 8.333
                                                                                                                                                                                                                                                                                                                                                       3.11 | 14.333
                                                                                                                                                                                                                                                                                                                                                                                       3 46 20 33
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                           1.50 | 8.417
                                                                                                                                                                                                                                                                                                                                                        3.11 |14.417
                                        1.84 | 12.000 | 127.18 | 18.000 | 2.07 | 24.00 | 1.38
                          6,000
                                                                                                                                                                                                                                                                                                          2.500
                                                                                                                                                                                                                                                                                                                          1.50 | 8.500
                                                                                                                                                                                                                                                                                                                                                       3.11 14.500
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.50
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                          2.583
                                                                                                                                                                                                                                                                                                                          1.50 | 8.583
                                                                                                                                                                                                                                                                                                                                                       3.11 |14.583
           Unit Hyd Qpeak (cms)= 0.862
                                                                                                                                                                                                                                                                                                          2.667
                                                                                                                                                                                                                                                                                                                          1.50 | 8.667
                                                                                                                                                                                                                                                                                                                                                       3.11 | 14.667
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.67
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                          2.750
                                                                                                                                                                                                                                                                                                                          1.50 8.750
                                                                                                                                                                                                                                                                                                                                                       3.11 14.750
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.75
3.46 | 20.83
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
           PEAK FLOW (cms)= 1.269 (i)
TIME TO PEAK (hrs)= 12.583
                                                                                                                                                                                                                                                                                                                           1.50 | 8.833
                                                                                                                                                                                                                                                                                                                                                        3.11 |14.833
                                                                                                                                                                                                                                                                                                          2.917
                                                                                                                                                                                                                                                                                                                           1.50 | 8.917
                                                                                                                                                                                                                                                                                                                                                        3.11 14.917
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.92
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
           RUNOFF VOLUME (mm)= 74.858
TOTAL RAINFALL (mm)= 115.199
                                                                                                                                                                                                                                                                                                                           1.50 | 9.000
                                                                                                                                                                                                                                                                                                                                                        3.11 | 15.000
                                                                                                                                                                                                                                                                                                                          1.50 | 9.083
                                                                                                                                                                                                                                                                                                          3.083
                                                                                                                                                                                                                                                                                                                                                       3.69 [15.083]
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 21.08
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                          1.50 | 9.167
1.50 | 9.250
                                                                                                                                                                                                                                                                                                                                                       3.69 | 15.167
3.69 | 15.250
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 21.17
3.46 | 21.25
           RUNOFF COEFFICIENT = 0.650
                                                                                                                                                                                                                                                                                                                                                                                                                     1 38
                                                                                                                                                                                                                                                                                                          3.167
                                                                                                                                                                                                                                                                                                          3.250
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                          1.50 | 9.333
1.50 | 9.417
1.50 | 9.500
           (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                                                                                                                                                                                                                                                                                          3 333
                                                                                                                                                                                                                                                                                                                                                       3.69 115.333
                                                                                                                                                                                                                                                                                                                                                                                      3.46 | 21.33
3.46 | 21.42
                                                                                                                                                                                                                                                                                                                                                                                                                     1 38
                                                                                                                                                                                                                                                                                                                                                       3.69 | 15.417
3.69 | 15.500
                                                                                                                                                                                                                                                                                                          3.500
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 21.50
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                          3.583
                                                                                                                                                                                                                                                                                                                          1.50 | 9.583
                                                                                                                                                                                                                                                                                                                                                       4.15 | 15.583
4.15 | 15.667
                                                                                                                                                                                                                                                                                                                                                                                     3.46 21.58
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                           1.50 | 9.667
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 21.67
                                                                                                                                                                                                                                                                                                          3.667
     3,750
                                                                                                                                                                                                                                                                                                                          1.50 | 9.750
                                                                                                                                                                                                                                                                                                                                                       4.15 | 15.750
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 21.75
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                          1.50 | 9.833 | 4.15 | 15.833 | 3.46 | 21.83 | 1.50 | 9.917 | 4.15 | 15.917 | 3.46 | 21.92
                                                                                                                                                                                                                                                                                                          3.917
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                          1.50 | 10.000 | 4.15 | 16.000 | 3.46 | 22.00 | 1.84 | 10.083 | 5.30 | 16.083 | 2.07 | 22.08
                                                                                                                                                                                                                                                                                                          4.000
                 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                          4.083
                                                                                                                                                                                                                                                                                                                                                       5.30 | 16.167 | 2.07 | 22.17
5.30 | 16.250 | 2.07 | 22.25
5.30 | 16.333 | 2.07 | 22.33
                                                                                                                                                                                                                                                                                                          4.167
                                                                                                                                                                                                                                                                                                                          1.84 110.167
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                                                   - TRANSFORMED HYETOGRAPH --
                                                                                                                                                                                                                                                                                                          4.333
                                                                                                                                                                                                                                                                                                                          1.84 10.333
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                          TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                          4.417
                                                                                                                                                                                                                                                                                                                          1.84 | 10.417
1.84 | 10.500
                                                                                                                                                                                                                                                                                                                                                        5.30 | 16.417 | 2.07 | 22.42
5.30 | 16.500 | 2.07 | 22.50
                                                                                                                                                                                                                                                                                                          4.500
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                                                                                                                                          4 583
                                                                                                                                                                                                                                                                                                          4.750
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                                         1.27 | 6.333 | 2.30 | 12.333 | 16.59 | 18.33 | 1.27 | 6.417 | 2.30 | 12.417 | 16.59 | 18.42
                          0.333
                                                                                                                                     2.07
                                                                                                                                                                                                                                                                                                          4 833
                                                                                                                                                                                                                                                                                                                                                                                                                       1 38
                                                                                                                                                                                                                                                                                                          4.917
                                          1.27 | 6.500
                          0.500
                                                                      2.30 12.500 16.59 18.50
                                                                                                                                      2.07
                                                                                                                                                                                                                                                                                                          5.000
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                                         1.27 | 6.583
1.27 | 6.667
1.27 | 6.750
1.27 | 6.833
                                                                      2.30 | 12.583 | 8.53 | 18.58
2.30 | 12.667 | 8.52 | 18.67
                          0.583
                                                                                                                                                                                                                                                                                                                           1.84 | 11.083 | 11.06 | 17.083
                                                                                                                                                                                                                                                                                                                                                                                         2.07 | 23.08
                                                                                                                                                                                                                                                                                                                          1.84 | 11.167 | 11.06 | 17.167
                                                                                                                                                                                                                                                                                                                                                                                        2.07 | 23.17
                          0.667
                                                                                                                                                                                                                                                                                                          5.167
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                                                                                                                                          1.84 |11.250 | 11.06 |17.250 | 2.07 | 23.25

1.84 |11.333 | 11.06 |17.333 | 2.07 | 23.33

1.84 |11.417 | 11.06 |17.417 | 2.07 | 23.42
                                                                      2.30 | 12.750 | 8.52 | 18.75
2.30 | 12.833 | 8.52 | 18.83
                          0.750
                                                                                                                                    2.07
                                                                                                                                                                                                                                                                                                          5.250
                                                                                                                                                                                                                                                                                                                                                                                                                        1.38
                          0.833
                                                                                                                                    2.07
                                                                                                                                                                                                                                                                                                          5.333
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                                          1.27 | 6.917
1.27 | 7.000
1.27 | 7.083
                          0.917
                                                                      2.30 [12.917
                                                                                                      8.52 | 18.92
                                                                                                                                     2.07
                                                                                                                                                                                                                                                                                                          5.417
                                                                                                                                                                                                                                                                                                                         1.84 | 11.500 | 11.06 | 17.500 | 2.07 | 23.50

1.84 | 11.583 | 47.92 | 17.583 | 2.07 | 23.58

1.84 | 11.667 | 47.92 | 17.667 | 2.07 | 23.67

1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75
                                                                      2.30 | 13.000 | 8.52 | 19.00
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                          1.083
                                                                       2.30 | 13.083
                                                                                                       6.22 | 19.08
                                                                                                                                                                                                                                                                                                           5.583
                                                                      2.30 |13.167
2.30 |13.250
                          1.167
                                           1.27 7.167
                                                                                                      6.22 | 19.17
                                                                                                                                     2.07
                                                                                                                                                                                                                                                                                                          5 667
                                                                                                                                                                                                                                                                                                                                                                                                                        1 32
                                          1.27 | 7.250
1.27 | 7.333
                                                                                                       6.22 | 19.25
                                                                                                                                                                                                                                                                                                          5.750
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                                                                                                                                                                                                                                                                                                                          1.84 | 11.833 | 127.17 | 17.833 | 2.07 | 23.83 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92
                                                                                                                                                                                                                                                                                                                                                                                                                       1.38
                          1.333
                                                                       2.30 13.333 6.22 19.33
                                                                                                                                     2.07
                                                                                                                                                                                                                                                                                                          5 833
                                          1.27 | 7.417
                                                                        2.30 |13.417
                          1.500
                                                                       2.30 | 13.500 | 6.22 | 19.50
                                                                                                                                    2.07
                                                                                                                                                                                                                                                                                                          6.000 1.84 12.000 127.18 18.000 2.07 24.00 1.38
                          1.583
                                          1.27 | 7.583
1.27 | 7.667
                                                                       2.30 |13.583
2.30 |13.667
                                                                                                    4.84 | 19.58
4.84 | 19.67
                          1.667
                                                                                                                                                                                                                                                                                           Unit Hyd Qpeak (cms)= 0.256
                          1.750
                                          1.27 | 7.750
                                                                      2.30 13.750 4.84 119.75
                                          1.27 | 7.833 | 2.30 | 13.833 | 4.84 | 19.83 | 2.07
                                                                                                                                                                                                                                                                                           PEAK FLOW (cms)= 0.230 (i)
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20Output/Proposed%20VO%20Detailed%20Output/%20-%20All%20Storms.txt(3/11/2024 11:44:24 AM] [ile://V1...%2010_dated%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Propose
           TIME TO PEAK (hrs)= 12.083
RUNOFF VOLUME (mm)= 63.718
TOTAL RAINFALL (mm)= 115.199
RUNOFF COEFFICIENT = 0.553
                                                                                                                                                                                                                                                                                                          2.417 1.50 | 8.417 3.11 | 14.417
                                                                                                                                                                                                                                                                                                          2.500 1.50 | 8.500 3.11 | 14.500
                                                                                                                                                                                                                                                                                                                                                                                     3.46 20.50
                                                                                                                                                                                                                                                                                                                                                                                                                    1.38
                                                                                                                                                                                                                                                                                                          2 583
                                                                                                                                                                                                                                                                                                                         1.50 | 8.583
                                                                                                                                                                                                                                                                                                                                                       3.11 114.583
                                                                                                                                                                                                                                                                                                                                                                                      3.46 | 20.58
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                                                       3.11 |14.667
                                                                                                                                                                                                                                                                                                                          1.50 8.667
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.67
                                                                                                                                                                                                                                                                                                          2.667
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                          2.750
                                                                                                                                                                                                                                                                                                                          1.50 | 8.750
                                                                                                                                                                                                                                                                                                                                                       3.11 14.750
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 20.75
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
           (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
                                                                                                                                                                                                                                                                                                                                                       3.11 |14.833
                                                                                                                                                                                                                                                                                                          2.917
                                                                                                                                                                                                                                                                                                                          1.50 | 8.917
                                                                                                                                                                                                                                                                                                                                                       3.11 114.917
                                                                                                                                                                                                                                                                                                                                                                                       3.46120.92
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                                                       3.11 |15.000 |
                                                                                                                                                                                                                                                                                                                                                                                      3.46 | 21.00
3.46 | 21.08
                                                                                                                                                                                                                                                                                                                          1.50 | 9.000
                                                                                                                                                                                                                                                                                                                          1.50 | 9.083
                                                                                                                                                                                                                                                                                                          3.083
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
      CALIB
                                                                                                                                                                                                                                                                                                          3.167
                                                                                                                                                                                                                                                                                                                          1.50 9.167
                                                                                                                                                                                                                                                                                                                                                       3.69 115.167
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 21.17
         STANDHYD ( 0204) | Area (ha)= 1.93
                                                                                                                                                                                                                                                                                                                           1.50 | 9.250
                                                                                                                                                                                                                                                                                                                                                       3.69 | 15.250
     ID= 1 DT= 5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
                                                                                                                                                                                                                                                                                                          3.333
                                                                                                                                                                                                                                                                                                                          1.50 | 9.333
                                                                                                                                                                                                                                                                                                                                                       3.69 | 15.333 | 3.46 | 21.33
                                                                                                                                                                                                                                                                                                                                                                                                                     1.38
                                                                                                                                                                                                                                                                                                                                                         3.69 15.417
                                                                                                                                                                                                                                                                                                                                                                                       3.46 21.42
                                          IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                                                                                                                                                                          1.50 | 9.500
                                                                                                                                                                                                                                                                                                                                                       3.69 [15.500]
                                                                                                                                                                                                                                                                                                          3.500
                                                                                                                                                                                                                                                                                                                                                                                       3.46 | 21.50
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3.583
3.667
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1.50 | 9.667
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4.15 | 15.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               3.46 | 21.58
3.46 | 21.67
                                                                                                                                                        0.77
5.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.50 9.750
                                                                                                                                                                1.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                3.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             4.15 | 15.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.46 21.75
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.50 | 9.833
1.50 | 9.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            4.15 | 15.833
4.15 | 15.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            3.46 | 21.83
3.46 | 21.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 3.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               4 000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.50 10.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.84 |10.083
          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.84 10.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                -- TRANSFORMED HYETOGRAPH --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1.84 | 10.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.30 | 16.333 | 2.07 | 22.33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.38
                              TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               5.30 | 16.533 | 2.07 | 22.53

5.30 | 16.417 | 2.07 | 22.42

5.30 | 16.500 | 2.07 | 22.50

7.14 | 16.583 | 2.07 | 22.58

7.14 | 16.667 | 2.07 | 22.67

7.14 | 16.750 | 2.07 | 22.75
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.84 | 10.417
1.84 | 10.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.417
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1.84 | 10.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.667
                                                            | 1.27 | 6.250 | 2.30 | 12.250 | 16.59 | 18.25 | 12.7 | 6.333 | 2.30 | 12.333 | 16.59 | 18.35 | 12.7 | 6.417 | 2.30 | 12.417 | 16.59 | 18.42 | 12.7 | 6.500 | 2.30 | 12.500 | 16.59 | 18.50 | 12.7 | 6.583 | 2.30 | 12.583 | 8.53 | 18.58 | 12.7 | 6.657 | 2.30 | 12.667 | 8.52 | 18.67 | 12.7 | 6.750 | 2.30 | 12.750 | 8.52 | 18.75 | 12.7 | 6.833 | 2.30 | 12.833 | 8.52 | 18.83 | 12.7 | 6.917 | 2.30 | 12.917 | 8.52 | 18.92 | 12.7 | 7.000 | 2.30 | 13.000 | 8.52 | 19.00 | 12.7 | 7.083 | 2.30 | 13.083 | 6.22 | 19.08 | 12.7 | 7.62 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.62 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.62 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.62 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.62 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.62 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.65 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.66 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.65 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.65 | 12.7 | 7.65 | 2.30 | 13.67 | 6.22 | 19.08 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 12.7 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.65 | 7.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.84 | 10.833 | 7.14 | 16.833 | 2.07 | 22.83 | 1.84 | 10.917 | 7.14 | 16.917 | 2.07 | 22.92 | 1.84 | 11.000 | 7.14 | 17.000 | 2.07 | 23.00
                              0.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                4.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4.917
                              0.500
                                                                                                                                                                                                                                                           2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                5.000
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                              0.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.84 |11.083 | 11.06 |17.083
1.84 |11.167 | 11.06 |17.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  2.07 | 23.08
                              0.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.167
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                              0.750
                                                                                                                                                                                                                                                          2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5 250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.84 | 11.250 | 11.06 | 17.250 | 2.07 | 23.25
1.84 | 11.333 | 11.06 | 17.333 | 2.07 | 23.33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.333
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                              0.917
                                                                                                                                                                                                                                                          2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 1.84 | 11.417 | 11.06 | 17.417 | 2.07 | 23.42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.84 11.500 11.06 17.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1.84 | 11.583 | 47.92 | 17.583 | 2.07 | 23.58 | 1.84 | 11.667 | 47.92 | 17.667 | 2.07 | 23.67 | 1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.67 | 1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75 | 2.07 | 23.75 | 2.07 | 23.75 | 2.07 | 23.83 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92 | 2.07 | 23.92 | 2.07 | 23.92 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 2.07 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.93 | 23.
                              1.083
                                                                                                                                                                                                                                                           2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5 583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1 38
                                                               1.27 | 7.167
1.27 | 7.250
1.27 | 7.333
                                                                                                                                                                                          6.22 | 19.17
6.22 | 19.25
6.22 | 19.33
                                                                                                                          2.30 | 13.167
2.30 | 13.250
                               1.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   5,750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38
                              1.333
                                                                                                                           2.30 113.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 5.833
                                                               1.27 | 7.417
1.27 | 7.500
                                                                                                                          2.30 |13.417
2.30 |13.500
                                                                                                                                                                                            6.22 | 19.42
6.22 | 19.50
                              1.417
                              1.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                6.000 1.84 12.000 127.18 18.000 2.07 24.00 1.38
                              1.583
                                                                1.27 | 7.583
                                                                                                                          2.30 | 13.583 | 4.84 | 19.58
                                                                                                                                                                                                                                                          2.07
                               1.667
                                                                1.27 7.667
                                                                                                                             2.30 | 13.667
                                                                                                                                                                                             4.84 | 19.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Max.Eff.Inten.(mm/hr)=
over (min) 5.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  127.18
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     63.63
                                                               1.27 | 7.750
1.27 | 7.833
1.27 | 7.917
                                                                                                                                                                                         4.84 | 19.75
4.84 | 19.83
4.84 | 19.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40.00
                              1.750
                                                                                                                           2.30 | 13.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                over (min)
                                                                                                                                                                                                                                                          2.07
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   over (min) 5.00 40.00

Storage Coeff. (min)= 4.49 (ii) 39.36 (ii)
Unit Hyd. Tpeak (min)= 5.00 40.00
Unit Hyd. peak (cms)= 0.23 0.03

*TOTALS*
                               1.833
                                                                                                                             2.30 |13.833
                              1.917
                                                                                                                             2.30 | 13.917
                                                                                                                                                                                                                                                           2.07
                                                               1.27 | 8.000
1.50 | 8.083
                                                                                                                                                                                       4.84 | 20.00
3.46 | 20.08
                              2 000
                                                                                                                           2.30 14.000
                                                                                                                                                                                                                                                          2.07
                              2.083
                                                                                                                           3.11 14.083
                                                                                                                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PEAK FLOW (cms)= 0.32 0.08
TIME TO PEAK (ltrs)= 12.00 12.50
                                                                                                                          3.11 14.167 3.46 20.17
                              2.167
                                                               1.50 8.167
                                                                                                                                                                                                                                                        1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.353 (iii)
                                                                                                                           3.11 14.250
                                                                                                                                                                                            3.46 20.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  12.00
                              2.333 1.50 | 8.333 3.11 | 14.333 3.46 | 20.33 1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   RUNOFF VOLUME (mm)= 113.20 66.19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   88.74
```

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TOTAL RAINFALL (mm)= 115.20 115.20
RUNOFF COEFFICIENT = 0.98 0.57
 ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
    (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
   CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
   THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
 | ADD HYD ( 0042)|
  ID = 3 ( 0042): 3.54 0.557 12.00 77.36
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
 ADD HYD ( 0042)
  ID = 1 ( 0042): 19.34 1.476 12.50 75.32
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
 RESERVOIR( 0025)| OVERFLOW IS OFF
 DT= 5.0 min
                OUTFLOW STORAGE | OUTFLOW STORAGE
            0.4900 0.3533 | 1.4000
                                 1.1965
               AREA QPEAK TPEAK
  (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0042) 19.340 1.476 12.50 75.32
OUTFLOW: ID= 1 ( 0025) 19.340 0.700 13.58 75.31
          PEAK FLOW REDUCTION [Qout/Qin](%)= 47.42
         TIME SHIFT OF PEAK FLOW (min)= 65.00
MAXIMUM STORAGE USED (ha.m.)= 0.5156
4.15 | 15.583 | 3.46 | 21.58 | 4.15 | 15.667 | 3.46 | 21.67
        3.583 1.50 | 9.583
                                           1.38
        3.750
             1.50 | 9.750
                       4.15 | 15.750
                                  3.46 | 21.75
                                            1.38
             1.50 | 9.833
1.50 | 9.917
                       4.15 | 15.833
4.15 | 15.917
                                  3.46 | 21.83
3.46 | 21.92
        3.833
        3.917
                                            1.38
        4 000
```

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CALIB
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                      -- TRANSFORMED HYETOGRAPH
                       TIME RAIN | TIME R
                                          1.27 | 6.333 | 2.30 | 12.333 | 16.59 | 18.33 | 1.27 | 6.417 | 2.30 | 12.417 | 16.59 | 18.42 | 1.27 | 6.500 | 2.30 | 12.500 | 16.59 | 18.50
                        0 333
                        0.500
                                          1.27 | 6.583
                        0.583
                                                                             2.30 | 12.583 | 8.53 | 18.58
2.30 | 12.667 | 8.52 | 18.67
                                                                                                                                                        2.07
                        0.667
                        0.750
                                            1.27 | 6.750
                                                                              2.30 12.750 8.52 18.75
                                           1.27 | 6.833
1.27 | 6.917
                                                                               2.30 |12.833
                                                                                                                    8.52 | 18.83
8.52 | 18.92
                        0.917
                                                                               2.30 12.917
                        1.000
1.083
                                           1.27 | 7.000
1.27 | 7.083
                                                                              2.30 |13.000
2.30 |13.083
                                                                                                                    8.52 | 19.00
6.22 | 19.08
                                           1.27 | 7.167
1.27 | 7.250
1.27 | 7.333
                         1.167
                                                                               2.30 113.167
                                                                                                                    6.22 | 19.17
                        1.333
                                                                              2.30 | 13.333 | 6.22 | 19.33
                         1.417
                                           1.27 | 7.417
1.27 | 7.500
                                                                              2.30 | 13.417
2.30 | 13.500
                                                                                                                    6.22 | 19.42
6.22 | 19.50
                         1.500
                                           1.27 | 7.583
1.27 | 7.667
1.27 | 7.750
                                                                             2.30 | 13.583 | 4.84 | 19.58
2.30 | 13.667 | 4.84 | 19.67
                         1 583
                                                                             2.30 | 13.750 | 4.84 | 19.75
2.30 | 13.833 | 4.84 | 19.83
2.30 | 13.917 | 4.84 | 19.92
                         1.750
                                          1.27 | 7.833
                         1.833
                         1.917
                                            1.27 | 8.000
                                                                              2 30 14 000 4 84 20 00
                        2.000
                                            1.50 | 8.083
                                                                               3.11 14.083
                                                                                                                    3.46 | 20.17
                        2.167
                                           1.50 | 8.167
                                                                               3.11 | 14.167
                                                                                                                                                         1.38
                                           1.50 | 8.250
1.50 | 8.333
                                                                              3.11 |14.250
3.11 |14.333
                        2.250
                                                                                                                    3.46 | 20.25
                        2.333
                                                                                                                    3.46 20.33
                                                                                                                                                         1.38
                                                                              3.11 |14.417
3.11 |14.500
3.11 |14.583
                                           1.50 | 8.417
1.50 | 8.500
                        2.417
                                                                                                                    3.46 | 20.42
                         2.500
                                                                                                                    3.46 | 20.50
                        2.583
                                            1.50 | 8.583
                                                                                                                    3.46 | 20.58
                                           1.50 | 8.667
1.50 | 8.750
                                                                              3.11 |14.667
3.11 |14.750
                                                                                                                    3.46 | 20.67
3.46 | 20.75
                        2.667
                        2.750
                                                                                                                    3.46 | 20.83
3.46 | 20.92
                        2.833
                                            1.50 | 8.833
                                                                               3.11 |14.833
                                             1.50 | 8.917
                                                                                3.11 14.917
                                                                              3.11 | 15.000
3.69 | 15.083
                                                                                                                    3.46 | 21.00
3.46 | 21.08
                        3.000
                                            1.50 | 9.000
                                                                                                                                                         1.38
                         3.083
                                            1.50 | 9.083
                                                                               3.69 115,167
                        3.167
                                           1.50 | 9.167
                                                                                                                    3.46 | 21.17
                                                                                                                                                         1.38
                         3 250
                                           1 50 9 250
                                                                               3 69 15 250
                                                                                                                    3.46 | 21.25
                        Mannings n
                                                = 0.013 0.250
```

```
1,50 |10,000
1.84 |10,083
                                                                4.15 |16.000
5.30 |16.083
                                                                                             3.46 | 22.00
2.07 | 22.08
                                                                5.30 | 16.167 | 2.07 | 22.17
5.30 | 16.250 | 2.07 | 22.25
                    4.167
                                    1.84 | 10.167
                                                                5.30 | 16.167 | 2.07 | 22.17

5.30 | 16.250 | 2.07 | 22.25

5.30 | 16.333 | 2.07 | 22.33

5.30 | 16.417 | 2.07 | 22.42

5.30 | 16.500 | 2.07 | 22.50
                    4.333
                                   1.84 | 10.333
                    4.417
                                    1.84 | 10.417
                    4.500
                                    1.84 | 10.500
                                                                7.14 |16.583
7.14 |16.667
7.14 |16.750
                                                                                             2.07 | 22.58
2.07 | 22.67
2.07 | 22.75
                    4 583
                                    1 84 110 583
                                   1.84 |10.667
1.84 |10.750
                   4.667
4.750
                                   1.84 | 10.833
1.84 | 10.917
                                                                7.14 | 16.833 | 2.07 | 22.83
7.14 | 16.917 | 2.07 | 22.92
7.14 | 17.000 | 2.07 | 23.00
                    4.833
                    4.917
                    5,000
                                   1.84 111 000
                                   1.84 | 11.083 | 11.06 | 17.083 | 2.07 | 23.08 | 1.84 | 11.167 | 11.06 | 17.167 | 2.07 | 23.17
                    5.167
                                                                                                                            1.38
                                   1.84 |11.250 | 11.06 |17.250 | 2.07 | 23.25
1.84 |11.333 | 11.06 |17.333 | 2.07 | 23.33
                    5.250
                    5.333
                                                                                                                            1.38
                                  1.84 | 11.533 | 11.06 | 17.353

1.84 | 11.417 | 11.06 | 17.507

1.84 | 11.500 | 11.06 | 17.500

1.84 | 11.583 | 47.92 | 17.583

1.84 | 11.667 | 47.92 | 17.667

1.84 | 11.750 | 47.92 | 17.750
                                                                                               2.07 | 23.42
2.07 | 23.50
2.07 | 23.58
                    5.417
                    5.583
                    5 667
                                                                                               2.07 | 23.67

    5,833
    1.84
    11.833
    127.17
    17.833
    2.07
    23.83
    1.38

    5,917
    1.84
    11.917
    127.18
    17.917
    2.07
    23.92
    1.38

    6,000
    1.84
    12,000
    127.18
    18.000
    2.07
    24.00
    1.38

      Unit Hyd Qpeak (cms)= 0.245
      PEAK FLOW (cms)= 0.332 (i)
TIME TO PEAK (hrs)= 12.500
      RUNOFF VOLUME (mm)= 71.525
TOTAL RAINFALL (mm)= 115.199
RUNOFF COEFFICIENT = 0.621
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
| STANDHYD ( 0220)| Area (ha)= 5.63
|ID=1 DT=5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00
                                   IMPERVIOUS PERVIOUS (i)
    Surface Area (ha)= 2.36 3.27
Dep. Storage (mm)= 2.00 5.00
Average Slope (%)= 2.00 2.00
Length (m)= 250.00 40.00
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NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                               - TRANSFORMED HYETOGRAPH
           TIME RAIN| 
                                 1.27 | 6.250 | 2.30 | 12.250 | 16.59 | 18.25
           0.333 1.27 | 6.333 2.30 | 12.333 16.59 | 18.33 
0.417 1.27 | 6.417 2.30 | 12.417 16.59 | 18.42 
0.500 1.27 | 6.500 2.30 | 12.500 16.59 | 18.50
                                                                                                                                                             2.07
                                                                                                                                                             2.07
            0.583
0.667
                                 1.27 | 6.583
1.27 | 6.667
1.27 | 6.750
                                                                        2.30 | 12.583
2.30 | 12.667
                                                                                                                  8.53 | 18.58
8.52 | 18.67
            0.750
                                                                        2.30 | 12.750 | 8.52 | 18.75
                                 1.27 | 6.833
1.27 | 6.917
                                                                        2.30 | 12.833
2.30 | 12.917
                                                                                                                  8.52 | 18.83
8.52 | 18.92
            0.833
            0.917
                                 1.27 | 7.000
1.27 | 7.083
                                                                       2.30 | 13.000 | 8.52 | 19.00
2.30 | 13.083 | 6.22 | 19.08
             1.000
             1.083
                                 1.27 | 7.167
1.27 | 7.250
1.27 | 7.333
            1.167
                                                                        2.30 | 13.167 | 6.22 | 19.17
                                                                          2.30 |13.250
            1.333
                                                                        2.30 | 13.333 | 6.22 | 19.33
                                                                       2.30 | 13.333 | 6.22 | 19.33
2.30 | 13.417 | 6.22 | 19.42
2.30 | 13.500 | 6.22 | 19.50
2.30 | 13.583 | 4.84 | 19.58
2.30 | 13.667 | 4.84 | 19.67
2.30 | 13.750 | 4.84 | 19.75
                                 1.27 | 7.417
1.27 | 7.500
1.27 | 7.583
              1.417
            1.583
              1.667
                                 1.27 | 7.667
1.27 | 7.750
             1.750
                               1.27 | 7.833 | 2.30 | 13.833 | 4.84 | 19.83 | 1.27 | 7.917 | 2.30 | 13.917 | 4.84 | 19.92 | 1.27 | 8.000 | 2.30 | 14.000 | 4.84 | 20.00
             1.833
             1.917
            2.000
                                   1.50 | 8.083
                                                                         3.11 |14.083
3.11 |14.167
                                                                                                                  3.46 | 20.08
3.46 | 20.17
                                  1.50 8.167
            2.167
                                                                                                                                                             1.38
             2 250
                                 1.50 | 8.250
1.50 | 8.333
                                                                        3.11 |14.250
3.11 |14.333
                                                                                                                   3.46 | 20.25
3.46 | 20.33
             2.333
                                                                                                                  3.46 | 20.42
3.46 | 20.50
            2.417
                                  1.50 | 8.417
                                                                         3.11 |14.417
                                   1.50 8.500
                                                                          3.11 14.500
            2 583
                                  1 50 | 8 583
                                                                         3.11 |14.583
3.11 |14.667
                                                                                                                  3.46 | 20.58
3.46 | 20.67
                                   1.50 | 8.667
                                                                                                                  3.46 | 20.75
3.46 | 20.83
3.46 | 20.92
             2.750
                                  1.50 | 8.750
1.50 | 8.833
                                                                         3.11 |14.750 3.11 |14.833
            2.833
                                   1.50 | 8.917
                                                                          3.11 14.917
             3.000
                                  1.50 | 9.000
                                                                         3.11 | 15.000
                                                                                                                   3.46 | 21.00
                                                                                                                                                             1.38
             3.083
                                 1.50 | 9.083
1.50 | 9.167
                                                                        3.69 | 15.083 | 3.46 | 21.08 | 3.69 | 15.167 | 3.46 | 21.17
             3.167
                                                                                                                  3.46 | 21.25
3.46 | 21.33
            3 250
                                  1.50 9 250
                                                                          3.69 15.250
                                                                                                                                                             1 38
                                  1.50 | 9.333
                                                                          3.69 |15.333
             3.417
                                  1.50 9.417
                                                                          3.69 15.417
                                                                                                                   3.46 21.42
                                                                                                                                                             1.38
                               1.50 | 9.500
1.50 | 9.583
                                                                       3.69 | 15.500
4.15 | 15.583
            3.500
3.583
                                                                                                                   3.46 | 21.50
                                                                                                                  3.46 21.58
                                                                                                                                                             1.38
                               1.50 | 9.667 | 4.15 | 15.667 | 3.46 | 21.67
1.50 | 9.750 | 4.15 | 15.750 | 3.46 | 21.75
            3.667
                                                                                                                                                             1.38
            3.833 1.50 | 9.833 4.15 | 15.833 3.46 | 21.83 1.38
```

 
 1.50 | 9.917
 4.15 | 15.917
 3.46 | 21.92
 1.38

 1.50 | 10.000
 4.15 | 16.000
 3.46 | 22.00
 1.38

 1.84 | 10.083
 5.30 | 16.083
 2.07 | 22.08
 1.38

 1.84 | 10.167
 5.30 | 16.167
 2.07 | 22.17
 1.38

 1.84 | 10.250
 5.30 | 16.250
 2.07 | 22.25
 1.38
 3 917 4.083 1.38 5.30 | 16.333 | 2.07 | 22.33 5.30 | 16.417 | 2.07 | 22.42 4.333 1.84 | 10.333 1.38 1.84 | 10.417 2.07 | 22.50 4.500 1.84 | 10.500 5.30 | 16.500 1.38 1.84 |10.583 1.84 |10.667 7.14 |16.583 | 2.07 | 22.58 7.14 |16.667 | 2.07 | 22.67 4.583 4.667 7.14 | 16.750 | 2.07 | 22.75 7.14 | 16.833 | 2.07 | 22.83 7.14 | 16.917 | 2.07 | 22.92 4.750 1.84 10.750 1.38 4.833 1.84 | 10.833 4.917 1.84 | 11.000 | 7.14 | 17.000 | 2.07 | 23.00 | 1.84 | 11.083 | 11.06 | 17.083 | 2.07 | 23.08 5.083 1.38 1.84 | 11.167 | 11.06 | 17.167 | 2.07 | 23.17 | 1.84 | 11.250 | 11.06 | 17.250 | 2.07 | 23.25 | 1.84 | 11.333 | 11.06 | 17.333 | 2.07 | 23.33 5 167 1.38 1.84 |11.333 | 11.06 |17.333 | 1.84 |11.417 | 11.06 |17.417 | 1.84 |11.500 | 11.06 |17.500 | 5.333 1.38 2.07 | 23.42 | 2.07 | 23.50 5.417 1.34 | 11.500 | 11.06 | 11.750 | 2.07 | 23.58 | 1.38 | 5.667 | 1.84 | 11.583 | 47.92 | 17.583 | 2.07 | 23.58 | 1.38 | 5.67 | 1.84 | 11.670 | 47.92 | 17.667 | 2.07 | 23.67 | 1.38 | 5.750 | 1.84 | 11.750 | 47.92 | 17.750 | 2.07 | 23.75 | 1.38 | 5.917 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92 | 1.38 | 5.917 | 1.84 | 11.917 | 127.18 | 17.917 | 2.07 | 23.92 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1.38 | 1. 6.000 1.84 | 12.000 127.18 | 18.000 2.07 | 24.00 1.38 Max.Eff.Inten.(mm/hr)= 127.18 111.64 PEAK FLOW (cms)= 0.67 0.71 TIME TO PEAK (hrs)= 12.00 12.08 
 IAME TO PEAK (hrs)=
 12.00
 12.08
 12.00

 RUNOFF VOLUME (mm)=
 113.20
 73.69
 87.12

 TOTAL RANFALL (mm)=
 115.20
 115.20
 115.20

 RUNOFF COEFFICIENT =
 0.98
 0.64
 0.76
 \*\*\*\* WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP! (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES: CN\* = 80.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT. (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY. RESERVOIR( 0050) OVERFLOW IS OFF -- (cms) (ha.m.) | (cms) (ha.m.) 0.0000 0.0000 | 0.5800 0.1023 file:///V/...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]

0.2500 0.0493 | 0.6600 0.1189 0.3700 0.0684 0.7600 0.1366 0.4600 0.0822 | 0.7800 0.1400 AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) INFLOW: ID= 2 ( 0220) 5.630 1.323 12.00 87.12 OUTFLOW: ID= 1 ( 0050) 5.630 0.641 12.25 87.12 PEAK FLOW REDUCTION [Qout/Qin](%)= 48.45 TIME SHIFT OF PEAK FLOW (min)= 15.00 MAXIMUM STORAGE USED (ha.m.)= 0.1165 | ADD HYD ( 0002)| 1+2=3 | AREA QPEAK TPEAK R.V. (lta) (ctns) (ths) (uni) (D1=1 (0225): 3.98 0.332 12.50 71.53 + ID2=2 (0025): 19.34 0.700 13.58 75.31 ID = 3 ( 0002): 23.32 0.890 13.00 74.66 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. | ADD HYD ( 0002)| 3 + 2 = 1 | AREA QPEAK TPEAK R.V. (ha) (cms) (hrs) (mm) ID1= 3 ( 0002): 23.32 0.890 13.00 74.66 + ID2= 2 ( 0050): 5.63 0.641 12.25 87.12 ID = 1 ( 0002): 28.95 1.316 12.50 77.08 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. V I SSSSS U U A L (v 6.2.2015) V V I SS U U AA L V V I SS U U AAAAA L V V I SS U U A A L VV 1 SSSSS UUUUUU A A LLLLL 000 TTTTT TTTTT H H Y Y M M 000 TM
0 0 T T H H Y Y M M M 0 0
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000 T T H H Y M M 000 Developed and Distributed by Smart City Water Inc Copyright 2007 - 2022 Smart City Water Inc All rights reserved. file: #VV...%20 Updated%20 EA%20 EA%20 Analysis VO/Detailed%20 Output/Proposed%20 VO%20 Detailed%20 Output/%20-%20 All%20 Storms.txt [3/11/20/24 11:44:24 AM] and the file #VV...%20 Updated #W20 EAW20 EA

\*\*\*\*\* DETAILED OUTPUT \*\*\*\*\* Input filename; C:\Program Files (x86)\Visual OTTHYMO 6.2\VO2\voin.dat Output filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\77e30e9a-44ea-42 lb-a4e6-9e6f2e47426b\scen Summary filename: C:\Users\nyokich\AppData\Local\Civica\VH5\3783a080-e662-4500-89be-26df3e227620\77e30e9a-44ea-421b-a4e6-9e6f2e47426b\scen DATE: 03/11/2024 TIME: 11:39:27 USER: COMMENTS: \* \*\* SIMULATION : SCS\_5yr \*\* READ STORM | Filename: C:\Users\nyokich\AppD ata\Local\Temp\ 5e49fc0a-79f7-4237-8582-77f9360bb4e5\f93665c7 Ptotal= 76.80 mm | Comments: SCS\_5yr TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.00 0.85 | 6.00 1.54 | 12.00 11.06 | 18.00 1.38 |
0.25 0.85 | 6.25 1.54 | 12.25 11.06 | 18.25 1.38 |
0.50 0.85 | 6.50 1.54 | 12.50 5.68 | 18.50 1.38 |
0.75 0.85 | 6.75 1.54 | 12.75 5.68 | 18.75 1.38 |
1.00 0.85 | 7.00 1.54 | 13.00 4.15 | 19.00 1.38 |
1.25 0.85 | 7.25 1.54 | 13.05 4.15 | 19.25 1.38 |
1.25 0.85 | 7.25 1.54 | 13.05 4.15 | 19.25 1.38 |
1.50 0.85 | 7.75 1.54 | 13.50 3.23 | 19.50 1.38 |
1.50 0.85 | 7.75 1.54 | 13.75 3.23 | 19.50 1.38 |
1.50 0.85 | 7.75 1.54 | 13.75 3.23 | 19.75 1.38 |
1.50 0.85 | 0.85 | 7.75 1.75 | 1.36 | 13.25 |
1.50 0.85 | 0.85 | 7.75 1.75 | 1.36 | 13.25 |
1.50 0.85 | 0.85 | 7.75 1.75 | 1.36 | 13.25 |
1.50 0.85 | 0.85 | 0.75 | 1.36 | 13.25 |
1.50 0.85 | 0.85 | 0.75 | 1.36 | 13.25 |
1.50 0.85 | 0.85 | 0.75 | 1.36 | 13.25 |
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1.50 0.85 | 0.85 | 0.75 | 1.36 | 13.25 |
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1.50 0.85 |
1.50 2.25 1.00 | 8.25 | 2.07 | 14.25 | 2.30 | 20.25 | 0.92 1.00 | 8.50 | 2.07 | 14.50 | 2.30 | 20.50 | 0.92 2.50 1.00 | 8.75 | 2.07 | 14.75 | 2.30 | 20.75 | 0.92 | 1.00 | 9.00 | 2.46 | 15.00 | 2.30 | 21.00 | 0.92 | 1.00 | 9.25 | 2.46 | 15.25 | 2.30 | 21.25 | 0.92 2.75 3.00 3.25 1.00 | 9.50 | 2.77 | 15.50 | 2.30 | 21.50 | 0.92 1.00 | 9.75 | 2.77 | 15.75 | 2.30 | 21.75 | 0.92 3.50 4.00 1.23 | 10.00 3.53 | 16.00 1.38 | 22.00 0.92 4.25 1.23 | 10.25 3.53 | 16.25 1.38 | 22.25 0.92 4.50 1.23 10.50 4.76 16.50 1.38 22.50 0.92

5.75 1.23 | 11.75 84.79 | 17.75 1.38 | 23.75 0.92 CALIB | NASHYD ( 0210)| Area (ha)= 6.83 Curve Number (CN)=83.0 |ID=1 DT=5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)=3.00 --- U.H. Tp(hrs)= 0.54 NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP. - TRANSFORMED HYETOGRAPH -TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | hrs mm/hr | hrs 1.38 1.54 | 12.533 | 11.06 | 18.33 1.54 | 12.417 | 11.06 | 18.42 1.54 | 12.500 | 11.06 | 18.50 1.54 | 12.583 | 5.68 | 18.58 1.54 | 12.667 | 5.68 | 18.67 1.54 | 12.750 | 5.68 | 18.75 0.583 0.85 6.583 1.38 0.667 0.85 | 6.667 0.85 | 6.750 0.750 1.38 1.54 | 12.833 | 5.68 | 18.83 1.54 | 12.917 | 5.68 | 18.92 1.54 | 13.000 | 5.68 | 19.00 1.38 0.84 | 7.083 0.85 | 7.167 1.54 | 13.083 1.54 | 13.167 4.15 | 19.08 4.15 | 19.17 1.167 1.38 1.250 0.85 | 7.250 0.85 | 7.333 1.54 | 13.250 | 4.15 | 19.25 1.54 | 13.333 | 4.15 | 19.33 1.333 1.38 1.417 0.85 | 7.417 1.500 0.85 | 7.500 1.54 | 13.417 | 4.15 | 19.42 1.54 | 13.500 | 4.15 | 19.50 1.54 | 13.583 | 3.23 | 19.58 1.54 | 13.667 | 3.23 | 19.67 1.38 1.54 | 13.667 3.23 | 19.75 3.23 | 19.83 3.23 | 19.92 1.54 113.750 1.38 1.54 13.833 1.38 0.85 | 7.917 1.54 | 13.917 1.54 | 14.000 | 3.23 | 20.00 2.07 | 14.083 | 2.30 | 20.08 2.07 | 14.167 | 2.30 | 20.17 2.000 0.85 | 8.000 1.38 2.083 1.00 | 8.083 1.00 | 8.167 2.167 0.92 2.250 1.00 | 8.250 2.07 14.250 2.30 20.25 0.92 1.00 | 8.230 2.07 | 14.230 | 230 | 20.23 2.07 | 14.417 | 2.30 | 20.42 2.333 2.417 0.92 2.500 2.583 1.00 | 8.500 1.00 | 8.583 2.07 |14.500 | 2.30 | 20.50 2.07 |14.583 | 2.30 | 20.58 0.92 1.00 | 8.667 | 2.07 | 14.667 | 2.30 | 20.67 | 1.00 | 8.750 | 2.07 | 14.750 | 2.30 | 20.75 2.667 0.92 2.833 1.00 | 8.833 2.07 | 14.833 2.30 | 20.83 0.92

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2.917
                      1.00 | 8.917 | 2.07 | 14.917 | 2.30 | 20.92 | 0.92
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             3.083
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                                     2.46 15.167
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                                      2.46 |15.250
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                      1.00 | 9.333
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                                     2.76 | 15.583
2.77 | 15.667
2.77 | 15.750
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1.00 | 9.667
                                                      2.30 | 21.58
2.30 | 21.67
             3.583
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                                                                       0.92
             3.750
                      1.00 | 9.750
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                                                                      0.92
                      1.00 | 9.833
1.00 | 9.917
                                      2.76 |15.833
2.77 |15.917
                                                      2.30 | 21.83 | 2.30 | 21.92
             3.833
             3.917
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1.23 |10.083
                                      2.77 |16.000 | 2.30 | 22.00
3.53 |16.083 | 1.38 | 22.08
             4.000
             4.083
                                                                       0.92
                                      3.53 | 16.167 | 1.38 | 22.17
3.53 | 16.250 | 1.38 | 22.25
             4.167
                      1.23 10.167
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             4 333
                      1.23 110 333
                                      3.53 16.333
                                                       1.38 | 22.33
                                                                       0.92
             4.417
                      1.23 |10.417
1.23 |10.500
                                      3.53 |16.417
3.53 |16.500
                                                       1.38 | 22.42
1.38 | 22.50
             4.583
                      1.23 [10.583]
                                      4.76 |16.583
4.76 |16.667
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1.38 | 22.67
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             4.667
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                                                       1.38 | 22.75
             4.750
                      1.23 | 10.750
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             4.833
                      1.23 |10.833
                                      4.76 |16.833
4.76 |16.917
                                                      1.38 | 22.83
1.38 | 22.92
             4.917
                      1.23 |10.917
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                                      4.76 | 17.000
7.37 | 17.083
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1.38 | 23.75
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5.750
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                     1.23 | 11.833 | 84.78 | 17.833 | 1.23 | 11.917 | 84.79 | 17.917
                                                       1.38 | 23.83 | 0.92
1.38 | 23.92 | 0.92
             5.833
             6.000
                      1.23 | 12.000 84.79 | 18.000 1.38 | 24.00 0.92
     Unit Hyd Opeak (cms)= 0.483
     PEAK FLOW (cms)= 0.365 (i)
TIME TO PEAK (hrs)= 12.417
RUNOFF VOLUME (mm)= 41.633
TOTAL RAINFALL (mm)- 76.801
RUNOFF COEFFICIENT = 0.542
     (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
  | STANDHYD ( 0205)| Area (ha)= 7.90
|ID=1 DT=5.0 min | Total Imp(%)= 20.00 Dir. Conn.(%)= 10.00
2.76 |15.583
2.77 |15.667
2.77 |15.750
             3.583
                      1 00 | 9 583
                                                     2.30 | 21.58
                                                                     0.92
                      1.00 | 9.667
             3.750
                      1.00 | 9.750
                                                      2.30 | 21.75
                                                                      0.92
                      1.00 | 9.833
1.00 | 9.917
                                     2.76 | 15.833
2.77 | 15.917
                                                      2.30 | 21.83
2.30 | 21.92
             3.833
             3.917
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                                      2.77 |16.000
3.53 |16.083
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(ha)= 1.58

(mm)= 2.00

(e)= 2.00

(m)= 229.49

= 0.013
                                                                         2.00
                                                                                                     5.00
 Average Slope
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                                                                                          250.00
Length
Mannings n
                                                                                             0.250
       NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                    - TRANSFORMED HYETOGRAPH
                    TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                 | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME | RAIN | HME
                  1.54 | 12.333 | 11.06 | 18.33
1.54 | 12.417 | 11.06 | 18.42
1.54 | 12.500 | 11.06 | 18.50
                                                                                                                                                                1.38
                  0.583 0.85 6.583
                                                                              1.54 12.583
                                                                                                                    5.68 | 18.58
5.68 | 18.67
                                                                                                                                                              1.38
                                        0.85 | 6.667
                                                                                1.54 12.667
                  0.667
                  0.750
                                     0.85 | 6.750
                                                                                1.54 12.750
                                                                                                                      5.68 | 18.75
                                                                                                                                                              1.38
                                     0.84 | 6.833
0.85 | 6.917
                                                                                                                      5.68 | 18.83
5.68 | 18.92
                  0.917
                                                                               1.54 112.917
                                                                                                                                                              1.38
                                      0.85 | 7.000
0.84 | 7.083
                                                                               1.54 | 13.000
1.54 | 13.083
                                                                                                                     5.68 | 19.00
4.15 | 19.08
                   1.000
                                                                                                                                                              1.38
                   1.083
                                                                                                                                                              1.38
                                     0.85 | 7.167
0.85 | 7.250
0.85 | 7.333
                                                                              1.54 | 13.167 | 4.15 | 19.17
1.54 | 13.250 | 4.15 | 19.25
1.54 | 13.333 | 4.15 | 19.33
                   1.167
                                                                                                                                                              1.38
                  1.333
                                                                                                                                                              1.38
                   1.417
                                     0.85 | 7.417
0.85 | 7.500
                                                                               1.54 | 13.417
1.54 | 13.500
                                                                                                                    4.15 | 19.42
4.15 | 19.50
                   1.500
                                                                                                                                                              1.38
                                     0.85 | 7.583
0.85 | 7.667
0.85 | 7.750
                                                                               1.54 | 13.583
1.54 | 13.667
                                                                                                                     3.23 | 19.58
3.23 | 19.67
                   1 583
                   1.750
                                                                              1.54 | 13.750
                                                                                                                      3.23 | 19.75
                                                                                                                                                              1.38
                                     0.85 | 7.833
0.85 | 7.917
                                                                              1.54 | 13.833
1.54 | 13.917
                                                                                                                     3.23 | 19.83
3.23 | 19.92
                                                                                                                                                              1.38
                   1.833
                   1.917
                                                                                                                                                               1.38
                  2.000
                                      0.85 8.000
                                                                              1.54 114 000
                                                                                                                      3.23 | 20.00
                                                                                                                                                              1.38
                                                                             2.07 |14.083 | 2.07 |14.167
                                        1.00 | 8.083
                   2.083
                                                                                                                      2.30 | 20.17
                  2.167
                                        1.00 | 8.167
                                                                                                                                                             0.92
                                                                                                                     2.30 | 20.25
2.30 | 20.33
2.30 | 20.42
                                                                             2.07 |14.250
2.07 |14.333
                  2.250
                                        1.00 | 8.250
                                                                                                                                                              0.92
                  2.333
                                        1.00 | 8.333
                                                                                                                                                              0.92
                                                                            2.07 |14.417 | 2.30 | 20.42 | 2.07 |14.500 | 2.30 | 20.50 | 2.07 |14.583 | 2.30 | 20.58
                                       1.00 | 8.417
1.00 | 8.500
                  2.417
                                                                                                                                                              0.92
                   2.500
                                                                                                                                                             0.92
                  2.583
                                        1.00 | 8.583
                                                                                                                                                             0.92
                                       1.00 | 8.667
1.00 | 8.750
                                                                             2.07 |14.667
2.07 |14.750
                                                                                                                     2.30 | 20.67
                  2.667
                  2.750
                                                                                                                                                              0.92
                  2.833
                                         1.00 | 8.833
                                                                              2.07 | 14.833 | 2.30 | 20.83
                                                                                                                                                            0.92
                                         1.00 | 8.917
                                                                               2.07 14.917
                                                                                                                      2.30 | 20.92
                  3.000
                                        1.00 | 9.000
                                                                              2.07 |15.000
                                                                                                                    2.30 | 21.00
                                                                                                                                                            0.92
                                    1.00 | 9.083 | 2.46 | 15.083 | 2.30 | 21.08 | 0.92 | 1.00 | 9.250 | 2.46 | 15.167 | 2.30 | 21.17 | 0.92 | 1.00 | 9.250 | 2.46 | 15.250 | 2.30 | 21.25 | 0.92 | 1.00 | 9.333 | 2.46 | 15.333 | 2.30 | 21.33 | 0.92 |
                   3.083
                  3,167
                   3 250
                  3.333
```

IMPERVIOUS PERVIOUS (i)

6.32

Surface Area (ha)=

```
4.167
                       1.23 | 10.167
                                         3.53 | 16.167
                                                             1.38 | 22.17
                                                                               0.92
                       1.23 |10.250
                                         3.53 16.250
                                                             1.38 | 22.25
                                         3.53 16.333
            4.333
                      1.23 | 10.333
                                                            1.38 | 22.33
                                                                               0.92
            4.417
                       1.23 |10.417
                                        3.53 | 16.417 | 1.38 | 22.42
3.53 | 16.500 | 1.38 | 22.50
                       1.23 10.500
            4.500
                                                                               0.92
                                         4.76 |16.583
4.76 |16.667
            4 583
                       1.23 110 583
                                                             1.38 | 22.58
                      1.23 |10.667
1.23 |10.750
                                                            1.38 | 22.67
            4.750
                                         4.76 16.750
                                                                               0.92
                      1.23 | 10.833
1.23 | 10.917
                                        4.76 | 16.833 | 1.38 | 22.83
4.76 | 16.917 | 1.38 | 22.92
            4.833
                                                                              0.92
            4.917
            5,000
                       1 23 111 000
                                         4 76 117 000
                                                             1 38 23 00
                                                                               0.92
                       1.23 |11.083
                                        7.37 |17.083
7.37 |17.167
                      1.23 111.167
                                                            1.38 | 23.17
            5.167
                                                                               0.92
                                        7.37 |17.250
7.37 |17.333
                                                            1.38 | 23.25
1.38 | 23.33
                       1.23 |11.250
            5.250
            5.333
                      1.23 11.333
                      1.23 |11.417 7.37 |17.417
1.23 |11.500 7.37 |17.500
1.23 |11.583 31.95 |17.583
                                                             1.38 | 23.42
1.38 | 23.50
            5.417
                                                             1.38 | 23.58
1.38 | 23.67
1.38 | 23.75
            5.583
                                                                               0.92
            5 667
                      1.23 |11.667 31.95 |17.667
1.23 |11.750 31.95 |17.750
                                                                               0.92
             5.750
                                                                               0.92
                      5.833
                                                                               0.92
            6.000 1.23 12.000 84.79 18.000 1.38 24.00 0.92
  0.25 0.04
*TOTALS*

        PEAK FLOW
        (cms)=
        0.18
        0.38
        0.408 (iii)

        TIME TO PEAK
        (hrs)=
        12.00
        12.33
        12.33

        RUNOFF VOLUME
        (mm)=
        74.80
        36.44
        40.28

        TOTAL RAINFALL
        (mm)=
        76.80
        76.80
        76.80

        RUNOFF COEFFICIENT
        =
        0.97
        0.47
        0.52

***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
***** WARNING:FOR AREAS WITH IMPERVIOUS RATIOS BELOW 20%
           YOU SHOULD CONSIDER SPLITTING THE AREA.
     (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES.
    CN* = 76.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
        THAN THE STORAGE COEFFICIENT.
   (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
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(ha) (cms) (hrs) (mm)

ID1=1 ( 0205): 7.90 0.408 12.33 40.28

+ID2=2 ( 0210): 6.83 0.365 12.42 41.63
           ID = 3 ( 0003): 14.73 0.767 12.33 40.91
      NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                     - TRANSFORMED HYETOGRAPH -
                       TIME RAIN | TIME R
                       0.500 0.85 6.500
                                                                             1.54 | 12.500 | 11.06 | 18.50
1.54 | 12.583 | 5.68 | 18.58
1.54 | 12.667 | 5.68 | 18.67
                                                                                                                                                       1.38
                       0.583
                                         0.85 6.583
                                          0.85 6.667
                       0.667
                                                                                                                                                      1.38
                       0.750
                                        0.85 | 6.750
0.84 | 6.833
                                                                             1.54 | 12.750
1.54 | 12.833
                                                                                                                 5.68 | 18.75
5.68 | 18.83
                       0.833
                                                                                                                                                      1.38
                                        0.85 | 6.917
0.85 | 7.000
                                                                                                                  5.68 | 18.92
5.68 | 19.00
                       0.917
                                                                               1.54 112.917
                                                                                                                                                      1.38
                                                                               1.54 | 13.000
                        1.000
                        1.083
                                         0.84 | 7.083
                                                                               1 54 13 083
                                                                                                                 4.15 | 19.08
4.15 | 19.17
                                                                                                                                                      1.38
                                         0.85 | 7.167
0.85 | 7.250
0.85 | 7.333
                                                                               1.54 | 13.167
                                                                                                                 4.15 | 19.25
4.15 | 19.33
4.15 | 19.42
4.15 | 19.50
                        1.250
                                                                               1.54 | 13.250
                                                                                                                                                      1.38
                        1.333
                                                                               1.54 13.333
                                                                                                                                                      1.38
                                         0.85 | 7.417
0.85 | 7.500
                         1.417
                                                                               1.54 | 13.417
                        1.500
                                                                               1.54 | 13.500
                                                                                                                                                      1.38
                        1.583 0.85 7.583
                                                                              1.54 | 13.583 | 3.23 | 19.58
                                        0.85 | 7.667
0.85 | 7.750
                                                                               1.54 13.667
                                                                                                                  3.23 | 19.67
                        1.667
                                                                                                                                                      1.38
                        1.750
                                                                               1.54 13.750
                                                                                                                  3.23 | 19.75
                                                                                                                                                      1 38
                        1.833
                                          0.85 | 7.833
                                                                               1.54 |13.833
                                                                                                                  3.23 | 19.83
                        1.917
                                          0.85 | 7.917
                                                                               1.54 13.917
                                                                                                                  3.23 | 19.92
                                                                                                                                                      1.38
                                         0.85 | 8.000
1.00 | 8.083
                                                                            1.54 | 14.000
2.07 | 14.083
                                                                                                                  3.23 | 20.00
                       2.083
                                                                                                                2.30 | 20.08
                                                                                                                                                      0.92
                                          1.00 | 8.167
1.00 | 8.250
                                                                            2.07 |14.167 | 2.30 | 20.17
2.07 |14.250 | 2.30 | 20.25
                       2.167
                                                                                                                                                     0.92
                       2.333 1.00 | 8.333 2.07 | 14.333 2.30 | 20.33 0.92
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2.417
                                         1.00 | 8.417 | 2.07 | 14.417 | 2.30 | 20.42
                                                                                                                                0.92
                                                                     2.07 |14.500
                                          1.00 | 8.500
                                                                                                     2.30 20.50
                         2.583
                                          1.00 | 8.583
                                                                                                     2.30 | 20.58
                                                                                                                                 0.92
                         2.667
                                          1.00 | 8.667
                                                                      2.07 114.667
                                                                                                     2.30 | 20.67
                                                                                                                                                                                                                                                                               CALIB
                                                                                                                                                                                                                                                                              2.07 |14.750
                         2.833
                                         1.00 | 8.833
                                                                     2.07 114.833
                                                                                                     2.30 | 20.83
                                                                                                                                 0.92
                                          1.00 | 8.917
                                                                     2.07 |14.917
                                                                                                     2.30 | 20.92
                         2.917
                                                                                                     2.30 | 21.00
                         3.000
                                          1.00 | 9.000
                                                                                                                                 0.92
                                         1.00 | 9.083
1.00 | 9.167
                                                                     2.46 |15.083
2.46 |15.167
                                                                                                     2.30 | 21.08
2.30 | 21.17
                         3.083
                                                                                                                                                                                                                                                                                          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                         3.167
                                                                                                                                  0.92
                         3.250
                                          1.00 | 9.250
                                                                     2.46 | 15.250
                                                                                                     2.30 | 21.25
                                                                                                                                 0.92
                                                                      2.46 | 15.333
2.46 | 15.417
                         3.333
                                          1.00 | 9.333
                                                                                                                                                                                                                                                                                                                           -- TRANSFORMED HYETOGRAPH -
                                                                                                     2.30 21.42
                                                                                                                                                                                                                                                                                                    TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN
                         3.417
                                          1.00 | 9.417
                                                                                                                                 0.92
                                                                                                                                                                                                                                                                                                 3.500
                                         1.00 | 9.500
1.00 | 9.583
                                                                     2.46 |15.500
2.76 |15.583
                                                                                                   2.30 | 21.50
2.30 | 21.58
                         3,583
                                                                                                                                 0.92
                                         1.00 | 9.667
1.00 | 9.750
                                                                     2.77 |15.667
2.77 |15.750
                         3.667
                                                                                                    2.30 21.67
                                                                                                                                 0.92
                                                                                                     2.30 | 21.75
                                                                      2.76 | 15.833 | 2.30 | 21.83
2.77 | 15.917 | 2.30 | 21.92
2.77 | 16.000 | 2.30 | 22.00
                                                                                                                                                                                                                                                                                                                 0.85 | 6.333
0.85 | 6.417
0.85 | 6.500
                                                                                                                                                                                                                                                                                                                                               1.54 | 12.333 | 11.06 | 18.33
1.54 | 12.417 | 11.06 | 18.42
1.54 | 12.500 | 11.06 | 18.50
                         3.833
                                          1.00 | 9.833
                                                                                                                                0.92
                                                                                                                                                                                                                                                                                                  0 333
                                         1.00 | 9.917
1.00 | 10.000
                         3.917
                         4.000
                                                                                                                                                                                                                                                                                                  0.500
                                                                                                                                                                                                                                                                                                                                                                                                             1.38
                         4.083
                                          1.23 [10.083]
                                                                      3.53 | 16.083 | 1.38 | 22.08
3.53 | 16.167 | 1.38 | 22.17
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                  0.583
                                                                                                                                                                                                                                                                                                                 0.85 | 6.583
                                                                                                                                                                                                                                                                                                                                                1.54 12.583
                                                                                                                                                                                                                                                                                                                                                                            5.68 | 18.58
5.68 | 18.67
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                                          1.23 10.167
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                                                                                                                                                                                                                                                                                                                                                1.54 12.667
                         4.167
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                                                                       3.53 | 16.250
                                                                                                      1.38 | 22.25
                         4.250
                                          1.23 | 10.250
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                  0.750
                                                                                                                                                                                                                                                                                                                 0.85 | 6.750
                                                                                                                                                                                                                                                                                                                                                1.54 12.750
                                                                                                                                                                                                                                                                                                                                                                              5.68 | 18.75
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                         4.333
                                          1.23 |10.333
                                                                       3.53 | 16.333
                                                                                                     1.38 | 22.33
1.38 | 22.42
                                                                                                                                                                                                                                                                                                                   0.84 6.833
                                                                                                                                                                                                                                                                                                                                                                              5.68 | 18.83
5.68 | 18.92
                         4.417
                                          1.23 |10.417
                                                                       3.53 116.417
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                  0.917
                                                                                                                                                                                                                                                                                                                  0.85 | 6.917
                                                                                                                                                                                                                                                                                                                                                1.54 112.917
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                  0.85 | 7.000
0.84 | 7.083
                                                                                                                                                                                                                                                                                                                                                1.54 | 13.000
1.54 | 13.083
                                                                                                                                                                                                                                                                                                                                                                              5.68 | 19.00
4.15 | 19.08
                         4 500
                                          1.23 | 10.500
                                                                       3.53 116.500
                                                                                                      1.38 | 22.50
                                                                                                                                  0.92
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                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                          1.23 |10.583
                                                                       4.76 16.583
                                                                                                                                                                                                                                                                                                   1.083
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                 0.85 | 7.167
0.85 | 7.250
0.85 | 7.333
                         4.667
                                          1.23 | 10.667
                                                                       4.76 16.667
                                                                                                      1.38 | 22.67
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                  1.167
                                                                                                                                                                                                                                                                                                                                                1.54 113.167
                                                                                                                                                                                                                                                                                                                                                                              4.15 | 19.17
4.15 | 19.25
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                         1.23 |10.750
1.23 |10.833
                                                                      4.76 |16.750
4.76 |16.833
                                                                                                     1.38 | 22.75
                         4.750
                                                                                                                                                                                                                                                                                                                                                1.54 13.250
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                         4.833
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                  1.333
                                                                                                                                                                                                                                                                                                                                                                            4.15 | 19.33
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                                                      4.76 | 16,833

4.76 | 16,917

4.76 | 17,000

7.37 | 17,083

7.37 | 17,167

7.37 | 17,250
                         4.917
                                          1.23 110.917
                                                                                                     1.38 | 22.92
1.38 | 23.00
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                   1.417
                                                                                                                                                                                                                                                                                                                 0.85 | 7.417
0.85 | 7.500
                                                                                                                                                                                                                                                                                                                                                1.54 | 13.417
1.54 | 13.500
                                                                                                                                                                                                                                                                                                                                                                             4.15 | 19.42
4.15 | 19.50
                                          1.23 |11.000
                         5.000
                                                                                                                                                                                                                                                                                                   1.500
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                                                                                                                                                                                                                                                                                                 0.85 | 7.583
0.85 | 7.667
0.85 | 7.750
                                                                                                                                                                                                                                                                                                                                                1.54 | 13.583
1.54 | 13.667
                                                                                                                                                                                                                                                                                                                                                                              3.23 | 19.58
3.23 | 19.67
                         5.083
                                          1.23 111.083
                                                                                                      1.38 | 23.08
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                   1 583
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                         1.23 |11.167
1.23 |11.250
                                                                                                      1.38 | 23.17
1.38 | 23.25
                          5.250
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                                                                                                                                                                                                                                                                                                                                                1.54 | 13.750
                                                                                                                                                                                                                                                                                                                                                                              3.23 | 19.75
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                                                                      7.37 | 17.333
7.37 | 17.417
7.37 | 17.500
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0.85 | 7.917
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1.54 | 13.917
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3.23 | 19.92
                         5 333
                                          1.23 111 333
                                                                                                     1.38 | 23.33
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                   1.833
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                          1.23 11.417
                                                                                                      1.38 | 23.42
                                                                                                                                                                                                                                                                                                   1.917
                                                                                                                                                                                                                                                                                                                                                                                                            1.38
                         5.500
                                          1.23 111.500
                                                                                                      1.38 | 23.50
                                                                                                                                                                                                                                                                                                  2.000
                                                                                                                                                                                                                                                                                                                  0.85 | 8.000
                                                                                                                                                                                                                                                                                                                                                1.54 114.000
                                                                                                                                                                                                                                                                                                                                                                              3.23 | 20.00
                                                                                                                                                                                                                                                                                                                                                                                                           1.38
                                         1.23 |11.583 | 31.95 |17.583
1.23 |11.667 | 31.95 |17.667
                                                                                                      1.38 | 23.58
                                                                                                                                                                                                                                                                                                                                               2.07 |14.083
                         5 583
                                                                                                                                                                                                                                                                                                                   1.00 | 8.083
                                                                                                                                                                                                                                                                                                   2.083
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 20.17
                         5.667
                                                                                                                                    0.92
                                                                                                                                                                                                                                                                                                  2.167
                                                                                                                                                                                                                                                                                                                   1.00 | 8.167
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                              2.07 |14.250
2.07 |14.333
                                                                                                                                                                                                                                                                                                                                                                             2.30 | 20.25
2.30 | 20.33
                         5.750
                                         1 23 111 750 31 95 117 750
                                                                                                      1.38 | 23.75
                                                                                                                                    0.92
                                                                                                                                                                                                                                                                                                  2.250
                                                                                                                                                                                                                                                                                                                   1.00 | 8.250
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                        1.23 | 11.833 | 84.78 | 17.833 | 1.38 | 23.83 | 1.23 | 11.917 | 84.79 | 17.917 | 1.38 | 23.92
                         5.833
                                                                                                                                    0.92
                                                                                                                                                                                                                                                                                                  2.333
                                                                                                                                                                                                                                                                                                                   1.00 | 8.333
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                              2.07 |14.417
2.07 |14.500
2.07 |14.583
                                                                                                                                                                                                                                                                                                                  1.00 | 8.417
1.00 | 8.500
                         5.917
                                                                                                                                    0.92
                                                                                                                                                                                                                                                                                                  2.417
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 20.42
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                         6.000 1.23 | 12.000 84.79 | 18.000 1.38 | 24.00
                                                                                                                                                                                                                                                                                                   2.500
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 20.50
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                  2.583
                                                                                                                                                                                                                                                                                                                   1.00 | 8.583
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 20.58
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                  1.00 | 8.667
1.00 | 8.750
                                                                                                                                                                                                                                                                                                                                               2.07 |14.667
2.07 |14.750
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 20.67
2.30 | 20.75
          Unit Hyd Qpeak (cms)= 1.805
                                                                                                                                                                                                                                                                                                  2.667
                                                                                                                                                                                                                                                                                                  2.750
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
          PEAK FLOW (cms)= 1.150 (i)
TIME TO PEAK (hrs)= 12.250
RUNOFF VOLUME (mm)= 38.099
TOTAL RAINFALL (mm)= 76.801
RUNOFF COEFFICIENT = 0.496
                                                                                                                                                                                                                                                                                                  2.833
                                                                                                                                                                                                                                                                                                                   1.00 | 8.833
                                                                                                                                                                                                                                                                                                                                               2.07 114 833
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 20.83
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                   1.00 | 8.917
                                                                                                                                                                                                                                                                                                                                                2.07 14.917
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 20.92
                                                                                                                                                                                                                                                                                                  3.000
                                                                                                                                                                                                                                                                                                                   1.00 | 9.000
                                                                                                                                                                                                                                                                                                                                               2 07 15 000
                                                                                                                                                                                                                                                                                                                                                                              2.30 | 21.00
                                                                                                                                                                                                                                                                                                                                                                                                          0.92
                                                                                                                                                                                                                                                                                                   3.083
                                                                                                                                                                                                                                                                                                                   1.00 | 9.083
                                                                                                                                                                                                                                                                                                                                               2.46 |15.083
                                                                                                                                                                                                                                                                                                                                                                             2.30 | 21.08
                                                                                                                                                                                                                                                                                                                                               2.46 [15,167]
                                                                                                                                                                                                                                                                                                  3,167
                                                                                                                                                                                                                                                                                                                   1.00 | 9.167
                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                 1.00 | 9.250 | 2.46 | 15.250 | 2.30 | 21.25 | 0.92 | 1.00 | 9.333 | 2.46 | 15.333 | 2.30 | 21.33 | 0.92
                                                                                                                                                                                                                                                                                                   3 250
           (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
[ile://V1...%2010pdated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%2
                                        1.00 | 9.417 | 2.46 | 15.417 | 2.30 | 21.42
1.00 | 9.500 | 2.46 | 15.500 | 2.30 | 21.50
                                                                                                                                0.92
                         3 417
                                                                                                                                                                                                                                                                                     Mannings n
                                                                                                                                                                                                                                                                                                                      = 0.013 0.250
                         3.500
                                                                     2.76 |15.583
2.77 |15.667
2.77 |15.750
                         3.583
                                         1 00 | 9.583
                                                                                                   2.30 | 21.58
                                                                                                                                0.92
                                                                                                                                                                                                                                                                                          NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                          1.00 | 9.667
                         3.750
                                          1.00 | 9.750
                                                                                                     2.30 | 21.75
                                                                                                                                 0.92
                                         1.00 | 9.833
1.00 | 9.917
                                                                     2.76 | 15.833
2.77 | 15.917
                                                                                                    2.30 | 21.83
2.30 | 21.92
                          3.833
                                                                                                                                                                                                                                                                                                                             TRANSFORMED HYETOGRAPH
                                                                                                                                                                                                                                                                                                  TIME RAIN| 
                         3.917
                                                                                                                                 0.92
                                                                      2.77 |16.000
3.53 |16.083
                                                                                                    2,30 | 22.00
1.38 | 22.08
                         4 000
                                          1.00 10.000
                                                                                                                                  0.92
                                          1.23 |10.083
                         4.083
                         4.167
                                          1.23 | 10.167
                                                                       3.53 | 16.167
                                                                                                      1.38 | 22.17
                                                                                                                                  0.92
                                                                                                     1.38 | 22.25
                                          1.23 |10.250
                                                                       3.53 16.250
                                                                                                                                                                                                                                                                                                                  0.85 | 6.250
                                                                                                                                                                                                                                                                                                                                               1.54 | 12.250 | 11.06 | 18.25
                         4.333
                                          1.23 | 10.333
                                                                       3.53 16.333
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                  0.333
                                                                                                                                                                                                                                                                                                                 0.85 6.333
                                                                                                                                                                                                                                                                                                                                                                                                             1.38
                         4.417
                                          1.23 |10.417
                                                                                                                                  0.92
                                                                                                                                                                                                                                                                                                                  0.85 | 6.417
```

```
3.53 |16.417
3.53 |16.500
                                                            1.38 | 22.42
1.38 | 22.50
                       1.23 |10.500
            4.500
                                                                               0.92
            4 583
                       1.23 110 583
                                         4.76 16 583
                                                             1.38 | 22.58
                      1.23 |10.667
1.23 |10.750
                                                            1.38 | 22.67
                                         4.76 16.667
            4.750
                                         4.76 | 16.750
                                                                               0.92
                      1.23 | 10.833
1.23 | 10.917
                                         4.76 | 16.833
4.76 | 16.917
                                                            1.38 | 22.83
1.38 | 22.92
            4.833
                                                                               0.92
            4.917
            5,000
                       1 23 111 000
                                         4 76 117 000
                                                             1 38 23 00
                                                                               0.92
                       1.23 |11.083
                                         7.37 |17.083
7.37 |17.167
                      1.23 111.167
                                                            1.38 | 23.17
            5.167
                                                                               0.92
                                         7.37 |17.250
7.37 |17.333
                                                            1.38 | 23.25
1.38 | 23.33
                       1.23 |11.250
            5.250
            5.333
                       1.23 11.333
                                                                               0.92
                      1.23 |11.417 7.37 |17.417
1.23 |11.500 7.37 |17.500
1.23 |11.583 31.95 |17.583
                                                             1.38 | 23.42
1.38 | 23.50
            5.417
            5.583
                                                             1.38 | 23.58
                                                                               0.92
            5 667
                      1.23 |11.667 31.95 |17.667
1.23 |11.750 31.95 |17.750
                                                             1.38 | 23.67
                                                                               0.92
             5.750
                                                                               0.92
                      1.23 |11.833 | 84.78 | 17.833 | 1.38 | 23.83 | 1.23 |11.917 | 84.79 | 17.917 | 1.38 | 23.92
            5.833
                                                                               0.92
            6.000 1.23 12.000 84.79 18.000 1.38 24.00 0.92
   Unit Hyd Qpeak (cms)- 0.757
    PEAK FLOW (cms)= 0.307 (i)
TIME TO PEAK (hrs)= 12.000
   RUNOFF VOLUME (mm)= 34,754
TOTAL RAINFALL (mm)= 76,801
RUNOFF COEFFICIENT = 0,453
   (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
CALIB
| STANDHYD ( 0202)| Area (ha)= 4.57
|ID=1 DT= 5.0 min | Total Imp(%)= 40.00 Dir. Conn.(%)= 32.00
                      IMPERVIOUS PERVIOUS (i)
   Surface Area (ha)= 1.83 2.74
Dep. Storage (mm)= 2.00 5.00
Average Slope (%)= 5.00 5.00
                     (m)= 500.00 500.00
   Length
```

```
1.54 | 12.333 | 11.06 | 18.33
1.54 | 12.417 | 11.06 | 18.42
1.54 | 12.500 | 11.06 | 18.50
0.500
         0.85 | 6.500
                                                                  1.38
0.583
         0.85 | 6.583
0.85 | 6.667
                            1.54 | 12.583
1.54 | 12.667
                                              5.68 | 18.58
5.68 | 18.67
         0.85 6.750
                            1.54 12.750
                                              5.68 | 18.75
0.750
                                                                 1.38
                            1.54 | 12.833
1.54 | 12.917
                                              5.68 | 18.83
5.68 | 18.92
0.833
         0.84 | 6.833
         0.85 | 6.917
0.917
                                                                 1.38
         0.85 | 7.000
0.84 | 7.083
                                              5.68 | 19.00
4.15 | 19.08
1 000
                            1.54 13.000
                            1.54 13.083
1.083
1.167
         0.85 7.167
                            1.54 113.167
                                              4.15 | 19.17
                                                                 1.38
          0.85 | 7.250
                            1.54 | 13.250
         0.85 | 7.333
1.333
                            1.54 13.333
                                              4.15 | 19.33
                                                                 1.38
        0.85 | 7.417
0.85 | 7.500
0.85 | 7.583
                            1.54 | 13.417
1.54 | 13.500
                                              4.15 | 19.42
4.15 | 19.50
3.23 | 19.58
1.417
1.583
                            1.54 113.583
                                                                 1.38
         0.85 | 7.667
0.85 | 7.750
                            1.54 | 13.667
1.54 | 13.750
                                              3.23 | 19.67
3.23 | 19.75
1.667
1.750
                                                                 1.38
        0.85 | 7.833
0.85 | 7.917
1.833
                            1.54 113.833
                                              3.23 | 19.83
                                                                 1 38
                            1.54 13.917
                                              3.23 19.92
1.917
                                                                 1.38
2.000
        0.85 | 8.000
                            1.54 14.000
                                              3.23 | 20.00
                                                                 1.38
                           2.07 |14.083
2.07 |14.167
          1.00 | 8.083
                                              2.30 | 20.17
2.167
          1.00 | 8.167
                                                                 0.92
2 250
         1.00 | 8.250
1.00 | 8.333
                           2.07 |14.250
2.07 |14.333
                                              2.30 | 20.25
2.30 | 20.33
2.333
                                                                 0.92
2.417
          1.00 | 8.417
                           2.07 | 14.417
                                              2.30 | 20.42
                                                                 0.92
          1.00 | 8.500
                            2.07 14.500
2 583
          1.00 | 8.583
                           2 07 14 583
                                              2.30 | 20.58
                                                                 0.92
                           2.07 |14.383
2.07 |14.667
2.07 |14.750
2.07 |14.833
2.667
          1.00 | 8.667
                                              2.30 | 20.67
2.750
          1.00 | 8.750
                                              2.30 | 20.75 2.30 | 20.83
2.833
          1.00 | 8.833
                                                                 0.92
                           2.07 |14.917
          1.00 | 8.917
                                              2.30 | 20.92
3.000
          1.00 | 9.000
                                              2.30 | 21.00
                                                                 0.92
3.083
         1.00 | 9.083
                           2.46 |15.083
2.46 |15.167
                                             2.30 | 21.08
2.30 | 21.17
                                                                 0.92
3.167
                                                                 0.92
3 250
          1 00 | 9 250
                           2.46 15.250
                                              2.30 | 21.25
                                                                 0.92
3.333
          1.00 | 9.333
                            2.46 |15.333
                                              2.30 | 21.33
                                                                 0.92
3.417
          1.00 | 9.417
                           2.46 15.417
                                              2.30 | 21.42
                                                                 0.92
         1.00 | 9.500
1.00 | 9.583
                           2.46 | 15.500
2.76 | 15.583
                                             2.30 | 21.50
2.30 | 21.58
3.500
3.583
                                                                 0.92
         1.00 | 9.667
1.00 | 9.750
                           2.77 | 15.667 | 2.30 | 21.67
2.77 | 15.750 | 2.30 | 21.75
3.667
                                                                 0.92
                                             2.30 | 21.75
3.833 1.00 | 9.833 2.76 | 15.833 2.30 | 21.83 0.92
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1.23 | 10.083 | 3.53 | 16.083 | 1.23 | 10.167 | 3.53 | 16.167
                              4.083
                                                                                                                           1.38 | 22.08
                              4.333
                                                  1.23 110.333
                                                                                     3.53 | 16.333 | 1.38 | 22.33
                                                  1.23 10.417
                                                                                      3.53 16.417
                                                                                                                           1.38 | 22.42
                              4.500
                                                  1.23 110,500
                                                                                      3.53 | 16.500
                                                                                                                            1.38 | 22.50
                                                                                     4.76 | 16.583 | 1.38 | 22.58
4.76 | 16.667 | 1.38 | 22.67
4.76 | 16.750 | 1.38 | 22.75
                                                  1.23 |10.583
1.23 |10.667
                              4.583
                              4.667
                              4.750
                                                  1.23 110.750
                                                                                                                                                                0.92
                                                  1.23 |10.833
1.23 |10.917
                                                                                      4.76 |16.833
4.76 |16.917
                                                                                                                            1.38 | 22.92
                              4.917
                                                  1.23 |11.000
1.23 |11.083
                                                                                     4.76 | 17.000 | 1.38 | 23.00 | 7.37 | 17.083 | 1.38 | 23.08
                              5.083
                                                                                     7.37 | 17.167 | 1.38 | 23.17
7.37 | 17.250 | 1.38 | 23.25
7.37 | 17.333 | 1.38 | 23.33
                              5 167
                                                  1.23 111.167
                              5.333
                                                  1.23 111.333
                                                  1.23 |11.417
1.23 |11.500
                                                                                     7.37 | 17.417 | 1.38 | 23.42 | 7.37 | 17.500 | 1.38 | 23.50
                                                5.583
                              5.750
                              5.833
                              5.917
                              6.000 1.23 12.000 84.79 18.000 1.38 24.00 0.92

    Max.Eff.Inten.(mm/hr)=
    84.79
    23.23

    over (min)
    5.00
    50.00

    Storage Coeff. (min)=
    4.42 (ii)
    48.17 (ii)

    Unit Hyd. Tpeak (min)=
    5.00
    50.00

    Unit Hyd. peak (cms)=
    0.23
    0.02

    *TOTALS*

             PEAK FLOW (cms)= 0.34 0.11
TIME TO PEAK (hrs)= 12.00 12.67
            RUNOFF VOLUME (mm)= 74.80 33.75 46.88

TOTAL RAINFALL (mm)= 76.80 76.80 76.80

RUNOFF COEFFICIENT = 0.97 0.44 0.61
     **** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
               (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
              CN* = 73.0 Ia = Dep. Storage (Above)

(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL THAN THE STORAGE COEFFICIENT.
             (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
     file:///V...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed
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+ ID2= 2 ( 0202): 4.57 0.372 12.00 46.88
     ID = 3 ( 0040): 7.74 0.679 12.00 41.91
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
RESERVOIR( 0032)| OVERFLOW IS OFF
             OUT=1
DT= 5.0 min
                         OUTFLOW STORAGE | OUTFLOW STORAGE
                    -- (cms) (ha.m.) | (cms) (ha.m.)
0.0000 0.0000 | 0.1020 0.2824
0.0400 0.1208 | 0.1160 0.3268
                    0.0640 0.1775 | 0.1330 0.3659
0.0790 0.2218 | 0.0000 0.0000
                         AREA QPEAK TPEAK R.V.
  (ha) (cms) (hrs) (mm)
INFLOW: ID= 2 ( 0040) 7.740 0.679 12.00 41.91
OUTFLOW: ID= 1 ( 0032) 7.740 0.063 14.25 41.81
               PEAK FLOW REDUCTION [Qout/Qin](%)= 9.33
                                                             (min)=135.00
               TIME SHIFT OF PEAK FLOW
               MAXIMUM STORAGE USED (ha.m.)= 0.1761
 ADD HYD ( 0001) | 1+2=3 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1=1 ( 0200): 20.32 1.150 12.25 38.10 | + ID2=2 ( 0032): 7.74 0.063 14.25 41.81
     ID = 3 ( 0001): 28.06 1.193 12.33 39.12
   NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
CALIB
| NASHYD ( 0215)| Area (ha)= 15.80 Curve Number (CN)= 83.0
|ID= 1 DT= 5.0 min | Ia (mm)= 5.00 # of Linear Res.(N)= 3.00
                     U.H. Tp(hrs)= 0.70
       NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
           --- TRANSFORMED HYETOGRAPH ----
TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN |
hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr |
0.083 0.85 | 6.083 1.54 | 12.083 11.07 | 18.08 1.38
0.167 0.85 | 6.167 1.54 | 12.167 11.06 | 18.17 1.38
0.250 0.85 | 6.250 1.54 | 12.250 11.06 | 18.25 1.38
0.333 0.85 | 6.333 1.54 | 12.333 11.06 | 18.33 1.38
```

```
1.54 | 12.583 | 5.68 | 18.58 | 1.38 | 1.54 | 12.667 | 5.68 | 18.67 | 1.38
0.583 0.85 6.583
                     0.85 | 6.667
0.750
                   0.85 | 6.750
                                                             1.54 | 12.750
                                                                                                     5.68 | 18.75
                                                                                                                                             1.38
0.833
                   0.84 | 6.833
0.85 | 6.917
                                                            1.54 |12.833
1.54 |12.917
                                                                                                    5.68 | 18.83
5.68 | 18.92
0.917
                                                                                                                                            1.38
1.000 0.85 | 7.000
1.083 0.84 | 7.083
                                                            1.54 | 13.000
1.54 | 13.083
                                                                                                   5.68 | 19.00
4.15 | 19.08
                   0.85 | 7.167
0.85 | 7.250
0.85 | 7.333
1.167
                                                             1.54 113.167
                                                                                                     4.15 | 19.17
                                                            1.333
1.417
                    0.85 | 7.417
0.85 | 7.500
                                                            1.54 | 13.417
1.54 | 13.500
                                                                                                   4.15 | 19.42
4.15 | 19.50
1.500
                   0.85 | 7.583
0.85 | 7.667
0.85 | 7.750
                                                                                                   3.23 | 19.58
3.23 | 19.67
3.23 | 19.75
1.583
                                                             1.54 | 13.583
                                                            1.54 |13.667
1.54 |13.750
1.750
                   0.85 | 7.833
0.85 | 7.917
                                                           1.54 | 13.833 | 3.23 | 19.83
1.54 | 13.917 | 3.23 | 19.92
1.833
1.917
2 000
                   0.85 | 8.000
                                                            1.54 | 14.000
                                                                                                    3 23 | 20 00
                                                                                                                                            1 38
                     1.00 | 8.083
                                                          2.07 |14.083
                     1.00 | 8.167
                                                                                                  2.30 | 20.17
2.167
                                                                                                                                           0.92
                     1.00 | 8.250
1.00 | 8.333
                                                          2.07 |14.250
2.07 |14.333
                                                                                                   2.30 | 20.25 | 2.30 | 20.33
2.250
2.333
                                                                                                                                           0.92
                     1.00 | 8.417
1.00 | 8.500
1.00 | 8.583
                                                          2.07 |14.417
2.07 |14.500
2.07 |14.583
                                                                                                    2.30 | 20.42
2.30 | 20.50
2.417
                                                                                                  2.30 | 20.58
2.30 | 20.67
2.30 | 20.75
2.583
                                                                                                                                          0.92
2.667
                     1.00 | 8.667
                                                          2.07 |14.667
2.07 |14.750
2.750
2.833
                     1.00 | 8.833
                                                          2.07 | 14.833 | 2.30 | 20.83
                      1.00 | 8.917
                                                           2.07 |14.917
                     1.00 | 9.000 | 2.07 | 15.000 | 2.30 | 21.00 | 1.00 | 9.083 | 2.46 | 15.083 | 2.30 | 21.08 | 1.00 | 9.167 | 2.46 | 15.167 | 2.30 | 21.17
3.000
                                                                                                                                         0.92
3.083
3.167
3.250
                      1.00 | 9.250 | 2.46 | 15.250
                                                                                                    2 30 21 25 0.92
                      1.00 | 9.333
                                                           2.46 |15.333
                      1.00 9.417
                                                           2.46 15.417
3.417
                                                                                                     2.30 | 21.42
                                                                                                                                          0.92
                                                         2.46 | 15.417 | 2.30 | 21.42 | 2.46 | 15.500 | 2.30 | 21.50 | 2.76 | 15.883 | 2.30 | 21.58 | 2.77 | 15.667 | 2.30 | 21.67 | 2.77 | 15.750 | 2.30 | 21.75 | 2.76 | 15.833 | 2.30 | 21.83 | 2.77 | 15.917 | 2.30 | 21.92 | 2.77 | 16.000 | 2.30 | 22.00 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 | 2.30 |
                      1.00 | 9.500
3.583
                      1.00 | 9.583
                     1.00 | 9.667
1.00 | 9.750
1.00 | 9.833
 3.667
3.833
                     1.00 | 9.917
1.00 | 10.000
3.917
4.000
4.083
                     1.23 |10.083 | 3.53 |16.083 | 1.38 | 22.08 | 1.23 |10.167 | 3.53 |16.167 | 1.38 | 22.17
                                                            3.53 |16.250 | 1.38 | 22.25
3.53 |16.333 | 1.38 | 22.33
4.250
                     1.23 [10.250]
4.333
                      1.23 |10.333
4.417
                      1.23 | 10.417
                                                              3.53 | 16.417
                                                                                                       1.38 | 22.42
                   1.23 | 10.500 | 3.53 | 16.500 | 1.38 | 22.50 | 1.23 | 10.583 | 4.76 | 16.583 | 1.38 | 22.58 | 1.23 | 10.667 | 4.76 | 16.667 | 1.38 | 22.67 | 1.23 | 10.750 | 4.76 | 16.750 | 1.38 | 22.75
4 500
4.583
4.667
                                                                                                                                           0.92
4.833 1.23 | 10.833 4.76 | 16.833 1.38 | 22.83 0.92
```

```
5.000 1.23 | 11.000 4.76 | 17.000 1.38 | 23.00 0.92
                        1.23 | 11.083 | 7.37 | 17.083 | 1.38 | 23.08 | 1.23 | 11.167 | 7.37 | 17.167 | 1.38 | 23.17
              5.083
                                                                                        0.92
              5.167
                        5.417
              5.583
              5 667
                         1.23 |11.750 31.95 |17.750

    5.833
    1.23 | 11.833
    84.78 | 17.833
    1.38 | 23.83
    0.92

    5.917
    1.23 | 11.917
    84.79 | 17.917
    1.38 | 23.92
    0.92

    6.000
    1.23 | 12.000
    84.79 | 18.000
    1.38 | 24.00
    0.92

    Unit Hyd Qpeak (cms)= 0.862
    PEAK FLOW (cms)= 0.700 (i)
TIME TO PEAK (hrs)= 12.583
    RUNOFF VOLUME (mm)= 41.634
TOTAL RAINFALL (mm)= 76.801
RUNOFF COEFFICIENT = 0.542
    (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                TRANSFORMED HYETOGRAPH --
              TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN | hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
              0.083 0.85 | 6.083 1.54 | 12.083 11.07 | 18.08 
0.167 0.85 | 6.167 1.54 | 12.167 11.06 | 18.17
                                            1.54 | 12.250 | 11.06 | 18.25
1.54 | 12.333 | 11.06 | 18.33
1.54 | 12.417 | 11.06 | 18.42
              0.250 0.85 6.250
0.333 0.85 6.333
                        0.85 | 6.417
                                             1.54 | 12.500 | 11.06 | 18.50
1.54 | 12.583 | 5.68 | 18.58
1.54 | 12.667 | 5.68 | 18.67
              0.500
                        0.85 | 6.500
              5.68 | 18.75
5.68 | 18.83
5.68 | 18.92
              0.750 0.85 6.750
                                              1.54 12.750
                                                                                        1 38
                        0.84 | 6.833
                                              1.54 |12.833
              0.917
                        0.85 | 6.917
                                              1.54 12.917
                                                                                        1.38
             1.000 0.85 | 7.000 | 1.54 | 12.917 | 5.88 | 18.92 | 1.000 | 0.85 | 7.000 | 1.54 | 13.000 | 5.68 | 19.00 | 1.083 | 0.84 | 7.083 | 1.54 | 13.083 | 4.15 | 19.08 | 1.167 | 0.85 | 7.167 | 1.54 | 13.167 | 4.15 | 19.17 | 1.250 | 0.85 | 7.250 | 1.54 | 13.250 | 4.15 | 19.25
                                                                                        1.38
                                                                                        1.38
              1.333 0.85 | 7.333 1.54 | 13.333 4.15 | 19.33 1.38
```

```
1.417 0.85 | 7.417 1.54 | 13.417 4.15 | 19.42
                                                                                                                                                                                                                                                       5.917 1.23 |11.917 84.79 |17.917 1.38 | 23.92 0.92
6.000 1.23 |12.000 84.79 |18.000 1.38 | 24.00 0.92
                                  0.85 | 7.500
                                                            1.54 13.500
                                                                                     4.15 19.50
                     1.583
                                                            1.54 | 13.583
                                                                                     3.23 | 19.58
                                                                                                              1.38
                                   0.85 | 7.667
0.85 | 7.750
                      1.667
                                                             1.54 113.667
                                                                                     3.23 | 19.67
                                                                                                                                                                                                                                           Unit Hyd Qpeak (cms)= 0.256
                                                                                                                                                                                                                                          PEAK FLOW (cms)= 0.121 (i)
TIME TO PEAK (ltrs)= 12.083
RUNOFF VOLUME (mm)= 33.882
TOTAL RAINFALL (mm)= 76.801
RUNOFF COEFFICIENT = 0.441
                     1.833
                                  0.85 | 7.833
                                                            1.54 113.833
                                                                                     3.23 | 19.83
                                                                                                              1.38
                                   0.85 | 7.917
                                                             1.54 |13.917
                                                                                     3.23 | 19.92
                      1.917
                                                                                     3.23 20.00
                     2.000
                                  0.85 | 8,000
                                                            1.54 | 14.000
                                                                                                              1.38
                                   1.00 | 8.083
1.00 | 8.167
                                                            2.07 |14.083
2.07 |14.167
                                                                                     2.30 | 20.08
2.30 | 20.17
                     2.083
                     2.167
                                                                                                              0.92
                     2.250
                                   1.00 | 8.250
                                                           2.07 14.250
                                                                                     2.30 | 20.25
                                                                                                              0.92
                                   1.00 | 8.333
                                                          2.07 |14.333
2.07 |14.417
                                                                                     2.30 | 20.33 | 2.30 | 20.42
                     2.333
                                                                                                                                                                                                                                           (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                   1.00 | 8.417
                     2.417
                                                                                                              0.92
                     2.500
                                   1.00 | 8.500
1.00 | 8.583
                                                          2.07 |14.500 | 2.30 | 20.50
2.07 |14.583 | 2.30 | 20.58
                     2.583
                                                                                                              0.92
                                                          2.07 | 14.667 | 2.30 | 20.67 | 2.07 | 14.750 | 2.30 | 20.75 | 2.07 | 14.833 | 2.30 | 20.83
                     2.667
                                   1.00 | 8,667
                                                                                                              0.92
                                                                                                                                                                                                                                       CALIB
                                   1.00 8.750
                                                                                                                                                                                                                                       STANDHYD ( 0204)| Area (ha)= 1.93
                     2.833
                                   1.00 | 8.833
                                                                                                             0.92
                                                                                                                                                                                                                                      |ID= 1 DT= 5.0 min | Total Imp(%)= 60.00 Dir. Conn.(%)= 48.00
                                   1.00 | 8.917
                                                          2.07 |14.917
2.07 |15.000
                                                                                    2.30 | 20.92 | 2.30 | 21.00
                     2.917
                     3.000
                                                                                                                                                                                                                                                                    IMPERVIOUS PERVIOUS (i)
                                                                                                                                                                                                                                          2.30 | 21.08
2.30 | 21.17
2.30 | 21.25
                     3.083
                                   1.00 | 9.083
                                                          2.46 [15.083
                                                                                                              0.92
                                                          2.46 | 15.167
                                   1.00 | 9.167
                     3.167
                     3.250
                                   1.00 | 9.250
                                                                                                             0.92
                                                                                                                                                                                                                                                                                                            1.00
                     3.333
                                   1.00 | 9.333
1.00 | 9.417
                                                          2.46 | 15.333 | 2.30 | 21.33 | 2.46 | 15.417 | 2.30 | 21.42
                     3.417
                                                                                                             0.92
                                                          2.46 | 15.500
2.76 | 15.583
2.77 | 15.667
                     3.500
                                   1.00 | 9.500
                                                                                     2.30 21.50 0.92
                                   1.00 | 9.583
                                                                                                                                                                                                                                                NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                     3,667
                                   1.00 9.667
                                                                                     2.30 | 21.67
                                                                                                              0.92
                                   1.00 | 9.750
1.00 | 9.833
                                                          2.77 | 15.750 | 2.30 | 21.75
2.76 | 15.833 | 2.30 | 21.83
                      3.750
                     3.833
                                                                                                                                                                                                                                                                            -- TRANSFORMED HYETOGRAPH --
                                                                                                             0.92
                     3.917
                                   1.00 | 9.917 | 2.77 | 15.917 | 2.30 | 21.92 | 0.92 | 1.00 | 10.000 | 2.77 | 16.000 | 2.30 | 22.00 | 0.92
                                                                                                                                                                                                                                                       TIME RAIN | TIME RAIN | TIME RAIN | TIME RAIN hrs mm/hr | hrs mm/hr | hrs mm/hr | hrs mm/hr
                     4.000
                                   0.083 0.85 | 6.083 1.54 | 12.083 11.07 18.08
0.167 0.85 | 6.167 1.54 | 12.167 11.06 | 18.17
0.250 0.85 | 6.250 1.54 | 12.250 11.06 | 18.25
                     4.083
                                                                                     1.38 | 22.08
                                                                                                               0.92
                                                                                     1.38 | 22.17
                     4.250
                                                                                                                                                                                                                                                                                                                                                 1.38
                                                            3.53 | 16.333 | 1.38 | 22.33
3.53 | 16.417 | 1.38 | 22.42
                                                                                                                                                                                                                                                       4 333
                                   1.23 | 10.333
                                                                                                              0.92
                                   1.23 |10.417
                     4.500
                                   1.23 110.500
                                                            3.53 | 16.500
                                                                                       1.38 | 22.50
                                                                                                               0.92
                                                                                                                                                                                                                                                       0.500 0.85 6.500
                                                                                                                                                                                                                                                                                             1.54 12.500 11.06 18.50
                                                                                                                                                                                                                                                                                                                                                 1.38
                                   1.23 |10.583
                                                            4.76 | 16.583
4.76 | 16.667
                                                                                     1.38 | 22.58
                                                                                                                                                                                                                                                                                             1.54 | 12.583 | 5.68 | 18.58
1.54 | 12.667 | 5.68 | 18.67
                     4.583
                                                                                                                                                                                                                                                        0.583 0.85 6.583
                     4.667
                                                                                                                                                                                                                                                       0.667 0.85 6.667
                                                                                                               0.92
                                                                                                                                                                                                                                                                                                                                                 1.38
                                                            4.76 | 16.067 | 1.38 | 22.75 | 4.76 | 16.833 | 1.38 | 22.83 | 4.76 | 16.917 | 1.38 | 22.92
                                                                                                                                                                                                                                                       0.750
                                                                                                                                                                                                                                                                                             1.54 | 12.750 | 5.68 | 18.75
1.54 | 12.833 | 5.68 | 18.83
                     4.750
                                   1.23 10.750
                                                                                                              0.92
                                                                                                                                                                                                                                                                   0.85 | 6.750
                                   1.23 |10.833
                     4.833
                                                                                                               0.92
                                                                                                                                                                                                                                                       0.833
                                                                                                                                                                                                                                                                   0.84 | 6.833
                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                             0.917 0.85 | 6.917
1.000 0.85 | 7.000
1.083 0.84 | 7.083
                     4.917
                                   1.23 110.917
                                   1.23 |11.000
                                                            4.76 |17.000
                                                                                     1.38 | 23.00
                     5.083
                                   1.23 | 11.083
                                                            7.37 | 17.083 | 1.38 | 23.08
7.37 | 17.167 | 1.38 | 23.17
                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                        1.167
                                                                                                                                                                                                                                                                   0.85 | 7.167
0.85 | 7.250
                     5.167
                                   1.23 111 167
                                                                                                               0.92
                                                                                                                                                                                                                                                                                                                                                 1.38
                                                            7.37 |17.250
7.37 |17.333
                                   1.23 |11.250
                                                                                       1.38 | 23.25
                                                                                                                                                                                                                                                        1.250
                                                                                                                                                                                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                       1.333 0.85 | 7.333
1.417 0.85 | 7.417
                                                                                                                                                                                                                                                                                              5.333
                                   1.23 111.333
                                                                                      1.38 | 23.33
                                                                                                               0.92
                                                            7.37 | 17.417 | 1.38 | 23.42 | 7.37 | 17.500 | 1.38 | 23.50
                                    1.23 11.417
                                                                                                                                                                                                                                                       1.500 0.85 | 7.500
1.583 0.85 | 7.583
                                                                                                                                                                                                                                                                                             5.500
                                   1.23 |11.500
                                                                                                              0.92
                                                                                                                                                                                                                                                                                                                                                 1.38
                                   1.23 |11.583 31.95 |17.583
1.23 |11.667 31.95 |17.667
                     5,583
                                                                                       1.38 | 23.58
1.38 | 23.67
                                                                                                               0.92
                                                                                                                                                                                                                                                       1.667 0.85 | 7.667 1.54 | 13.667 3.23 | 19.67 1.750 0.85 | 7.750 1.54 | 13.750 3.23 | 19.75 1.833 0.85 | 7.833 1.54 | 13.833 3.23 | 19.83
                     5.667
                                                                                                                                                                                                                                                                                                                                                 1.38
                      5.750
                                   1.23 111.750 31.95 117.750
                                                                                       1.38 | 23.75
                                                                                                                0.92
                                   1.23 | 11.833 | 84.78 | 17.833 | 1.38 | 23.83 | 0.92
[ile://V1...%20Updated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20Detailed%20VO%20VO%20
                                                                                                                                                                                                                                           Unit Hyd. Tpeak (min)= 5.00 55.00
Unit Hyd. peak (cms)= 0.21 0.02
*TOTALS*
                     1.917 0.85 | 7.917 1.54 | 13.917 3.23 | 19.92
2.000 0.85 | 8.000 1.54 | 14.000 3.23 | 20.00
                                                                                                             1.38
                     2.083
                                  1.00 | 8.083
                                                                                                             0.92
```

```
2.07 | 14.083 | 2.30 | 20.08
2.07 | 14.167 | 2.30 | 20.17
                                                                                                                                                                             PEAK FLOW (cms)= 0.21 0.03 0.
TIME TO PEAK (hrs)= 12.00 12.75
RUNOFF VOLUME (mm)= 74.80 35.73
TOTAL RAINFALL (mm)= 76.80 76.80
RUNOFF COEFFICIENT = 0.97 0.47
                    1.00 | 8.167
                                                                                                                                                                                                                                                 0.220 (iii)
         2.250
                    1.00 | 8.250
                                      2.07 | 14.250
                                                           2.30 | 20.25
                                                                             0.92
                                                                                                                                                                                                                                                   12.00
54.47
                    1.00 | 8.333
1.00 | 8.417
                                      2.07 |14.333
2.07 |14.417
                                                          2.30 | 20.33 | 2.30 | 20.42
         2,333
         2,417
                                                                             0.92
                                                                                                                                                                                                                                                          76.80
                    1.00 | 8.500
1.00 | 8.583
                                      2.07 |14.500
2.07 |14.583
                                                          2.30 | 20.50
2.30 | 20.58
         2 500
                                                                             0.92
         2.667
                    1.00 | 8.667
                                      2.07 | 14.667
                                                           2.30 | 20.67
                                                                             0.92
                                      2.07 | 14.750 | 2.30 | 20.75
2.07 | 14.833 | 2.30 | 20.83
                    1.00 | 8.750
                                                                                                                                                                               (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
         2.833
                    1.00 | 8.833
                                                                             0.92
                                                                                                                                                                               CN* = 72.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
         2.917
                    1.00 | 8.917
                                      2.07 |14.917
2.07 |15.000
                                                          2.30 | 20.92
2.30 | 21.00
                                                                             0.92
         3.000
                    1.00 | 9.000
                                                                             0.92
                                                                                                                                                                                    THAN THE STORAGE COEFFICIENT.
                    1.00 | 9.083
1.00 | 9.167
1.00 | 9.250
         3.083
                                      2.46 115 083
                                                           2.30 | 21.08
                                                                             0.92
                                                                                                                                                                              (iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY
                                      2.46 | 15.167
2.46 | 15.250
                                                          2.30 | 21.17
         3.250
                                                                             0.92
                    1.00 | 9.333
1.00 | 9.417
                                      2.46 | 15.333
2.46 | 15.417
                                                         2.30 | 21.33
2.30 | 21.42
         3 333
                                                                             0.92
         3.417
                                                                             0.92
                                                                                                                                                                          | ADD HYD ( 0042)|

| 1 + 2 = 3 | AREA QPEAK TPEAK R.V.

(ha) (cms) (hrs) (mm)

| ID1 = 1 ( 0203): 1.61 0.121 12.08 33.88

+ ID2 = 2 ( 0204): 1.93 0.220 12.00 54.47
         3.500
                    1 00 19 500
                                      2.46 [15.500]
                                                          2 30 21 50 0 92
          3.583
                    1.00 | 9.583
                                      2.76 | 15.583 | 2.77 | 15.667
                                                         2.30 | 21.58 | 2.30 | 21.67
         3,667
                                                                             0.92
                                      2.77 | 15.750 | 2.30 | 21.75
2.76 | 15.833 | 2.30 | 21.83
         3.750
                    1.00 | 9.750
         3.833
                    1.00 9.833
                                                                             0.92
                                     2.77 |15.917 | 2.30 | 21.92 | 2.77 |16.000 | 2.30 | 22.00 | 3.53 |16.083 | 1.38 | 22.08 | 3.53 |16.250 | 1.38 | 22.25 |
                    1.00 | 9.917
1.00 | 10.000
         3.917
                                                                             0.92
                                                                                                                                                                                 ID = 3 ( 0042): 3.54 0.326 12.00 45.11
         4.083
                    1.23 | 10.083
                                                                              0.92
         4.167
                    1.23 |10.167
1.23 |10.250
                                                                              0.92
                                                                                                                                                                              NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
         4.250
                                                                              0.92
                                       3.53 | 16.333 | 1.38 | 22.33
3.53 | 16.417 | 1.38 | 22.42
         4.333
                    1.23 110.333
                                                                              0.92
                    1.23 |10.417
         4.500
                    1.23 |10.500
                                       3.53 | 16.500 | 1.38 | 22.50 | 4.76 | 16.583 | 1.38 | 22.58 | 4.76 | 16.667 | 1.38 | 22.67
                                                                              0.92
                                                                                                                                                                          ADD HYD ( 0042)
                                                                                                                                                                             3 + 2 = 1 | AREA QPEAK TPEAK R.V.
         4 583
                    1.23 |10.583
1.23 |10.667
                                                                              0.92
                                                                                                                                                                               (ha) (cms) (hrs) (nm)

ID1=3 ( 0042): 3.54 0.326 12.00 45.11

+ ID2=2 ( 0215): 15.80 0.700 12.58 41.63
         4.667
                                                                              0.92
         4.750
                    1.23 | 10.750
                                       4.76 16.750 1.38 22.75
                                       4.76 | 16.833
4.76 | 16.917
                    1.23 |10.833
                                                           1.38 | 22.83
                                                           1.38 | 22.92
         4.917
                    1.23 | 10.917
                                                                              0.92
                    1.23 11.000
                                       4.76 | 17.000
7.37 | 17.083
                                                            1.38 | 23.00
                                                                                                                                                                                 ID = 1 ( 0042): 19.34 0.800 12.50 42.27
         5.083
                    1.23 |11.083
                                                           1.38 | 23.08
                                                                              0.92
                                       7.37 | 17.083

7.37 | 17.167

7.37 | 17.250

7.37 | 17.333

7.37 | 17.417

7.37 | 17.500
                                                           1.38 | 23.17
1.38 | 23.25
1.38 | 23.33
         5.167
                    1.23 |11.167
1.23 |11.250
                                                                                                                                                                              NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY.
         5.333
                    1.23 111.333
                                                                              0.92
         5.417
5.500
                    1.23 |11.417
1.23 |11.500
                                                           1.38 | 23.42
1.38 | 23.50
                                                                                                                                                                           RESERVOIR( 0025)| OVERFLOW IS OFF
                                                                                                                                                                           IN= 2---> OUT= 1 |
                                                                                                                                                                           DT= 5.0 min
         5.583
                    1.23 |11.583 31.95 |17.583
                                                            1.38 | 23.58
1.38 | 23.67
                                                                               0.92
                                                                                                                                                                                                     OUTFLOW STORAGE | OUTFLOW STORAGE
                                                                                                                                                                                               1.23 |11.667 | 31.95 | 17.667
                    1.23 | 11.750 | 31.95 | 17.750 | 1.38 | 23.75 | 1.23 | 11.833 | 84.78 | 17.833 | 1.38 | 23.83 | 1.23 | 11.917 | 84.79 | 17.917 | 1.38 | 23.92
         5.750
                                                                               0.92
         5.833
         5.917
                                                                               0.92
         6.000 1.23 | 12.000 84.79 | 18.000 1.38 | 24.00 0.92
                                                                                                                                                                                                0.4900 0.3533 | 1.4000
                                                                                                                                                                                                                                         1.1965
Max.Eff.Inten.(mm/hr)= 84.79 26.39
over (min) 5.00 55.00
Storage Coeff. (min)= 5.28 (ii) 54.87 (ii)
                                                                                                                                                                            \begin{array}{ccccc} AREA & QPEAK & TPEAK & R.V. \\ (ha) & (cmis) & (hrs) & (mm) \\ INFLOW: ID= 2 ( \ 0.042) & 19.340 & 0.800 & 12.50 & 42.27 \end{array}
                                                                                                        ut%20-%20All%20Storms.txt[3/11/2024 11:44:24 AM]
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OUTFLOW: ID=1 (0025) 19.340 0.390 13.58 42.26
                                      PEAK FLOW REDUCTION [Qout/Qin](%)= 48.71
                                                                                                                                                                                                                                                                                                                                                                                                            3.167
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.00 | 9.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.46 15.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.30 | 21.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.00 | 9.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.46 | 15.250
2.46 | 15.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 2.30 | 21.25
                                         TIME SHIFT OF PEAK FLOW
                                        MAXIMUM STORAGE USED
                                                                                                                                                 (ha.m.)= 0.2841
                                                                                                                                                                                                                                                                                                                                                                                                             3.333
                                                                                                                                                                                                                                                                                                                                                                                                            3 417
                                                                                                                                                                                                                                                                                                                                                                                                                                 1 00 | 9 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2 46 115 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.30 | 21.42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         2.46 |15.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.76 | 15.583 | 2.30 | 21.58
2.77 | 15.667 | 2.30 | 21.67
2.77 | 15.750 | 2.30 | 21.75
                                                                                                                                                                                                                                                                                                                                                                                                            3.583
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.00 | 9.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.00 | 9.667
      3.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                                                                                            3.833
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.00 | 9.833
1.00 | 9.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.76 | 15.833
2.77 | 15.917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                2.30 | 21.83
2.30 | 21.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                                                                                             3.917
                                                                                                                                                                                                                                                                                                                                                                                                            4.000
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.00 10.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2.77 | 16.000 | 2.30 | 22.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.92
                       NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                                                                                   1.23 |10.083
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.53 16.083
                                                                                                                                                                                                                                                                                                                                                                                                            4.167
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.23 10.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           3.53 [16.167]
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.38 | 22.17
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.92
                                                                                                                                                                                                                                                                                                                                                                                                            4.250
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.23 |10.250
1.23 |10.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.53 |16.250
3.53 |16.333
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    1.38 | 22.25
1.38 | 22.33
                                                                     - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                                                                                                                                                                                                                                                            4.333
                                   TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.23 | 10.417 | 3.53 | 16.417 | 1.23 | 10.417 | 3.53 | 16.417 | 1.23 | 10.500 | 3.53 | 16.500 | 1.23 | 10.583 | 4.76 | 16.583 | 12.3 | 10.667 | 4.76 | 16.667 | 1.23 | 10.750 | 4.76 | 16.750 | 1.23 | 10.833 | 4.76 | 16.833 |
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38 | 22.42
1.38 | 22.50
1.38 | 22.58
                                                                                                                                                                                                                                                                                                                                                                                                            4 417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.92
                                                                                                                                                                                                                                                                                                                                                                                                            4.500
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.92
                                  4.667
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.38 | 22.67
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.92
                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.38 | 22.75
                                                                                               1.54 | 12.333 | 11.06 | 18.33
                                   0.333 0.85 | 6.333
                                                                                                                                                                                   1.38
                                                                                                                                                                                                                                                                                                                                                                                                            4.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.38 | 22.83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.92
                                  0.417 0.85 | 6.417
0.500 0.85 | 6.500
                                                                                               1.54 | 12.417 | 11.06 | 18.42
1.54 | 12.500 | 11.06 | 18.50
                                                                                                                                                                                                                                                                                                                                                                                                                                   1.23 |10.917
                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                                                                            5.000
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.23 111.000 4.76 17.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38 | 23.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                      0.85 | 6.583
0.85 | 6.667
                                                                                                1.54 | 12.583 | 5.68 | 18.58
1.54 | 12.667 | 5.68 | 18.67
                                                                                                                                                                                                                                                                                                                                                                                                             5.083
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.23 |11.083
1.23 |11.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          7.37 |17.083
7.37 |17.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.38 | 23.08
1.38 | 23.17
                                   0.583
                                                                                                                                                                                 1 38
                                   0.667
                                                                                                                                                                                                                                                                                                                                                                                                             5.167
                                                                                                                                                                                                                                                                                                                                                                                                                                                                         7.37 |17.250
7.37 |17.333
7.37 |17.417
                                   0.750
                                                      0.85 | 6.750
                                                                                                 1.54 12.750
                                                                                                                                        5.68 18.75
                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                                                                             5.250
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.23 111.250
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.38 | 23.25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            0.92
                                   0.833
                                                      0.84 | 6.833
0.85 | 6.917
                                                                                                1.54 | 12.833 | 5.68 | 18.83
1.54 | 12.917 | 5.68 | 18.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1.38 | 23.33
                                                                                                                                                                                                                                                                                                                                                                                                              5.333
                                                                                                                                                                                                                                                                                                                                                                                                                                   1.23 |11.333
                                   0.917
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.23 11.417
                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                                                                                            5.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                1.54 | 13.000 | 5.68 | 19.00
1.54 | 13.083 | 4.15 | 19.08
1.54 | 13.167 | 4.15 | 19.17
                                  1.000 0.85 | 7.000
1.083 0.84 | 7.083
                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.23 |11.500 7.37 |17.500
1.23 |11.583 31.95 |17.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.38 | 23.50
1.38 | 23.58
                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                                                                             5.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.92
                                                                                                                                                                                                                                                                                                                                                                                                           5.585 1.23 | 11.583 | 51.795 | 17.585 | 1.88 | 23.58 |
5.667 | 1.23 | 11.667 | 31.795 | 17.667 | 1.38 | 23.67 |
5.750 | 1.23 | 11.750 | 31.95 | 17.750 | 1.38 | 23.75 |
5.833 | 1.23 | 11.833 | 84.78 | 17.833 | 1.38 | 23.83 |
5.917 | 1.23 | 11.917 | 84.79 | 17.917 | 1.38 | 23.92 |
6.000 | 1.23 | 12.000 | 84.79 | 18.000 | 1.38 | 24.00 |
                                                      0.85 | 7.167
0.85 | 7.250
0.85 | 7.333
                                   1.167
                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              0.92
                                   1.250
1.333
                                                                                                1.54 |13.250
1.54 |13.333
                                                                                                                                      4.15 | 19.25
4.15 | 19.33
                                                                                                                                                                                  1.38
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.92
                                                      0.85 | 7.417
0.85 | 7.500
0.85 | 7.583
                                                                                                1.54 | 13.417 | 4.15 | 19.42
1.54 | 13.500 | 4.15 | 19.50
1.54 | 13.583 | 3.23 | 19.58
                                   1.417
                                                                                                                                                                                 1.38
                                   1.583
                                                                                                                                                                                  1.38
                                                       0.85 | 7.667
                                                                                               1.54 | 13.667
1.54 | 13.750
                                                                                                                                       3.23 | 19.67
3.23 | 19.75
                                    1.667
                                                                                                                                                                                                                                                                                                                                                                                         Unit Hyd Qpeak (cms)= 0.245
                                   1.750
                                                                                                                                                                                  1.38
                                                                                               1.54 | 13.833 | 3.23 | 19.83
1.54 | 13.917 | 3.23 | 19.92
                                                                                                                                                                                                                                                                                                                                                                                         PEAK FLOW (cms)= 0.180 (i)
TIME TO PEAK (hrs)= 12.500
                                   1.833
                                                      0.85 | 7.833
                                                                                                                                                                                 1.38
                                                        0.85 7.917
                                   1.917
                                                                                                                                                                                 1.38
                                                                                                                                                                                                                                                                                                                                                                                         RUNOFF VOLUME (mm)= 39.239
TOTAL RAINFALL (mm)= 76.801
RUNOFF COEFFICIENT = 0.511
                                   2.000
                                                        0.85 | 8.000
                                                                                                1.54 | 14.000
                                                                                                                                        3.23 | 20.00
                                                                                                                                                                                 1.38
                                                                                               2.07 |14.083
                                                        1.00 | 8.083
                                   2.167
                                                         1.00 | 8.167
                                                                                                                                         2.30 | 20.17
                                                                                                                                                                                 0.92
                                                                                              2.07 |14.250
2.07 |14.333
2.07 |14.417
                                   2.250
                                                        1.00 | 8.250
                                                                                                                                        2.30 | 20.25
                                                                                                                                                                                0.92
                                                         1.00 | 8.333
                                                                                                                                         2.30 | 20.33
                                   2.333
                                                                                                                                                                                 0.92
                                                                                                                                                                                                                                                                                                                                                                                         (i) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
                                   2.417
                                                         1.00 | 8.417
                                                                                                                                         2.30 | 20.42
                                                                                                                                                                                0.92
                                                                                              2.07 |14.500
2.07 |14.583
                                                          1.00 | 8.500
                                                                                                                                         2.30 | 20.50
                                                                                                                                        2.30 | 20.58
                                   2.583
                                                        1.00 | 8.583
                                                                                                                                                                                0.92
                                                                                                                                                                                0.92
                                                        1.00 | 8.667
1.00 | 8.750
                                                                                              2.07 | 14.667
2.07 | 14.750
                                                                                                                                      2.30 | 20.67
2.30 | 20.75
                                   2 667
                                   2.750
                                                                                                                                                                                 0.92
                                                                                                                                                                                                                                                                                                                                                                                  STANDHYD ( 0220) Area (ha)= 5.63
                                   2.833
                                                        1.00 | 8.833
                                                                                              2.07 | 14.833 | 2.30 | 20.83
                                                                                                                                                                                0.92
                                                                                                                                                                                                                                                                                                                                                                                 ID= I DT= 5.0 min | Total Imp(%)= 42.00 Dir. Conn.(%)= 34.00
                                                      1.00 | 8.917 | 2.07 | 14.917 | 2.30 | 20.92 | 0.92
[ile://V1...%2010_dated%20EA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20VO%20Output/Proposed%20VO%20Detailed%20Output/Proposed%20VO%20Detailed%20Output/Proposed
                                                                                                                                                                                                                                                                                                                                                                                                            3.500 1.00 | 9.500 2.46 | 15.500 2.30 | 21.50
3.583 1.00 | 9.583 2.76 | 15.583 2.30 | 21.58
3.667 1.00 | 9.667 2.77 | 15.667 2.30 | 21.67
                                                           IMPERVIOUS PERVIOUS (i)
              Surface Area (ha)= 2.36
Dep. Storage (mm)= 2.00
Average Slope (%)= 2.00
                                                                                                               3.27
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         0.92
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        2.77 |15.667
2.77 |15.750
              Dep. Storage (min)

Average Slope (%)= 2.00

Length (m)= 250.00

Mannings n = 0.013
                                                                                                                       5.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                    2.00
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   2.30 | 21.75
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.00 | 9.750
                                                                                                                                                                                                                                                                                                                                                                                                            3.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.00 | 9.83 | 2.76 | 15.833 | 2.30 | 21.83 | 1.00 | 9.835 | 2.76 | 15.833 | 2.30 | 21.83 | 1.00 | 9.917 | 2.77 | 15.917 | 2.30 | 21.92 | 1.00 | 10.000 | 2.77 | 16.000 | 2.30 | 22.00 | 1.23 | 10.085 | 3.53 | 16.083 | 1.38 | 22.08 | 1.23 | 10.167 | 3.53 | 16.167 | 1.38 | 22.17
                                                                                                              40.00
                                                                                                                                                                                                                                                                                                                                                                                                            3.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                              0.250
                                                                                                                                                                                                                                                                                                                                                                                                            4.000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                      NOTE: RAINFALL WAS TRANSFORMED TO 5.0 MIN. TIME STEP.
                                                                                                                                                                                                                                                                                                                                                                                                            4.083
                                                                                                                                                                                                                                                                                                                                                                                                            4.167
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.23 | 10.250 | 3.53 | 16.250 | 1.38 | 22.25 | 1.23 | 10.333 | 3.53 | 16.333 | 1.38 | 22.33
                                                                                                                                                                                                                                                                                                                                                                                                            4.250
                                                                    - TRANSFORMED HYETOGRAPH -
                                                                                                                                                                                                                                                                                                                                                                                                            4.333
                                   TIME RAIN | TIME R
                                                                                                                                                                                                                                                                                                                                                                                                            4.417
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.23 10.417
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.53 | 16.417 | 1.38 | 22.42
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
                                                                                                                                                                                                                                                                                                                                                                                                                                 1.23 |10.500
1.23 |10.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3.53 |16.500
4.76 |16.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.38 | 22.50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1.38 | 22.58
                                                                                                                                                                                                                                                                                                                                                                                                            4.583
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             0.92
                                  0.167  0.85 | 6.167
0.250  0.85 | 6.250
0.333  0.85 | 6.333
                                                                                                                                                                                                                                                                                                                                                                                                                                  1.23 | 10.667
1.23 | 10.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          4.76 | 16.667
4.76 | 16.750
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1.38 | 22.67
1.38 | 22.75
                                                                                                                                                                                                                                                                                                                                                                                                             4.667
4.750
                                                                                              1.54 |12.250 | 11.06 | 18.25
1.54 |12.333 | 11.06 | 18.33
                                                                                                                                                                                                                                                                                                                                                                                                            4.833
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           0.92
```

```
1.23 | 10.833 | 4.76 | 16.833 | 1.38 | 22.83 | 1.23 | 10.917 | 4.76 | 16.917 | 1.38 | 22.92 | 1.23 | 11.000 | 4.76 | 17.000 | 1.38 | 23.00
         0.85 | 6.417
0.85 | 6.500
                                1.54 | 12.417 | 11.06 | 18.42 | 1.54 | 12.500 | 11.06 | 18.50
0.417
0.500
                                                                                                                                                                                                   5.000
                                                                                                                                                                                                                                                                                0.92
                                1.54 | 12.583 | 5.68 | 18.58 | 1.54 | 12.667 | 5.68 | 18.67 | 1.54 | 12.750 | 5.68 | 18.75
                                                                                                                                                                                                              1.23 |11.083
1.23 |11.167
                                                                                                                                                                                                                                    7.37 |17.083
7.37 |17.167
                                                                                                                                                                                                                                                           1.38 | 23.08
1.38 | 23.17
0.583
          0.85 | 6.583
                                                                             1 38
                                                                                                                                                                                                   5.083
         0.85 | 6.667
                                                                                                                                                                                                             1.23 | 11.250 | 7.37 | 17.250 | 1.38 | 23.25 | 1.23 | 11.333 | 7.37 | 17.333 | 1.38 | 23.33 | 1.23 | 11.417 | 7.37 | 17.417 | 1.38 | 23.42 | 1.23 | 11.500 | 7.37 | 17.500 | 1.38 | 23.50 | 1.23 | 11.583 | 31.95 | 17.583 | 1.38 | 23.58 | 1.23 | 11.667 | 31.95 | 17.667 | 1.38 | 23.67
0.750
                                                                            1.38
                                                                                                                                                                                                   5.250
                                                                                                                                                                                                                                                                               0.92
                                1.54 | 12.833 | 5.68 | 18.83
1.54 | 12.917 | 5.68 | 18.92
0.833
          0.84 | 6.833
                                                                                                                                                                                                   5.333
           0.85 | 6.917
0.917
                                                                             1.38
                                                                                                                                                                                                   5.417
                                                                                                                                                                                                                                                                                0.92
          0.85 | 7.000
0.84 | 7.083
0.85 | 7.167
                                 1.54 | 13.000
1.54 | 13.083
                                                     5.68 | 19.00
4.15 | 19.08
4.15 | 19.17
1.000
                                                                                                                                                                                                   5.583
1.167
                                 1.54 13.167
                                                                             1.38
                                                                                                                                                                                                  5.667
                                                                                                                                                                                                                                                                                 0.92
                                                                                                                                                                                                             1.23 | 11.50 | 31.95 | 17.750 | 1.38 | 23.75 | 1.23 | 11.833 | 84.78 | 17.833 | 1.38 | 23.83 | 1.23 | 11.917 | 84.79 | 17.917 | 1.38 | 23.92
1.250
          0.85 | 7.250
0.85 | 7.333
                                1.54 | 13.250 | 4.15 | 19.25
1.54 | 13.333 | 4.15 | 19.33
                                                                             1 38
                                                                                                                                                                                                   5.750
1.333
                                                                             1.38
                                                                                                                                                                                                  5.833
                                                                                                                                                                                                                                                                                0.92
          0.85 | 7.417
0.85 | 7.500
0.85 | 7.583
                                                     4.15 | 19.42
4.15 | 19.50
1.417
                                 1.54 13.417
                                                                             1.38
                                                                                                                                                                                                   5 917
                                 1.54 | 13.500
                                                                                                                                                                                                  6.000 1.23 | 12.000 84.79 | 18.000 1.38 | 24.00 0.92
1.583
                                1.54 | 13.583 | 3.23 | 19.58
1.54 | 13.667 | 3.23 | 19.67
                                                                            1.38
1.667
           0.85 | 7.667
0.85 | 7.750
                                1.54 | 13.667
1.54 | 13.750
                                                                                                                                                                                        Max.Eff.Inten.(mm/hr)= 84.79
over (min) 5.00 15
                                                                                                                                                                                                                                     15.00
1.750
                                                       3.23 | 19.75
                                                                             1.38
                                                                                                                                                                                        over (min) 5.00 15.00
Storage Coeff. (min)= 3.84 (ii) 12.32 (ii)
Unit Hyd. Tpeak (min)= 5.00 15.00
1.833
          0.85 | 7.833
                                 1.54 | 13.833 | 3.23 | 19.83
                                                                            1.38
           0.85 | 7.917
                                 1.54 |13.917
                                                       3.23 | 19.92
1.917
          0.85 | 8.000
2.000
                                1.54 | 14.000
                                                     3.23 | 20.00
                                                                            1.38
                                                                                                                                                                                        Unit Hyd. peak (cms)=
                                                                                                                                                                                                                                 0.25
                                                                                                                                                                                                                                                0.08
           1.00 | 8.083
                                2.07 |14.083
2.07 |14.167
                                                      2.30 | 20.08
2.30 | 20.17
                                                                                                                                                                                                                                          *TOTALS*
2.083
                                                                                                                                                                                        PEAK FLOW (cms)= 0.45 0.37 0.7
TIME TO PEAK (hrs)= 12.00 12.08 1
RUNOFF VOLUME (mm)= 74.80 40.89
TOTAL RAINFALL (mm)= 76.80 76.80
RUNOFF COEFFICIENT = 0.97 0.53
                                                                                                                                                                                                                                                                   0.771 (iii)
2.167
           1.00 | 8.167
                                                                            0.92
           1.00 | 8.250
1.00 | 8.333
1.00 | 8.417
                               2.07 |14.250
2.07 |14.333
2.07 |14.417
                                                      2.30 | 20.25
2.30 | 20.33
2.30 | 20.42
                                                                                                                                                                                                                                                                     12.00
52.42
2.250
                                                                            0.92
2.333
2.417
                                                                            0.92
                                                                                                                                                                                                                                                                            76.80
           1.00 | 8.500
1.00 | 8.583
                               2.07 |14.500
2.07 |14.583
                                                      2.30 | 20.50 | 2.30 | 20.58
2.500
                                                                            0.92
2.583
                                                                            0.92
2.667
           1.00 | 8.667
                                2.07 14.667
                                                       2.30 20.67
                                                                            0.92
                                                                                                                                                                                   ***** WARNING: STORAGE COEFF. IS SMALLER THAN TIME STEP!
           1.00 | 8.750
                                2.07 |14.750
                                                       2.30 | 20.75
                                                     2.30 | 20.83
2.30 | 20.92
                                                                                                                                                                                          (i) CN PROCEDURE SELECTED FOR PERVIOUS LOSSES:
2.833
           1.00 | 8.833
                                2.07 |14.833
                                                                            0.92
                               2.07 |14.917
           1.00 | 8.917
                                                                                                                                                                                         CN* = 80.0 Ia = Dep. Storage (Above)
(ii) TIME STEP (DT) SHOULD BE SMALLER OR EQUAL
3.000
           1.00 | 9.000
                                                      2.30 | 21.00
                                                                            0.92
                               2.46 | 15.083
2.46 | 15.167
                                                     2.30 | 21.08
2.30 | 21.17
                                                                                                                                                                                        THAN THE STORAGE COEFFICIENT.
(iii) PEAK FLOW DOES NOT INCLUDE BASEFLOW IF ANY.
3 083
           1.00 | 9.083
                                                                            0.92
3.167
           1.00 | 9.167
                                                                            0.92
3.250
          1.00 9.250
                               2.46 15.250 2.30 21.25
                                                                           0.92
3.333
           1.00 9.333
                                2.46 | 15.333 | 2.30 | 21.33
3.417
          1.00 | 9.417 | 2.46 | 15.417 | 2.30 | 21.42 | 0.92
```

AREA QPEAK TPEAK R.V.
(ha) (cms) (hrs) (mm)

INFLOW: ID= 2 ( 0220) 5.630 0.771 12.00 52.42

OUTFLOW: ID= 1 ( 0050) 5.630 0.370 12.25 52.41 PEAK FLOW REDUCTION [Qout/Qin](%)= 47.94 TIME SHIFT OF PEAK FLOW (min)= 15.00 MAXIMUM STORAGE USED (ha.m.)= 0.0690 ID = 3 ( 0002): 23.32 0.485 13.08 41.74 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. | ADD HYD ( 0002)| | 3 + 2 = 1 | AREA QPEAK TPEAK R.V. | (ha) (cms) (hrs) (mm) | ID1= 3 ( 0002): 23.32 0.485 | 13.08 41.74 | + ID2= 2 ( 0050): 5.63 0.370 | 12.25 | 52.41 ID = 1 ( 0002): 28.95 0.725 12.50 43.82 NOTE: PEAK FLOWS DO NOT INCLUDE BASEFLOWS IF ANY. file:///V...%20Updated%20FA%20Analysis/VO/Detailed%20Output/Proposed%20VO%20Detailed%20Output%20-%20All%20Storms.txt[3/11/2024 II-44:24 AM]

# APPENDIX C: Stormwater Management Facility Calculations

Subject: **Water Quality Control Calculations** 

Project: Norval West Project No.: 165010598 Client: Halton Regi Norval West Halton Region

					Water Quality Unit Volume Requirements 1			Water Quality Volume Requirements		
Facility	Drainage Area (ha)²	Total % Imp.	Level	Facility Type	Total Unit Volume (m³/ha)	Permanent Pool (m³/ha)	Extended Detention (m <sup>3</sup> /ha)	Permanent Pool (m³)	Extended Detention (m³)³	Total MOE Volume
Reservoir 1	19.3	11%	Enhanced	Wet Pond	80	40	40	772	772	1,544
Reservoir 2	5.6	42%	Enhanced	Wet Pond	158	118	40	658	224	882
Reservoir 3	7.7	30%	Enhanced	Wet Pond	128	88	40	674	308	982

Water quality unit volume requirements based on Table 3.2, Stormwater Management Planning & Design Manual (MOE 2003), Protection Level "Enhanced" (formerly Level 1)
 Drainage Area for Quality control represents total drainage area to SWM Facility and includes the area of the SWM block itself
 Extended detention volume to draw down over 24 hours

Subject: **SWM Footprint - Reservoir 1** 

Project: **Norval West** Project No.: 165010598 Client: **Halton Region** 

### **Volume Truncated Rectangular Pyramid**

$$V = \frac{1}{3}H(A2 + \sqrt{A2 \times A1} + A1)$$

Where:

	. 3.
V = Volume	(m <sup>3</sup> )

$$H = Height (active storage)$$
 (m)  
A1 = W1 x L1 = Area at bottom (m<sup>2</sup>)

A2 = W2 x L2 = Area at top 
$$(m^2)$$

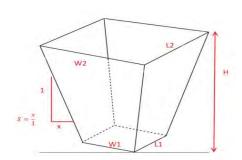
$$W = Width$$
 (m)

$$L = Length$$
 (m)

L1 = Length bottom (estimated) (m)

W1 = Width bottom (estimated) (m)

$$L2 = L1 \times S = Length top$$
 (m)  
 $W2 - W1 \times S = Width top$  (m)



Slope (s) =	5 :1
Depth of pond (H) =	3 m
Bottom Width (W1) =	34.58 m
Top Width (W2) =	64.58 m
L1:W1 =	2.00 :1
Bottom Length (L1) =	69.16 m
Top Length (L2) =	99.16 m
Required Volume =	12710 m <sup>3</sup>
Provided Volume =	12710 m <sup>3</sup>
Bottom Area (A1) =	2391.87 m <sup>2</sup>
Area at top of Active (A2) =	6404.28 m <sup>2</sup>
Freeboard =	0.30 m
Width at Freeboard =	67.58 m
Length at Freeboard =	102.16 m
Area at Freeboard =	6904.52 m <sup>2</sup>
Add 30% for grading =	8975.88 m <sup>2</sup>
=	0.90 ha

Therefore, pond footprint allowing for grading is:

0.90 ha

Subject: **SWM Footprint - Reservoir 2** 

Project: **Norval West** Project No.: 165010598 Client: **Halton Region** 

### **Volume Truncated Rectangular Pyramid**

$$V = \frac{1}{3}H(A2 + \sqrt{A2 \times A1} + A1)$$

Where:

V = Volumo	$(m^3)$
V = Volume	$(m^3)$

$$H = Height (active storage)$$
 (m)  
A1 = W1 x L1 = Area at bottom (m<sup>2</sup>)

A1 = W1 x L1 = Area at bottom (m)  
A2 = W2 x L2 = Area at top 
$$(m^2)$$

$$W = Width \tag{m}$$

$$W = Width$$
 (m)

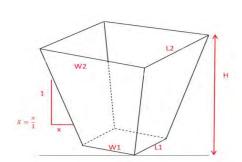
$$L = Length$$
 (m)

L1 = Length bottom (estimated) (m)

W1 = Width bottom (estimated) (m)

$$L2 = L1 \times S = Length top$$
 (m)

$$W2 - W1 \times S = Width top$$
 (m)



Slope (s) =	5 :1
Depth of pond (H) =	3 m
Bottom Width (W1) =	6.58 m
Top Width (W2) =	36.58 m
L1:W1 =	2.00 :1
Bottom Length (L1) =	13.16 m
Top Length (L2) =	43.16 m
Required Volume =	2035 m <sup>3</sup>
Provided Volume =	2035 m <sup>3</sup>
Bottom Area (A1) =	86.58 m <sup>2</sup>
Area at top of Active (A2) =	1578.72 m <sup>2</sup>
Freeboard =	0.30 m
Width at Freeboard =	39.58 m
Length at Freeboard =	46.16 m
Area at Freeboard =	1826.94 m <sup>2</sup>
Add 30% for grading =	2375.02 m <sup>2</sup>
=	0.24 ha

Therefore, pond footprint allowing for grading is:

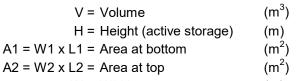
Subject: **SWM Footprint - Reservoir 3** 

Project: **Norval West** Project No.: 165010598 Client: **Halton Region** 

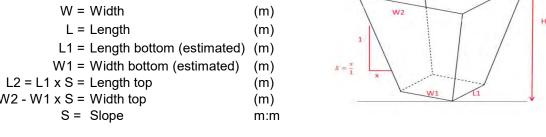
### **Volume Truncated Rectangular Pyramid**

$$V = \frac{1}{3}H(A2 + \sqrt{A2 \times A1} + A1)$$

Where:



$$L2 = L1 \times S = Length top$$
 (m)  
 $W2 - W1 \times S = Width top$  (m)



Slope (s) =	5 :1
Depth of pond (H) =	3 m
Bottom Width (W1) =	15.26 m
Top Width (W2) =	45.26 m
L1:W1 =	2.00 :1
Bottom Length (L1) =	30.51 m
Top Length (L2) =	60.51 m
Required Volume =	4333 m <sup>3</sup>
Provided Volume =	4333 m <sup>3</sup>
Bottom Area (A1) =	465.48 m <sup>2</sup>
Area at top of Active (A2) =	2738.50 m <sup>2</sup>
Freeboard =	0.30 m
Width at Freeboard =	48.26 m
Length at Freeboard =	63.51 m
Area at Freeboard =	3064.80 m <sup>2</sup>
Add 30% for grading =	3984.24 m <sup>2</sup>
=	0.40 ha

Therefore, pond footprint allowing for freeboard and grading is:

0.40 ha

# APPENDIX D: Hydraulic Model Files

# **Worksheet for Silver Creek (North)**

Project Description		
	Manning	
Friction Method	Formula	
Solve For	Normal Depth	
Input Data		
Roughness Coefficient	0.055	
Channel Slope	0.050 m/m	
Left Side Slope	2.000 H:V	
Right Side Slope	2.000 H:V	
Discharge	524.00 L/s	
Results		
Normal Depth	437.3 mm	
Flow Area	0.4 m <sup>2</sup>	
Wetted Perimeter	2.0 m	
Hydraulic Radius	195.6 mm	
Top Width	1.75 m	
Critical Depth	425.8 mm	
Critical Slope	0.058 m/m	
Velocity	1.37 m/s	
Velocity Head	0.10 m	
Specific Energy	0.53 m	
Froude Number	0.935	
Flow Type	Subcritical	
GVF Input Data		
Downstream Depth	0.0 mm	
Length	0.0 m	
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.0 mm	
Profile Description	N/A	
Profile Headloss	0.00 m	
Downstream Velocity	Infinity m/s	
Upstream Velocity	Infinity m/s	
Normal Depth	437.3 mm	
Critical Depth	425.8 mm	
Channel Slope	0.050 m/m	
Critical Slope	0.058 m/m	

# **Worksheet for Levi's Creek (South)**

		( )
Project Description		
Friction Method	Manning	
	Formula	
Solve For	Normal Depth	
Input Data		
Roughness Coefficient	0.035	
Channel Slope	0.010 m/m	
Left Side Slope	2.000 H:V	
Right Side Slope	2.000 H:V	
Discharge	229.00 L/s	
Results		
Normal Depth	366.0 mm	
Flow Area	0.3 m <sup>2</sup>	
Wetted Perimeter	1.6 m	
Hydraulic Radius	163.7 mm	
Top Width	1.46 m	
Critical Depth	305.8 mm	
Critical Slope	0.026 m/m	
Velocity	0.85 m/s	
Velocity Head	0.04 m	
Specific Energy	0.40 m	
Froude Number	0.638	
Flow Type	Subcritical	
GVF Input Data		
Downstream Depth	0.0 mm	
Length	0.0 m	
Number Of Steps	0	
GVF Output Data		
Upstream Depth	0.0 mm	
Profile Description	N/A	
Profile Headloss	0.00 m	
Downstream Velocity	Infinity m/s	
Upstream Velocity	Infinity m/s	
Normal Depth	366.0 mm	
Critical Depth	305.8 mm	
Channel Slope	0.010 m/m	
Critical Slope	0.026 m/m	