



APPENDIX E
TECHNICAL STEERING COMMITTEE CORRESPONDENCE
AND MEETING NOTES

- E-1** **LIST OF TECHNICAL STEERING COMMITTEE MEMBERS**
- E-2** **Update Letter to the Technical Steering Committee**
(FEBRUARY 22, 2013)
- E-3** **Technical Steering Committee Meeting #1 (October 24, 2012)**
– AGENDA
– PRESENTATION MATERIALS
– MEETING NOTES (TO BE FINALIZED)
- E-4** **Technical Steering Committee Meeting #2 (December 5, 2013)**
– AGENDA
– PRESENTATION MATERIALS
– MEETING NOTES (TO BE FINALIZED)

LIST OF TECHNICAL STEERING COMMITTEE MEMBERS



Halton Region
Prospect Park Municipal Class EA

Technical Steering Committee Membership List

Agency/Organization	Name	Title	Attendance - Meeting #1 October 24, 2012	Attendance - Meeting #2 December 5, 2013
XCG Consultants Ltd.	Michele Grenier	Senior Project Manager	Attended	Attended
XCG Consultants Ltd.	Kasia Piskorz	Project Engineer	Attended	N/A
XCG Consultants Ltd.	Carla Fernandes	Project Specialist	N/A	Attended
XCG Consultants Ltd.	Mike Schriver	Project Engineer	Attended	Absent
XCG Consultants Ltd.	George Zukovs	Senior Consultant	Attended	Absent
D.C. Damman & Associates	Dianne Damman	Principal	Attended	Attended
ARL Groundwater Resources Ltd.	Tony Lotimer	Senior Hydrogeologist	Attended	Attended
Associated Engineering (Ont.) Ltd.	Elia Edwards	Manager, Water	Attended	Attended
Halton Region	Michelle Gillespie	Water Design and Construction, Project Manager	Attended	Attended
Halton Region	Tom Renic	Senior Hydrogeologist	Attended	Attended
Halton Region	Jon Clark	Water Resource Specialist	Attended	Attended
Halton Region	David Simpson	Manager, Water Planning Services	Attended	Absent
Halton Region	Peter Hayes	Water Services Supervisor	Absent	Absent
Halton Region	Ron Kirkwood	Water Treatment Subforeperson	Absent	N/A
Halton Region	Bill Mundy	Water Treatment Optimization Specialist	Attended	Attended
Halton Region	Peter Nguyen	Water Treatment Operator	Absent	N/A
Halton Region	David Lockwood	Water Treatment Operator	N/A	Attended
Town of Halton Hills	John Linhardt	Director of Planning, Development and Sustainability	N/A	N/A
Town of Halton Hills	Terry Alyman	Director of Recreation and Parks	N/A	N/A
Town of Halton Hills	Steve Grace	Manager of Development Engineering, Infrastructure Services	Attended	Attended
Town of Halton Hills	John Kwast	Manager of Design & Construction, Infrastructure Services	Attended	Absent
Town of Halton Hills	Chris Mills	Director of Infrastructure/Town Engineering	N/A	N/A
Town of Halton Hills	Warren Harris	Manager of Parks and Open Space	N/A	Absent
Town of Halton Hills	Kevin Okimi	Senior Landscape Architect	N/A	Attended
City of Guelph	Dave Belanger	Water Supply Program Manager	Attended	Absent
Ministry of the Environment, Central Region	Daniel Delaquis	Environmental Resource Planner and EA Coordinator, Technical Support Section	Absent	Absent
Ministry of the Environment, Central Region	Ross Hodgins	Hydrogeologist, Water Resources Unit	Absent	Absent
Ministry of Natural Resources	John Pisapio	Biologist, Aurora District Office	N/A	Absent
Grand River Conservation Authority	Beth Brown	Supervisor of Resource Planning	N/A	N/A
Grand River Conservation Authority	Drew Cherry	Resource Planner	N/A	N/A
Credit Valley Conservation	Jennifer Dougherty	Water Quality Engineer	N/A	N/A
Credit Valley Conservation	Liam Marray	Manager - Planning Ecology	Absent	Absent
Credit Valley Conservation	Daniel Banks	Manager - Hydrogeology	Attended	Attended
Credit Valley Conservation	Kerry Mulchansingh	Source Water Protection Project Manager / Hydrogeologist	N/A	Absent

FEBRUARY 22, 2013 UPDATE LETTER TO STEERING COMMITTEE



February 22, 2013

Public Works
Water Services
1151 Bronte Road
Oakville ON L6M 3L1
Tel: 905-825-6000, ext. 3309
Fax: 905-825-0267
Email: michelle.gillespie@halton.ca

Technical Steering Committee Members:

RE: Municipal Class Environmental Assessments - Update on Prospect Park Well Field and Water Purification Plant Expansion, and Fourth Line Well Field Study, Town of Halton Hills (Acton), Ward 1, Halton Region Files: PR-2221, PR-2826

Halton Region is undertaking the following two Municipal Class Environmental Assessments (Class EAs) to support future growth in the community of Acton:

- 1) Prospect Park Well Field Re-rating and Water Purification Plant Expansion Class EA Study; and
- 2) Fourth Line Well Field Re-rating Class EA Study.

These projects were identified in Sustainable Halton's Water and Wastewater Master Plan (2011) as part of a long term Region-wide water servicing strategy. Both projects are being conducted in accordance with Approach #2 of the Master Planning Process, described in Appendix 4 of the Municipal Class EA document (Municipal Engineers Association, 2000 as amended in 2007 and 2011). The Master Plan and supporting documentation is available at: www.halton.ca/watermasterplan.

Background

The Master Plan addressed the need to accommodate population and employment growth forecasts to the year 2031, as identified in Ontario Ministry of Infrastructure's Growth Plan for the Greater Golden Horseshoe Area, 2006 (Pursuant to the Places to Grow Act, 2005).

The preferred water servicing strategy for Acton, as outlined in the Master Plan, is to expand the groundwater supply to the community. Components of the preferred strategy include:

- Increased water taking at the Prospect Park and Fourth Line Well Fields;
- Expansion of the Prospect Park Water Purification Plant;
- Expansion of the Third Line Reservoir;
- Development of a new well field supply north of Acton;
- Potential implementation of an Artificial Recharge Program; and
- Upgrades to local infrastructure.

The Prospect Park Well system currently supplies up to 40 per cent of Acton's water supply and consists of two production wells, associated well houses and a Water Purification Plant. To meet the water servicing needs of the projected population growth, the Region is evaluating the potential to increase the water taking from the existing wells from 2,273 to 3,500 m³/day (year round) and to expand the plant capacity from 2,300 m³/day to 3,500 m³/day.

The Fourth Line Well system currently supplies approximately 20 percent of Acton's water supply, and consists of one production well, one test well and an on-site treatment facility. To meet the water

The Regional Municipality of Halton

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servicing needs of the projected population growth, the Region is investigating the possibility of expanding the well field use from 1,309 to 1,709 m³/day. This incorporates bringing the existing test well into service as a standby production well.

The remainder of Acton's water supply is derived from the Davidson Well Field. No increase in water taking is planned for the Davidson Well Field. Other components of the preferred strategy (New North Acton Well Field, Third Line Reservoir expansion, etc.) are not scheduled to commence until 2014/2015 and are contingent upon funding. Infrastructure upgrades to the Davidson and Fourth Line Pumphouses (Schedule A projects) are in progress.

The Process

The Prospect Park and Fourth Line studies are following the Municipal Class EA process which includes public and review agency consultation, an evaluation of alternative design concepts, an assessment of the potential environmental effects of the alternatives, and the identification of reasonable measures to mitigate any adverse environmental impacts.

Together with the Master Plan, the Prospect Park Well Field Re-Rating and Water Purification Plant Expansion Class EA will satisfy the Phases 3 and 4 requirements of a Schedule C project (Master Plan satisfied Phases 1 and 2). A Public Information Centre (PIC) will be scheduled to solicit comment and input on the design concept alternatives. Comments received from the PIC will be considered in selecting the preferred design concept. An Environmental Study Report will be prepared to document the Class EA process and will be placed on public record for a 30-day review period.

The Fourth Line Well Field Class EA study has been identified as a Schedule B project, but was not listed in the Master Plan Class EA Notice of Completion (2011) as additional work was ongoing to investigate the potential to increase the Fourth Line Well Field capacity. A Public Information Centre will be scheduled to discuss the potential environmental impacts and reasonable mitigation or monitoring measures.

Both studies will require submission of an Impact Assessment Report to the Ministry of the Environment in order to fulfill the Permit to Take Water application requirements to increase the groundwater takings.

Target Dates

Public Information Centre to solicit comment on conceptual design alternatives for the Prospect Park Water Purification Plant expansion	March 2013
Agency Review of Prospect Park Well Field Impact Assessment Report	April 2013
Agency Review of Prospect Park Environmental Study Report	June 2013
Notice of Completion of Prospect Park Class EA Study - Environmental Study Report for Public Review	August 2013
Fourth Line Well Field Pumping Test	July/August 2013
Agency review of Fourth Line Well Field Impact Assessment Report	December 2013
Public Information Centre to present Fourth Line Well Field Impact Assessment results	February 2014
Notice of Completion of Fourth Line Class EA Study	March 2014

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Contact Us

Please contact any of the following project team members if you have any questions or comments.

Ms. Michelle Gillespie, P.Eng.
Project Manager, Water Design & Construction
Halton Region
Phone: 905-825-6000 ext. 3309
Toll Free: 1-866-442-5866
Fax: 905-825-0267
Email: michelle.gillespie@halton.ca

For technical questions regarding Prospect Park Well Field and WPP Expansion Class EA:

Ms. Michele Grenier, P.Eng.
Project Manager
XCG Consultants Ltd.
Phone: 905-829-8880, ext. 249
Fax: 905-829-8890
Email: micheleg@xcg.com

For technical questions regarding Fourth Line Well Field Class EA:

Mr. Robert Wiersma, P.Eng.
Project Manager
Stantec Consulting Ltd.
Phone: 519-585-7409
Fax: 519-579-8806
Email: robert.wiersma@stantec.com

Information updates will be posted on Halton Region's web site at: www.halton.ca/haltonhills_ea.

Thank you very much for your interest in the study.

Sincerely,

A handwritten signature in blue ink that reads "Michelle Gillespie".

Michelle Gillespie, P.Eng.
Project Manager, Water Design & Construction
Halton Region

cc: Michele Grenier, XCG Consultants Ltd.
Robert Wiersma, Stantec Consulting Ltd.
Jacqueline Weston, Halton Region

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STEERING COMMITTEE MEETINGS

- ***STEERING COMMITTEE MEETING #1***
 - *AGENDA*
 - *PRESENTATION MATERIAL*
 - *MEETING NOTES*
- ***STEERING COMMITTEE MEETING #2***
 - *AGENDA*
 - *PRESENTATION MATERIALS*
 - *MEETING NOTES*

STEERING COMMITTEE MEETING #1

OCTOBER 24, 2012

- ***AGENDA***
- ***PRESENTATION MATERIAL***
- ***MEETING NOTES***



HALTON REGION
PROSPECT PARK WELL FIELD CLASS EA
TECHNICAL STEERING COMMITTEE

Chartering Workshop
Wednesday, October 24, 2012
9:00 a.m. to 1:00 p.m.
Halton Region
Oak Room
1075 North Service Road West, Unit 27
Oakville, Ontario

A G E N D A

1. Welcome and Introductions
2. Role of Technical Steering Committee
3. Purpose of Chartering Workshop
4. Purpose and Background to the Study
5. Overview of Work Plan
6. Summary of Previous Work and Findings
7. Key Issues
8. Problem / Opportunity Statement
9. Preliminary Alternative Solutions
10. Next Steps and Timing
11. Next Meeting

Halton Region Prospect Park Well Field Class EA

Chartering Workshop



Workshop Agenda

- Introductions
- Study Objectives
- Purpose of Chartering Workshop
- Role of Technical Steering Committee
- Scope of the Schedule C Class Environmental Assessment
- Review Key Findings of Previous Work
- Discuss Key Issues for this Project



Introduction and Study Background



Background

- Prospect Park Well Field Consists of two overburden groundwater wells
 - Well 1 drilled in 1978
 - Well 2 drilled in 2002
- The two wells supply up to two fifths of Acton's water
- Water Purification Plant (WPP) brought into service in 1991 to treat for aesthetic parameters - primarily manganese and iron



Prospect Park Wellfield



Study Objectives

- Evaluate alternatives and determine a recommended preferred alternative for providing water to meet projected future needs as per the Master Plan
- Review previous studies and programs to prepare Impact Assessment Report
- Complete Schedule C Class Environmental Assessment
- Satisfy all requirements for the submission of an application for a Permit to Take Water (PTTW)



Purpose of Workshop

- Discuss Draft Problem Statement
- Review Preliminary List of Alternative Solutions
- Identify Key Issues and Concerns
- Build consensus on findings of work previously completed in the study area



Role of the TSC

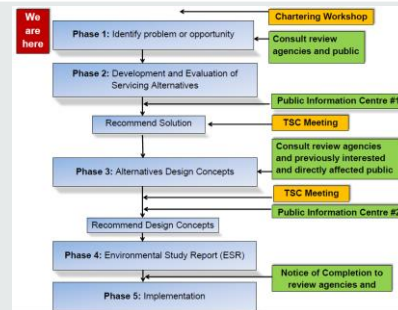
- Participate in Steering Committee Meetings:
 - Chartering Workshop
 - Preferred Alternative Review
 - Conceptual Design Workshop
- Provide input to key issues to be considered during the course of the study
- Timely review and comment on technical issues



Scope of the Class EA



Class EA Study Process



Draft Problem/Opportunity Statement

- To identify the most cost-effective, environmentally sound and sustainable approach to increase water taking at Prospect Park Well Field to a potential 3,400 m³/d, as outlined in the Sustainable Halton Water and Wastewater Master Plan, 2011, in order to provide long term water servicing for future growth in the Town of Acton to 2031.



Alternative Solutions

- Do Nothing
- Limit Community Growth
- New Water Source
- Optimize Existing Treatment Process
- Reduce Water Demand through Water Conservation
- Expand and/or Upgrade the Prospect Park Water Treatment Facility



Alternative Solutions cont'd...

- Expand and/or Upgrade one of the other Water Treatment Facilities in Acton
- Construct a New Prospect Park Water Treatment Facility on the Existing Site
- Construct a New Prospect Park Water Treatment Facility on a New Site
- Retain Existing Prospect Park Water Treatment Facility and Construct a New Plant for New Growth



Public Consultation Program

- Notice of Commencement
- Notice of Public Information Centres (PICs)
- PICs (2)
- Notice of Completion
- ESR Public Review and Comment Period



Results of Previous Studies and Investigations



Background Information & Previous Studies

- Drinking Water Analytical Summary, Prospect Park, August 2012
- Acton Drinking Water System, Drinking Water System Inspection Report, April 2012
- Acton Drinking Water System, Drinking Water System Inspection Report, May 2011
- Drinking Water Works Permit No.004-02-Acton Drinking Water System, December 2011
- Amended Permit to Take Water No. 6281-7WFQB3, October 2009



Background Information & Previous Studies

- Sustainable Halton Water and Wastewater Master Plan, AECOM, September 2011
- Prospect Park Well Field Groundwater Supply Study, Golder Associates, May 2012
- Prospect Park Well 1 Pump Installation Report, Lotowater Technical Services, December 2011
- Reconstruction of Prospect Park Well No.1, Golder Associates, May 2011
- Acton Water Supply System, Prospect Park Well Field, 2009 Pumping Test Work Plan, Dillon Consulting, August 2009
- Hydraulic Conductivity of Fairy Lake Sediments, AECOM, June 2009



Background Information & Previous Studies

- Regional Municipality of Halton Acton, Prospect Park Standby Well No.2 , International Water Supply, February 2003
- Groundwater Treatment Needs Assessment Study, Prospect Park Well, Region of Halton, January 2002
- Proposed Blue Springs Development Hydrogeologic Investigation Program, International Water Supply, July 1998
- Blue Springs Golf Club, Town of Halton Hills, International Water Supply, February 1997



Key Findings – Golder, 2012

- Study Objective: Assess potential environmental effects of increasing Prospect Park Well Field production from 2,273 m³/d to 3,400 m³/d year round
- Key Findings:
 - Two pumping tests at 3,400 m³/d were conducted in 2009/2010, with results indicating the well field can sustain at least 3,400 m³/d over the long-term
 - Steady-state production from the well field at 3,400 m³/d is sustained by approximately 920 m³/d from surface catchments and 2,480 m³/d from horizontal groundwater flow from the Prospect Park aquifer
 - Increased pumping rate from the Prospect Park aquifer should not interfere with local private supply wells



Key Findings – Golder, 2012 (con't)

- Key Findings (con't):
 - Seepage losses due to the increased pumping rate should have no discernible effect on local stream flows or on water temperature in local surface water features
 - Recommended wetland monitoring be included in future assessments
 - Predicted the increased pumping would draw down summer water levels in Fairy Lake an additional 0.05 m, representing a low risk to aquatic habitat and fish in the lake
 - Predicted no impacts to seasonal or permanent habitats used by birds or mammals, and no impacts to surface water feature used by amphibians, as a result of the increased pumping



Fairy Lake Water Quality Study – AECOM

- Key Findings:
 - Fairy Lake is mainly sustained by surface water inflows, with groundwater inflow accounting for only 5% of the water budget during non-drought conditions
 - The water quality in Fairy Lake is a function of contributions from multiple sources including:
 - Inflow from upstream sources (Black Creek, south and west inlets)
 - Inflow from agricultural sources and storm sewers
 - Internal nutrient dynamics
 - Septic systems
 - Fecal matter from waterfowl and runoff from surrounding areas
 - Local wetland setting



Prospect Park Wellfield Impact Assessment – Dillon (2008)

- Key Findings:
 - At Well 2, Dillon conducted a 30-day pumping test at a rate of 2924 m³/d, and 15-day pumping test at a rate of 4182 m³/d
 - The results indicate that there was no impact to the water level in Fairy Lake or to the baseflow to Black Creek
 - During the pumping tests, no impacts to the wetlands adjacent to Fairy Lake were observed
 - It was reported that the pumping tests reached equilibrium (steady state) conditions by the end of the 30-day pumping test



Prospect Park Wellfield Impact Assessment – Dillon (2008)

- Key Findings (con't):
 - Analysis and results strongly suggested that pumping from Well 2 at the rates of 3,000 m³/d (average) and 4,546 m³/d (maximum day demand) would be sustainable in the long-term without causing measurable impacts on the groundwater or surface water systems, or on the aquatic habitats of Fairy Lake, Black Creek and adjacent wetlands



Hydrogeological Investigation & Environmental Site Assessment (AMEC, 2009)

- Study Objective: To confirm the presence of shallow fill material near the Prospect Park pumphouse did not pose any threat to water quality in the municipal aquifer at the current pumping rates or at the proposed increased pumping rates
- Key Findings:
 - Included 17 boreholes and installation of 11 monitoring wells
 - Sampling results indicated soil and groundwater at the site exceeded MOE Table 1 Standards (Background) for base, neutral and acid extractable (BNAE) and some inorganic parameters. AMEC recommended that a screening level risk assessment be conducted



Hydrogeological Investigation & Environmental Site Assessment (AMEC, 2009)

■ Key Findings (con't):

- AMEC reported no exceedances of the Ontario Drinking Water Quality Standards at any monitoring wells within the predicted zone of influence
- A sample from one monitoring well outside the predicted zone of influence showed a chromium concentration that marginally exceeded the Ontario Drinking Water Quality Standard for chromium; it was reported this marginal chromium exceedance was not expected to affect water quality in the Prospect Park production wells



Capacity Needs Assessment (K.W. Thompson, 2011)

■ Key Findings:

- Prospect Park Aquifer pumping test at the rate of 4,546 m³/d resulted in higher levels of iron and manganese resulting in operational problems
- Pumping at 3,500 m³/d showed iron and manganese concentrations can be treated using the existing greensand filters
- Identified capital works required to provide a sustained average day demand of 3,500 m³/d



Moving Forward & Key Issues



Key Issues

- Facilitated Discussion



Next Steps

- Consultation/Workshop with the Region's Engineering and Operations staff
- TM # 1 – Existing Conditions and Future Needs
- TM # 2 – Alternative Solutions
- Public Information Centre #1
- Technical Steering Committee Meeting # 2



Thank You

Michelle Gillespie
Project Manager

Halton Region

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905-825-6000 x 3309

Michele Grenier

Project Manager

XCG Consultants Ltd.

micheleg@xcg.com

905-829-8880 x 249



XCG File No.:3-595-55-01

Re: Prospect Park Class EA - Regional Municipality of Halton

Meeting Date: Wednesday, October 24, 2012

Location: 1075 North Service Road W, Oakville, ON

Attendees: Michelle Gillespie - Halton Region (Region)
Tom Renic - Halton Region
David Simpson - Halton Region
Jon Clark - Halton Region
Bill Mundy - Halton Region
Steve Grace - Town of Halton Hills (Halton Hills)
John Kwast - Town of Halton Hills
David Belanger - City of Guelph
Daniel Banks - Credit Valley Conservation Authority
Dianne Damman - D.C. Damman & Associates
Tony Lotimer – ARL Groundwater
Elia Edwards – Associated Engineering (AE)
Michele Grenier - XCG Consultants Ltd. (XCG)
George Zukovs, XCG Consultants Ltd.
Michael Schriver - XCG Consultants Ltd.
Kasia Piskorz - XCG Consultants Ltd.

Regrets: Peter Hayes, Halton Region
Ron Kirkwood, Halton Region
Peter Nguyen, Halton Region
Daniel Delaquis, Ministry of the Environment (MOE)
Ross Hodgins, Ministry of the Environment
Liam Murray, Credit Valley Conservation Authority

Notes By: Kasia Piskorz, XCG Consultants Ltd.

Item	Action
1. Introduction	
<ul style="list-style-type: none"> M. Grenier is the project manager for XCG and Michelle Gillespie is the project manager for the Region. XCG will lead the study while D. Dammam will be responsible for public consultation, AE will complete the conceptual design and T. Lotimer will assist with the Impact Assessment review and PTTW application. 	Info



Item	Action
<p>2. Role of Technical Steering Committee & Purpose of Chartering Workshop</p> <ul style="list-style-type: none"> The Technical Steering Committee (TSC) Meeting No. 1 was held before any public consultation has been initiated. The purpose of the TSC is to help identify any key issues that need to be considered and to provide comments on technical issues during the study. Info TSC participation is required during the chartering workshop, preferred alternative review and conceptual design workshop. The following items were reviewed during the chartering workshop: draft problem statement, preliminary list of alternative solutions, key issues and concerns, and previous work completed at Prospect Park Well Field. 	
<p>3. Summary of Previous Work and Findings</p> <ul style="list-style-type: none"> An overview of the findings of several background reports was presented. Info All the background reports reviewed will be made available through a file transfer site. The Region has provided access information to TSC members. Info B. Mundy noted that the K.W. Thompson Capacity Needs Assessment, 2011 provided a high level assessment of capital infrastructure requirements for the Prospect Park site and facility only. Also, it was noted that the biggest operational/treatment issue at the site is the high oxidant demand due to ammonia concentrations in the raw water. Potassium permanganate is no longer used in the Prospect Park water treatment process. Info J. Kwast noted that two stormwater quality units were recently installed by the Town of Halton Hills in the area immediately north of Fairy Lake. Further information regarding these units was provided to XCG. J. Kwast noted that all data from the Halton Hills monitoring program can be made available for the purposes of this study. Halton Hills/XCG M. Schriver noted that the "Key Findings - Golder, 2012" presentation slide states an incorrect pumping rate of 3,400 m³/d for the two pumping tests conducted. The slide comment should state the "two pumping tests at 3,045 m³/d for 77 days and 4,400 m³/d for 111 days were conducted in 2009/2010, with resulting indicating the well field can sustain 3,400 m³/d over the long-term." Info 	

Item	Action
<ul style="list-style-type: none"> D. Belanger inquired how the findings from the AECOM Fairy Lake Water Quality Study regarding groundwater inflow accounting for 5 percent of the water budget relate to the 3,400 m³/d production at Prospect Park. The methodology used for the development of the water budget presented in the AECOM report will be reviewed in greater detail as part of the Impact Assessment Report. 	Info
<ul style="list-style-type: none"> Attached to these meeting minutes is an excerpt from Section 8 (Volume 1) of Halton Region Sustainable Water and Wastewater Master Plan, 2011 regarding existing and future growth (intensification within existing urban boundary, including Maple Leaf Lands) servicing requirements in terms of new capacity (~ 3.0 MLD) - pg 80,81, ES-12, ES-13 	Info
<ul style="list-style-type: none"> For reference, full Master Plan report is available on the Halton Region website at following link: http://www.halton.ca/planning_sustainability/environmental_assessments_eas/ 	Info
4. Key Issues	
<ul style="list-style-type: none"> The following key issues were identified for consideration: <ul style="list-style-type: none"> Impacts to Black Creek (i.e. baseflow to Black Creek will be impacted) Wetland complex Park space (largest impact on public) Modification of dam Protection of recreational use of lake Source water protection 	XCG/ D.Damman /AE/ T.Lotimer
<ul style="list-style-type: none"> The Credit Valley Conservation Authority noted that the Black Creek Subwatershed Study Background report is complete and the Black Creek Subwatershed Study Phase I report is almost complete. 	Info
<ul style="list-style-type: none"> M. Grenier noted that park space will be considered during the conceptual design and any property issues will be discussed during the conceptual design workshop. 	AE
<ul style="list-style-type: none"> T. Renic and D. Simpson noted that source water protection will not be considered as part of this study. A draft Tier 3 risk assessment report has been completed for the Region and can be referred to if required. 	Info

Item	Action
5. Study Area	
<ul style="list-style-type: none">Once defined the proposed study area will be submitted to the Town of Halton Hills for review by the appropriate Ward Councillor.	XCG/ Region/ Halton Hills
6. Public Consultation	
<ul style="list-style-type: none">The proposed Stakeholder and Agency Contact List will be D.Damman submitted to the Town of Halton Hill for review by the appropriate Ward Councillor.D. Simpson noted that a presentation regarding the study has been made to council members and the feedback was positive.	/Halton Hills
7. Problem / Opportunity Statement	
<ul style="list-style-type: none">The following problem statement was presented: <i>"To identify the most cost-effective, environmentally sound and sustainable approach to increase water taking at Prospect Park Well Field to a potential 3,400 m³/d, as outlined in the Sustainable Halton Water and Wastewater Master Plan, 2011, in order to provide long term water servicing for future growth in the Town of Acton to 2031."</i>D. Belanger inquired how the term sustainable would be defined as part of the study and how it will be measured with respect to the problem statement. G. Zukovs noted that a qualitative approach based on the judgement of various people will be required to determine the sustainability of the project outcome.The problem statement will be finalized since no other comments were made regarding the problem statement.	Info XCG/ Halton
8. Preliminary Alternative Solutions	
<ul style="list-style-type: none">The following alternative solutions were presented to the TSC:<ul style="list-style-type: none">Do NothingLimit Community GrowthNew Water SourceOptimize Existing Treatment ProcessReduce Water Demand through Water ConservationExpand and/or Upgrade the Prospect Park Water Treatment Facility	Info

Item	Action
<ul style="list-style-type: none">– Expand and/or Upgrade one of the other Water Treatment Facilities in Acton– Construct a New Prospect Park Water Treatment Facility on the Existing Site– Construct a New Prospect Park Water Treatment Facility on a New Site– Retain Existing Prospect Park Water Treatment Facility and Construct a New Plant for New Growth• The Sustainable Halton Water and Wastewater Master Plan, 2011 has already eliminated some of these alternatives therefore to build on previous work completed this study will not consider further any alternatives that have already been ruled out.	
9. Any Other Business	
<ul style="list-style-type: none">• MOE is interested in the project however they were unable to attend the TSC meeting.• Grand River Conservation Authority was invited to participate however no response was received by the Region.• The TSC member list can be found on the TSC file transfer site and attached to these meeting minutes.	Info
10. Next Steps and Timing	
<ul style="list-style-type: none">• M. Grenier requested a site visit of the Prospect Park facility with operations staff.• The following is a list of tentative completion dates:<ul style="list-style-type: none">– Public Information Centre #1 to be conducted end of November 2012.– Conceptual Design Workshop to be held beginning of February 2013.– Draft Conceptual Design report to be completed mid-April 2013.– Final Impact Assessment Report to be completed February 2013.– Draft ESR to be completed May 2013, followed by MOE Review period of 45 days. A public review period of 30 days will be conducted after the ESR is finalized	Info

Item	Action
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11. Next Meeting

- TSC Meeting is scheduled for the end of December. Due to Christmas holidays the meeting date will be changed to sometime in January 2012. Info

Any errors, omissions, or discrepancies should be reported to Kasia Piskorz.

Excerpt from Section 8 (Volume 1) Halton Region Sustainable Water and Wastewater Master Plan, 2011 (pages 80, 81, ES-12, ES-13)

8.2.4 Acton Water System

There is a fair amount of growth expected in Acton which will be serviced by expansions to the existing system. The projected demands for this service area are presented in Table 26.

Table 26 Water Demand Projections in the Acton Service Area

Max Day Water Demand Requirements (MLD)					
Service Area	2011	2016	2021	2026	2031
Acton	5.48	5.66	6.26	7.67	8.34

9.2 Detailed Servicing Requirements

The key servicing components for each service area is summarized below.

Acton Water Servicing

- Maintain the existing and future service areas on groundwater.
- Increase groundwater capacity at the Fourth Line and Prospect Park Well Fields as well as provide additional new groundwater capacity.
- Consider Artificial Recharge to Black Creek / wetlands as support to the overall strategy.

Components of the servicing strategy for the Acton lake-based service area include:

- Increased water taking at Prospect Park and Fourth Line Well Fields.
- Expansion of Prospect Park WPP.
- Third Line Reservoir to be expanded.
- New north Acton Well Supply.
- Local infrastructure to be upgraded through intensification program to meet demand projections caused by intensification.



**Halton Region
Prospect Park Municipal Class EA**

Technical Steering Committee Membership List

#	Agency/Organization	Name	Title	Phone	Email	Meeting #1 Invitation Response	Attendance - Meeting #1 October 24, 2012
1	XCG Consultants Ltd.	Michele Grenier	Senior Project Manager	905-829-8880 x249	micheleg@xcg.com	Confirmed	Attended
2	XCG Consultants Ltd.	Kasia Piskorz	Project Engineer	905-829-8880 x247	kasiap@xcg.com	Confirmed	Attended
3	XCG Consultants Ltd.	Mike Schriver	Project Engineer	905-829-8880 x229	michaels@xcg.com	Confirmed	Attended
4	XCG Consultants Ltd.	George Zukovs	Senior Consultant	905-829-8880	georgez@xcg.com	Confirmed	Attended
5	D.C. Damman & Associates	Dianne Damman	Principal	519-745-9227	ddamman@kw.igs.net	Confirmed	Attended
6	ARL Groundwater Resources Ltd.	Tony Lotimer	Senior Hydrogeologist	519-632-9887	alotimer@rogers.com	Confirmed	Attended
7	Associated Engineering (Ont.) Ltd.	Elia Edwards	Manager, Water	416-622-9502 x264	edwardse@ae.ca	Confirmed	Attended
8	Halton Region	Michelle Gillespie	Water Design and Construction, Project Manager	905-825-6000 x3309	Michelle.Gillespie@halton.ca	Confirmed	Attended
9	Halton Region	Tom Renic	Senior Hydrogeologist	905-825-6000 x7134	Tom.Renic@halton.ca	Confirmed	Attended
10	Halton Region	Jon Clark	Water Resource Specialist	905-825-6000 x7488	Jon.Clark@halton.ca	Confirmed	Attended
11	Halton Region	David Simpson	Manager, Water Planning Services	905-825-6000 x7601	David.Simpson@halton.ca	Tentative	Attended
12	Halton Region	Peter Hayes	Water Services Supervisor	905-825-6000 x3250	Peter.Hayes@halton.ca	Unable to attend but interested in study	Absent
13	Halton Region	Ron Kirkwood	Water Treatment Subforeperson	905-825-6000 x3251	Ron.Kirkwood@halton.ca	Unable to attend but interested in study	Absent
14	Halton Region	Bill Mundy	Water Treatment Optimization Specialist	905-825-6000 x7648	Bill.Mundy@halton.ca	Confirmed	Attended
15	Halton Region	Peter Nguyen	Water Treatment Operator	905-825-6000 x3254	Peter.Nguyen@halton.ca	Unable to attend but interested in study	Absent
16	Town of Halton Hills	Mr. John Linhardt	Director of Planning, Development and Sustainability	905-873-2601 x2294	JohnL@haltonhills.ca	No response	N/A
17	Town of Halton Hills	Mr. Terry Alyman	Director of Recreation and Parks	905-873-2601 x2265	TerryA@haltonhills.ca	No response	N/A
18	Town of Halton Hills	Mr. Steve Grace	Manager of Development Engineering, Infrastructure Services	905-873-2601 x2315	SteveG@haltonhill.ca	Confirmed	Attended
19	Town of Halton Hills	Mr. John Kwast	Manager of Design & Construction, Infrastructure Services	905-873-2601 x2310	JohnK@haltonhills.ca	Confirmed	Attended
20	Town of Halton Hills	Mr. Chris Mills	Director of Infrastructure/Town Engineering	905-873-2601 x2301	ChrisM@haltonhills.ca	Not attending - forwarded invitation to Steve Grace	N/A
21	City of Guelph	Mr. Dave Belanger	Water Supply Program Manager	519-837-5627 x251	Dave.Belanger@guelph.ca	Confirmed	Attended
22	Ministry of the Environment, Central Region	Mr. Daniel Delaquis	Environmental Resource Planner and EA Coordinator, Technical Support Section	416-326-4839	Dan.Delaquis@ontario.ca	Unable to attend but interested in study	Absent
23	Ministry of the Environment, Central Region	Mr. Ross Hodgins	Hydrogeologist, Water Resources Unit	416-326-3708	Ross.Hodgins@ontario.ca	Unable to attend but interested in study	Absent
24	Ministry of Natural Resources	Mr. John Pisapio	Biologist, Aurora District Office	905-713-7387	John.Pisapio@ontario.ca	No response	N/A
25	Grand River Conservation Authority	Ms. Beth Brown	Supervisor of Resource Planning	519-621-2763 x2229	bbrown@grandriver.ca	Not attending - forwarded invitation to Drew Cherry	N/A
26	Grand River Conservation Authority	Mr. Drew Cherry	Resource Planner	519-621-2763 x2237	dcherry@grandriver.ca	Not attending - Prospect Park site is outside watershed boundary. Forwarded invitation to Source Protection staff who may have interest.	N/A
27	Credit Valley Conservation	Ms. Jennifer Dougherty	Water Quality Engineer	905-670-1615	jdougherty@creditvalleyca.ca	Unable to attend - on maternity leave	N/A
28	Credit Valley Conservation	Mr. Liam Marray	Manager - Planning Ecology	905-670-1615	lmarray@creditvalleyca.ca	Unable to attend but interested in study	Absent
29	Credit Valley Conservation	Mr. Daniel Banks	Manager - Hydrogeology	905-670-1615	dbanks@creditvalleyca.ca	Confirmed	Attended

STEERING COMMITTEE MEETING #2

DECEMBER 5, 2013

- ***AGENDA***
- ***PRESENTATION MATERIAL***
- ***MEETING NOTES***



**HALTON REGION
PROSPECT PARK WELL FIELD CLASS EA
TECHNICAL STEERING COMMITTEE
WORKSHOP NO. 2**

**Halton Region
Thursday, December 5, 2013
1:00 PM – 4:00 PM
Burloak Water Purification Plant
3380 Rebecca St., Oakville, ON**

AGENDA

- 1) Welcome and Introductions
- 2) Review Project Background
- 3) Scope and Process for the Schedule C Class EA
- 4) Review of Key Findings of Impact Assessment Report
- 5) Provide Overview of Draft Environmental Study Report
- 6) Next Steps and Timing

Halton Region Prospect Park Class EA

Workshop No. 2



Workshop Agenda

- Introductions
- Review Project Background
- Scope and Process for the Schedule C Class EA
- Review Key Findings of Impact Assessment Report
- Overview of Draft Environmental Study Report
- Next Steps and Timing



Purpose of Workshop

- Provide update on project progress
- Discuss Key Issues and Concerns
- Build consensus on Preferred Concept



Background

- Prospect Park Well Field consists of two overburden groundwater wells
 - Well 1 drilled in 1978
 - Well 2 drilled in 2002
- Prospect Park supplies up to 40% of Acton's water
- Water Purification Plant (WPP) brought into service in 1991 to treat for aesthetic parameters - primarily manganese and iron



Prospect Park Wellfield



Objectives of Class EA

- Expansion of the Prospect Park Well Field and WPP identified as one part of the Preferred Solution for servicing in Acton:
 - Review previous studies and programs to prepare Impact Assessment Report
 - Complete Schedule C Class Environmental Assessment
 - Satisfy all requirements for the submission of an application for a Permit to Take Water (PTTW)



Scope of the Class EA



Acton Servicing Strategy

- Components included in the *Sustainable Halton Water and Wastewater Master Plan*:
 - Increased water taking at Prospect Park and Fourth Line Well Fields
 - Third Line Reservoir Expansion
 - New North Acton Well Supply

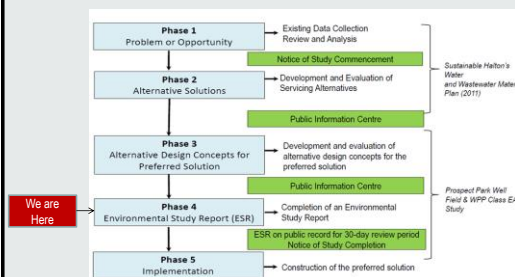


Opportunity Statement

- To identify the most cost-effective, environmentally sound and sustainable approach to increase water taking at Prospect Park Well Field to a potential 3,500 m³/d, as outlined in the *Sustainable Halton Water and Wastewater Master Plan, 2011*, in order to provide long term water servicing for future growth in the Town of Acton to 2031.



Class EA Study Process



Technical Program

- Consultation/Workshop with the Region's Engineering and Operations staff
- TM No. 1 – Existing Conditions and Future Needs
- TM No. 2 – Alternative Design Concepts
- Impact Assessment Report
- Environmental Study Report



Public Consultation Program

- Notice of Commencement
- Notice of Public Information Centre (PIC)
- PIC – March 20, 2013
- Notice of Completion
- ESR Public Review and Comment Period



Impact Assessment Report (XCG, ARL 2013)



Background

- Current Permitted Water Takings:
 - 1,137 m³/d from October 1 to April 30
 - 2,273 m³/d from May 1 to September 30
- Proposal is to have one maximum rate - 3,500 m³/d
 - Reduce the operational problems associated with two-tiered PTTW
 - Provide redundancy in the system
 - Service growth



Background Information & Reports

- Prospect Park Well Field Groundwater Supply Study - Golder (2012)
- Prospect Park Well Field Impact Assessment - Dillon (2010)
- Prospect Park Well Field Impact Assessment - Dillon (2007)
- Hydraulic Conductivity of Fairy Lake Sediments - Aecom (2009)
- Halton Hills Tier 3 Water Budget & Risk Assessment – Conceptual Model Report – Aecom & AquaResource (2012)

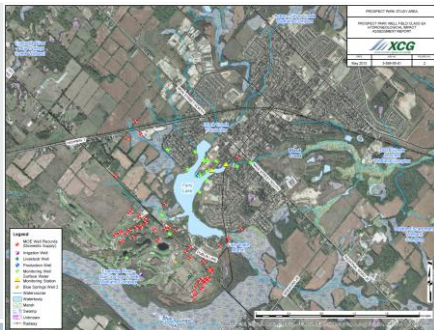


Background Information & Reports

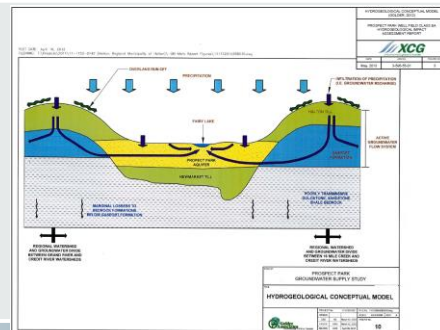
- Prospect Park Well 1 Reconstruction and Pump Installation - Lotowater (2011)
- Prospect Park Well No.2 Construction and Testing - IWS (2003)
- Proposed Blue Springs Development Hydrogeologic Investigation Program, IWS (July 1998)
- Blue Springs Golf Club, Town of Halton Hills, IWS (February 1997)



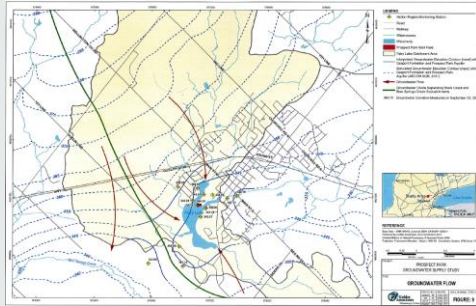
Prospect Park Study Area



Hydrogeological Conceptual Model



Groundwater Flow



XCG

Wellfield Impact Assessment – Dillon (2007)

- Environmental baseline study (surface water, creeks, biological)
- 30-day pumping test (flow rate of 2,924 m³/d) and 15-day pumping test (flow rate of 4,182 m³/d)
- Equilibrium (steady state) conditions reportedly reached by the end of the 30-day pumping test; close to equilibrium at end of 15-day test
- No measurable effects on Fairy Lake water levels and adjacent wetlands, or on baseflow in Black Creek were observed
- Monitoring data showed evidence of an ideal aquifer response to pumping; no apparent evidence of leakage

XCG

Wellfield Impact Assessment – Dillon (2007)

- Pumping at rates of 3,000 m³/d (average) and 4,546 m³/d (maximum day) was sustainable in the long-term without causing measurable impacts on groundwater & surface water systems, or aquatic habitats at Fairy Lake, Black Creek and adjacent wetlands

XCG

Well Field Impact Assessment – Dillon (2010)

- Further evaluation of groundwater level data
- Installation of new monitoring wells
- Extended pumping test – Dec 2009 to Mar 2010 (77 days): flow rate of 3,045 m³/day
- Analysis showed no significant boundary conditions; confined aquifer response (no evidence of leakage; no measurable effect on surface water features)
- Similar conclusions as the 2007 study: well field can sustain a flow rate of 3,000 m³/day without measurable impacts to surface water features, aquatic habitat, wetlands

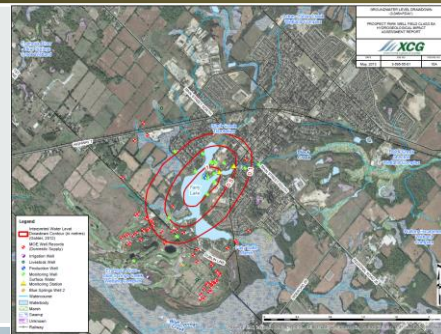
XCG

PPGSS – Golder, 2012

- Study Objective: Assess potential effects of increasing production to 3,400 m³/d
 - Analyzed data from two major pumping tests: (a) 77 – day winter test at 3,045 m³/day and (b) 111 day summer-fall test at 4,400 m³/day
 - Drawdown in aquifer reached steady-state during summer-fall test
 - Approximately 73 % of the production was provided by horizontal groundwater flow in the aquifer and 27 % is from vertical leakage within local surface catchment areas
 - Zones of influence for both tests were similar (see Figures)

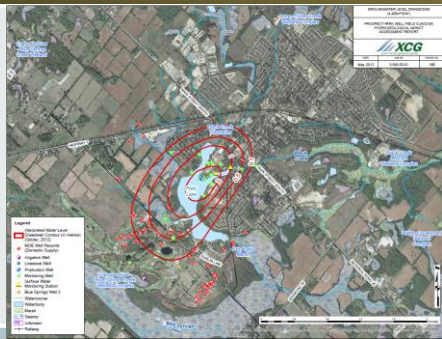
XCG

Zone of Influence (a)



XCG

Zone of Influence (b)



PPGSS – Golder, 2012 (con't)

- Increased pumping rate from Prospect Park aquifer should not interfere with local private supply wells
- Seepage losses due to the increased pumping rate should have no measurable effect on local stream flows or on water temperature in local surface water features
- Calculated that increased pumping would draw down summer water levels in Fairy Lake an additional 5 cm - a low risk to aquatic habitat and fish in the lake
- No impacts to seasonal or permanent bird and mammal habitats; no impacts to surface water features used by amphibians

Fairy Lake Water Quality Study – AECOM

- Fairy Lake is sustained mostly by surface water inflows, with groundwater inflow accounting for only 5% of the water budget during non-drought conditions
- Water quality in Fairy Lake is a function of contributions from multiple sources including:
 - Inflow from upstream sources (Black Creek, south and west inlets)
 - Inflow from agricultural sources and storm sewers
 - Internal nutrient dynamics
 - Septic systems
 - Fecal matter from waterfowl and runoff from surrounding areas
 - Local wetland setting

Hydrogeological Investigation & Environmental Site Assessment (AMEC, 2009)

- To investigate whether shallow fill material near the Prospect Park pump house poses a threat to water quality in the aquifer at current or increased pumping rates
 - 17 boreholes, 11 monitoring wells
 - Results indicated soil and groundwater at the site exceeded MOE Table 1 Standards (Background) for some extractable organics and inorganic parameters. No exceedance of Ontario Drinking Water Quality Standards at monitoring wells within the predicted zone of influence were reported
 - Results appeared to show little or no evidence that fill posed a significant threat to water quality from the production wells.

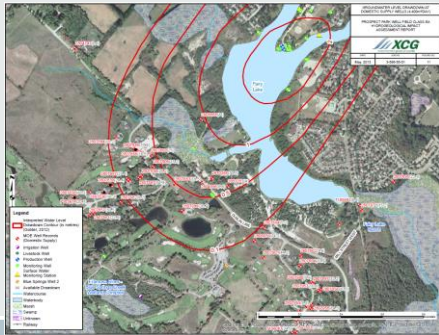
Hydrogeological Impact Assessment (XCG, ARL 2013) - Conclusions

- Existing work provides an acceptable technical basis for the hydrogeological impact assessment
- The well field can sustain a regular pumping rate of 3,500 m³/day

Hydrogeological Impact Assessment (XCG, ARL 2013) - Conclusions

- Removing the two-tier pumping constraint and adopting a single maximum continuous Q of 3,500 m³/day for the well field should have no adverse effect on private wells

Groundwater Level Drawdown at Domestic Supply Wells (4,400 m³/d)



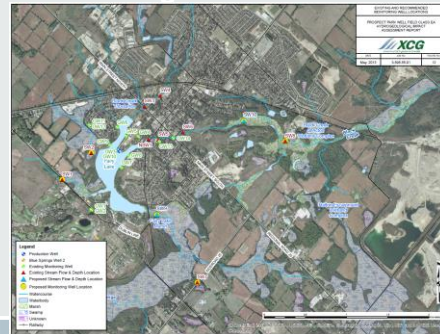
Hydrogeological Impact Assessment (XCG, ARL 2013) - Conclusions

- Measurable effects of the proposed changes in pumping rate should be limited to:
 - <1 m decline in groundwater levels in the aquifer beneath the uppermost part of Black Creek catchment downstream of lake
 - <0.5 m decline in groundwater levels in the aquifer at the edge of the Blue Springs catchment
 - Neither of these declines should result in a measurable effect on surface water levels in these areas

Hydrogeological Impact Assessment (XCG, ARL 2013) - Conclusions

- The predicted effects of the increased pumping rate on the water level in Fairy Lake (5 – 6 cm water level decline – Golder 2012) is small in relation to existing seasonal variations in lake level
- No adverse effects expected from this impact

Existing and Recommended Monitoring Well Locations



Environmental Study Report

ESR – Contents

- Existing Conditions
- Impact Assessment Report
- Alternative Design Concepts
- Environmental Effects and Mitigating Measures
- Public, Agency, Stakeholder, and Aboriginal Consultation

TM No. 1 – Existing Conditions

- Existing Conditions and Future Needs
 - High level review of existing WPP capacity
 - Review of recent water quality data (2007-2013)
- Findings:
 - Preliminary identification of performance/capacity limiting factors
 - Recommendations for addition studies/review

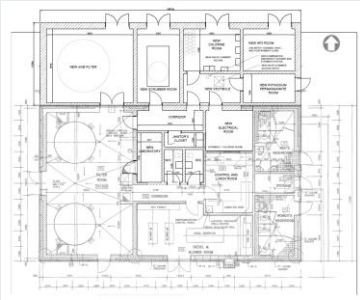


TM No. 2 – Design Concepts

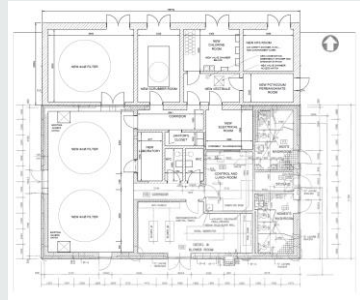
- Identify and Evaluate Alternative Design Concepts for WPP Expansion
- Four (4) concepts
 - Two building layouts (A and B)
 - Additional filtration capacity
 - New scrubber room
 - New chemical storage areas
 - New electrical room



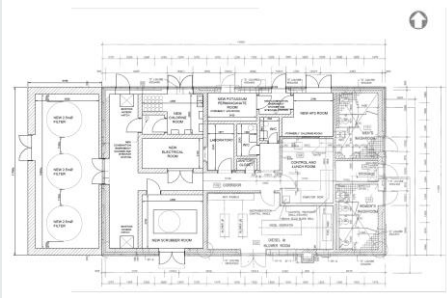
Design Concept 1



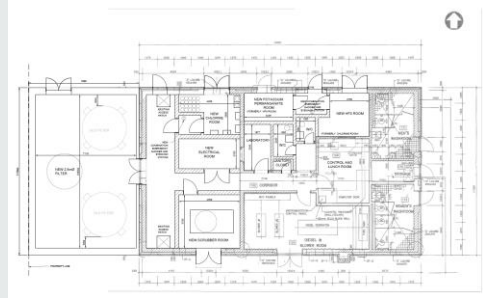
Design Concept 2



Design Concept 3



Design Concept 4



Evaluation Criteria

Group	Criteria
Natural Environment	Effects on surface water and groundwater Displacement of vegetation
Technical Environment	Constructability Ease of operation Performance reliability Compatibility with existing infrastructure Ability to consistently meet Region's treated water quality criteria
Social/Cultural/Community Environments	Disruption of adjacent residential, community and recreational features (noise, dust, traffic)
Economic Environment	Disruption to park visitors Capital costs Annual operating costs



Evaluation of Alternatives

- A score was assigned to each alternative for each evaluation criteria:

<input type="radio"/>	Meets objectives/least negative impact/lowest cost
<input checked="" type="radio"/>	Meets most aspects of objective/moderate impact
<input type="radio"/>	Meets some aspects of objective/potential for negative impact
<input type="radio"/>	Does not meet objectives/negative impact/highest cost

- Each group was considered to have equal weight



Results – Concept 1

Concept 1 One Day System Biosystem Concept 1	Natural Environment	Technical Environment	Social/Cultural/Community Environments	Economic Environment	Impact Rank
	Criteria: Evaluation <ul style="list-style-type: none"> Effects on surface water and groundwater Displacement of vegetation Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Constructability Ease of operation Performance reliability Compatibility with existing infrastructure Ability to consistently meet Region's treated water quality criteria 	Criteria: Evaluation <ul style="list-style-type: none"> Disruption of adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Capital costs Annual operating costs Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) 	Impact Rank 1
	Group Average Score: 1	Group Average Score: 1	Group Average Score: 1	Group Average Score: 1	



Results – Concept 2

Concept 2 Two Day System Biosystem Concept 2	Natural Environment	Technical Environment	Social/Cultural/Community Environments	Economic Environment	Impact Rank
	Criteria: Evaluation <ul style="list-style-type: none"> Effects on surface water and groundwater Displacement of vegetation Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Constructability Ease of operation Performance reliability Compatibility with existing infrastructure Ability to consistently meet Region's treated water quality criteria 	Criteria: Evaluation <ul style="list-style-type: none"> Disruption of adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Capital costs Annual operating costs Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) 	Impact Rank 2
	Group Average Score: 2	Group Average Score: 2	Group Average Score: 2	Group Average Score: 2	



Results – Concept 3

Concept 3 One Day System Biosystem Concept 3	Natural Environment	Technical Environment	Social/Cultural/Community Environments	Economic Environment	Impact Rank
	Criteria: Evaluation <ul style="list-style-type: none"> Effects on surface water and groundwater Displacement of vegetation Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Constructability Ease of operation Performance reliability Compatibility with existing infrastructure Ability to consistently meet Region's treated water quality criteria 	Criteria: Evaluation <ul style="list-style-type: none"> Disruption of adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Capital costs Annual operating costs Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) 	Impact Rank 3
	Group Average Score: 3	Group Average Score: 3	Group Average Score: 3	Group Average Score: 3	



Results – Concept 4

Concept 4 One Day System Biosystem Concept 4	Natural Environment	Technical Environment	Social/Cultural/Community Environments	Economic Environment	Impact Rank
	Criteria: Evaluation <ul style="list-style-type: none"> Effects on surface water and groundwater Displacement of vegetation Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Constructability Ease of operation Performance reliability Compatibility with existing infrastructure Ability to consistently meet Region's treated water quality criteria 	Criteria: Evaluation <ul style="list-style-type: none"> Disruption of adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) Disruption to park visitors 	Criteria: Evaluation <ul style="list-style-type: none"> Capital costs Annual operating costs Disruption to park visitors Disruption to adjacent residential, community and recreational features (noise, dust, traffic) 	Impact Rank 4
	Group Average Score: 4	Group Average Score: 4	Group Average Score: 4	Group Average Score: 4	



Preferred Design Concept

- Design Concept 3 – Three New Taller Filters (Building Layout B)
 - Construction of three new filters and decommissioning of the existing filters
 - Expansion of the west side of the building using the existing blow-out wall
 - Other modifications include:
 - new scrubber room, a new chlorine room, a new electrical room, a retrofitted potassium permanganate room, a new laboratory, and retrofitted fluoride room



Potential Impacts and Mitigation

- Summary of Potential Impacts
 - Land Use
 - Resolve title issues
 - Social Environment
 - Ensure park access; limit hours of construction
 - Cultural Environment
 - Consultation with Town during detailed design phase to properly stage construction
 - Natural Environment
 - Sediment and erosion control, tree protection, additional measures to prevent impacts to aquatic habitats



Moving Forward & Key Issues



Next Steps

- Finalize Impact Assessment Report
- Submit ESR for MOE Review
- Finalize and Post ESR for Public Comment
- Complete Conceptual Design



Key Issues

- Facilitated Discussion
- “Parking Lot” Items



Thank You

Michelle Gillespie
Project Manager
Halton Region
Michelle.gillespie@halton.ca
905-825-6000 x 3309

Michele Grenier
Project Manager
XCG Consultants Ltd.
Michele.Grenier@xcg.com
905-829-8880 x 249



XCG File No.:3-595-55-01

Re: Prospect Park Class EA - Regional Municipality of Halton
Technical Steering Committee Meeting No. 2

Meeting Date: Thursday, December 5, 2013

Location: Burloak Water Purification Plant
3380 Rebecca St., Oakville, ON

Attendees: Michelle Gillespie (MG) - Halton Region (Region)
Tom Renic (TR) - Region
Jon Clark (JC) - Region
Bill Mundy (BM) - Region
David Lockwood (DL) - Region
Steve Grace (SG) - Town of Halton Hills (Halton Hills)
Kevin Okimi (KO) - Halton Hills
Daniel Banks (DB) - Credit Valley Conservation Authority
Dianne Damman (DD) - D.C. Damman & Associates
Tony Lotimer (TL) – ARL Groundwater
Elia Edwards (EE) – Associated Engineering (AE)
Michele Grenier (MDG) - XCG Consultants Ltd. (XCG)
Carla Fernandes (CF) - XCG

Regrets: David Simpson - Region
Peter Hayes - Region
John Kwast - Halton Hills
Warren Harris - Halton Hills
David Belanger - City of Guelph
George Zukovs - XCG
Michael Schriver - XCG
Daniel Delaquis - Ministry of the Environment (MOE)
Ross Hodgins - MOE
John Pisapio - MOE
Liam Marray - Credit Valley Conservation Authority
Kerry Mulchansingh - Credit Valley Conservation Authority

Notes By: Carla Fernandes, XCG

Item	Action
1. Introduction	
<ul style="list-style-type: none">The attendees introduced themselves and their respective roles.	Info
<ul style="list-style-type: none">Purpose: To provide an update on project progress, discuss key issues, and build a consensus on the preferred design concept.	
2. Project Background	
<ul style="list-style-type: none">An overview of the following was provided:	Info
<ul style="list-style-type: none"><ul style="list-style-type: none">Applicable components of the Sustainable Halton Water and Wastewater Master Plan (MP).Components of the Prospect Park WPP and Wellfield.	
3. Scope of the Class EA	
<ul style="list-style-type: none">The Class EA study process was summarized and it was identified that the Prospect Park Class EA is at Phase 4 - Environmental Study Report (ESR).	Info
<ul style="list-style-type: none">The public consultation activities were summarized.	Info
Impact Assessment Report	
<ul style="list-style-type: none">An overview of the findings of several background reports of previous hydrogeological work at the project site was presented.	Info
<ul style="list-style-type: none">It was noted that seasonal variations in Fairy Lake are greater than the 5cm level changes due to increased pumping.	Info
<ul style="list-style-type: none">Long pumping tests (77 and 111 days) identified vertical leakage contributions and that there are seasonal impacts on these contributions - less during winter periods due to a higher groundwater table and more during summer periods.	Info
<ul style="list-style-type: none">CVC inquired about the ability to control the outflow structure. KO commented that Halton Hills does not actively control the outflow structure, however it is thought to be possible. A potential strategy to manage water level changes is to lower the dam level in the spring and raise the dam level in the fall.	Info
Environmental Study Report	
<ul style="list-style-type: none">The various design concepts and evaluation strategy were reviewed.	Info
<ul style="list-style-type: none">No questions or concerns with regards to the preferred design concept were brought forward.	Info

Item	Action
<ul style="list-style-type: none">KO inquired about any land transfer expectations/requirements for this study. It was decided that staff from the Town of Halton Hills and Halton Region would hold this discussion until a later date.	Info
Next Steps	
<ul style="list-style-type: none">XCG will address comments from the CVC with regards to the Impact Assessment Report.	XCG
<ul style="list-style-type: none">The target submission period for the draft ESR to the Ministry of Environment (MOE) for initial review is January 2014. Following receipt of comments from the MOE, the ESR will be finalized and made available for the 30-day public review period.	Info
Other	
<ul style="list-style-type: none">A provision for a new walkway/access along the south side of the baseball field to accommodate limited/restricted access closer to and around the WPP.	Info
<ul style="list-style-type: none">The construction period for the new 3 filter build-out is estimated to be nine months.	Info
<ul style="list-style-type: none">Displacement of the Halton Hills owned storage shed that is within the study area:<ul style="list-style-type: none">This is mentioned in the draft ESRA footprint for the new Town storage facility will be presented on the project drawings moving forward.	Info
<ul style="list-style-type: none">Any additional study information can be provided upon request.	Info

Any errors, omissions, or discrepancies should be reported to Carla Fernandes.