

# NOTICE OF STUDY COMMENCEMENT CLASS ENVIRONMENTAL ASSESSMENT STUDY

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) to Highway 407, Town of Milton PR-2667

## Study

Halton Region is initiating a Class Environmental Assessment (Class EA) study to consider a wide range of options for transportation corridor improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407, in the Town of Milton. In order to best address capacity deficiencies along Britannia Road, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross-sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

#### **Process**

This notice signals the commencement of the Class EA, a study which will define the problem, identify and evaluate alternative solutions, and determine a preferred solution in consultation with the Town of Milton, regulatory agencies, and the public. The study is being conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007), which is approved under the Ontario Environmental Assessment Act.

Public and review agency consultation is a key element of the Class EA process and input will be sought from parties throughout this study. At this time, it is anticipated that two (2) Public Information Centres (PICs) will be conducted. It is anticipated that the first public meeting will be held in early 2011. Details regarding the forthcoming PICs will be advertised as the study progresses. Upon completion of the study, a comprehensive Environmental Study Report will be prepared and placed on the public record for a 30-day review period. The document will detail the planning process and the preferred alternative including how the public and agency input was received. A notice of completion will be issued at that stage.

#### Comments

Please contact either of the following project team members if you wish to be added to the project mailing list, if you have any questions or comments, or wish to obtain more information about the project. Information requests or questions may be directed to:

Mr. Andrew Head, C.E.T. **Project Manager Transportation Services** Halton Region 1151 Bronte Road Oakville, Ontario L6M 3L1 Telephone: 905-825-6000 ext. 7475

Fax: 905-847-2192

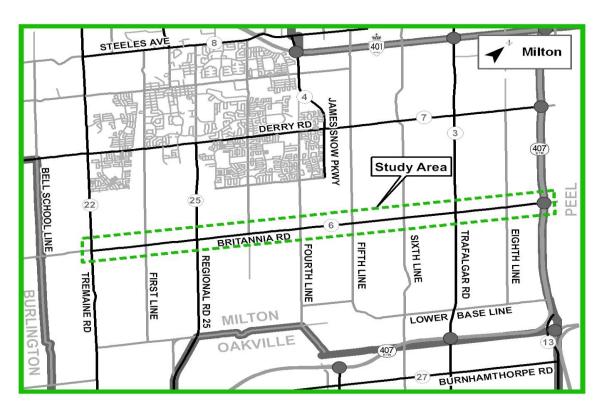
Email: andrew.head@halton.ca

Mr. Manoj Dilwaria B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director **Delcan Corporation** 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8 Telephone: 905-631-0500 ext. 105

Fax: 905-631-0570

Email: m.dilwaria@delcan.com

The map below shows the approximate limits of the study area.





# MHalton The Regional Municipality of Halton www.halton.ca

# NOTICE OF STUDY COMMENCEMENT CLASS ENVIRONMENTAL ASSESSMENT STUDY

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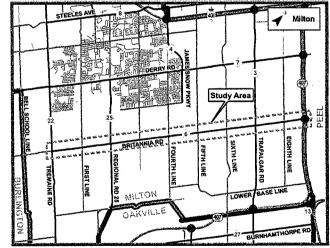
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Mr. Manoj Dilwaria B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director **Delcan Corporation** 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8 Telephone: 905-631-0500 ext 105 Fax: 905-631-0570 Email: m.dilwaria@delcan.com

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livounced information about community health or social services, outeon't know who id tell Dial

- an easy-to-remember non-emergency telephone number
- free, confidential service in more than 150 languages
- whenever you need it 24 hours a day, 365 days a year
- also available online at www.211halton.ca

COMMUNITY CONNECTION

# West Nile virus surveillance continues

Halton Region's comprehensive West Nile virus (WNV) surveillance program continues through to the beginning of October since the risk of exposure continues until that time.

Remember to continue to cover up from dusk to dawn and to use a mosquito repellent containing DEET. Reduce mosquito breeding sites around your home and business by getting rid of standing water. For more information on how to protect yourself and your family from mosquito bites, visit our website at www.halton.ca/wnv.



**Gary Carr** Regional Chair

Please let us know as soon as possible if you will have an accessibility or accommodation need at a Halton Region hosted event or meeting. 1151 Bronte Road, Oakville, Ontario L6M 3L1 • Dial 311 or 905-825-6000 • Toll Free 1-866-442-5866 • TTY 905-827-9833 • www.halton.ca

MILTON CHAMPION
SBPT 23

www.delcan.com



September 23, 2010

Ms. Lorna Wilson President Halton Region Federation of Agriculture 6351 First Line, RR #1 Milton, Ontario L9T 2X5 Delcan Ref. No: TN1390 Region Ref No: PR-2667

Re: Notice of Study Commencement and Development of Stakeholder Advisory Group Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region Class Environmental Assessment Study

Delcan, on behalf of the Halton Region, has initiated a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407 (see study area figure below). In order to best address capacity deficiencies along Britannia Road, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross-sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

This studv is beina conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007), which is approved under the Ontario Environmental Assessment Act. Public and review agency consultation is a key element of the Class EA process and input will be sought from parties throughout this study. At this time, it is anticipated that two (2) Public Information Centres (PICs) will



conducted. Details regarding the forthcoming PICs will be advertised as the study progresses.

The purpose of this letter is to introduce the study and to invite you to participate as a representative of your group in the Stakeholder Advisory Group (SAG) being formed for this study. Membership of the Stakeholder Advisory Group will be comprised of representatives from communities, businesses, special interest groups, geographically spread throughout the study area. If you are unable to participate, please nominate another individual from your group who will be able to act as its representative during the study.

SAG members will be expected to represent their group by actively participating and providing feedback to the Consultant Team throughout the study.

# Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

If you, or your group decide to participate as a member of the SAG, please review the attached "Stakeholder Advisory Group Information" and fill in and return the attached "Stakeholder Advisory Group Application Form" to the contact shown either by fax, mail or email by October 15, 2010. During the course of the study you will be invited to participate at three informal meetings with the Consultant Team; one initial meeting at the outset of the study and one meeting prior to each Public Information Centre. Invitations to attend these Stakeholder Advisory Group meetings will be mailed/emailed out to you prior to each meeting.

Should you decide not to participate in the SAG meetings, please complete the attached Fax Back Form and advise us of your interest in this study by October 15, 2010.

If you have any questions or require additional information, please feel free to contact me directly at (905) 631-0500 ext. 105 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. - Halton Region

Attached: Stakeholder Advisory Group Information Sheet

Stakeholder Advisory Group Application Form





# **Stakeholder Advisory Group Information**

# What is a Stakeholder Advisory Group and what are its member's responsibilities?

In order to facilitate the consultation with affected stakeholders within the study area, a Stakeholder Advisory Group is being formed. Membership of the Stakeholder Advisory Group will be comprised of representatives from communities, businesses, special interest groups, geographically spread throughout the study area.

The purpose of the Stakeholder Advisory Group is to:

- Provide advice and act as a source of input to the Consultant Team on ideas and concerns related to the study.
- Provide a forum for sharing of ideas and concerns with the Consultant Team, testing of solutions and alternatives and providing direction on the findings from the study from a community perspective.
- Provide a sense of broad community reactions and concerns, and how these might be addressed.
- Provide advice to the Consultant Team in the development of solutions to address the problem statement and the preferred solution for the Britannia Road corridor.
- Assist the Consultant Team in working toward consensus on the preferred solution for the Britannia Road corridor.
- Serve as a mechanism for receiving, understanding and evaluating public input.

In order to fulfill the Stakeholder Advisory Group's purpose, members are expected to:

- Prepare for and actively participate in the meetings
- Respect any issues of confidentiality arising in meetings or other proceedings of the Stakeholder Advisory Group
- Respect and listen to the views and contributions of others in the Stakeholder Advisory Group
- Discuss items of interest with their respective constituency (neighbours, group members, etc.) and advise of any feedback.

## How will I participate in the Stakeholder Advisory Group?

Participation in the Stakeholder Advisory Group is entirely voluntary and non-compensated. The Stakeholder Advisory Group will operate during the period from October 2010 until the Britannia Road Class Environmental Assessment Study is completed in early spring, 2012.

During the course of the study you will be invited to participate at three informal meetings with the Consultant Team; one initial meeting at the outset of the study and one meeting prior to each Public Information Centre. Invitations to attend these SAG meetings will be mailed/emailed out to you prior to each meeting.

#### **Additional Consultation Opportunities**

Parties who are not available to attend or cannot be accommodated on the Stakeholder Advisory Group are invited to follow the study and submit comments through the Region's website and attend the public forums that will be held during this process.





# **Stakeholder Advisory Group Application Form**

Fax Number:

905-631-0570

Re:	From Tremaine R	Regional Road 6) Transportation Corridor Improvements load (Regional Road 22) to Highway 407, Halton Region Intal Assessment Study
Please	fill in the following i	nformation and fax back before <u>October 15, 2010</u> .
G	roup/Association:	
Repr		
	Address:	
	Phone:	
	E-Mail:	
		interest concerning the study?

This Information is being collected to assist the Consultant Team. It will be used in accordance with the Freedom of Information and Protection of Privacy Act and the Access to Information Act. With the exception of personal information, all information will become part of the public record.



To:

Manoj Dilwaria



# Britannia Road (Regional Road 6) Transportation Corridor Improvements Class Environmental Assessment Stakeholders

TITLE Ms.	FIRST NAME Lorna	LAST NAME Wilson	JOB TITLE President	COMPANY Halton Region Federation of Agriculture
Ms. Ms.	Sandy Jacquelyn	Martin Garrard	Executive Director Executive Director	Milton Chamber of Commerce Downtown Milton BIA
Mr.	Kevin	Brackley	President	Milton Ratepayers Association
Mr.	Mike	Grimwood	President	Milton Rural Residents Association
Ms.	Maryse	Carrier		Conseil scolaire de district catholique Centre-Sud
Mr.	Mark	Gruehl	General Manager	Piper's Heath Golf Club
Mr.	Roy	Felix	Store Manager	Terra Greenhouses
Mr.	Roland	Willis		Willis Family Fruit Farm
Mr.	Steve	Corbet		The Omagh Church of Christ
Rev.	Shawn D.	Croll	Reverend	Omagh Presbyterian Church
Mr.	Michael	Telawski		Trinison Management Corp.





September 23, 2010

Delcan Ref. No: TN1390 Region Ref No: PR-2667

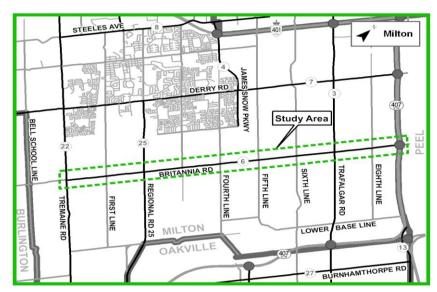
Ms. Louise Knox Regional Director Canadian Environmental Assessment Agency 55 St. Clair Avenue East, 9th Floor, Toronto, Ontario M4T 1M2

Re: Notice of Study Commencement and Development of Technical Agency Committee (TAC)

Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region Class Environmental Assessment Study

Delcan, on behalf of the Halton Region, has initiated a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407 (see study area figure below). In order to best address capacity deficiencies along Britannia Road, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross-sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

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conducted. Details regarding the forthcoming PICs will be advertised as the study progresses.

The purpose of this letter is to introduce the study, to invite your agency or group to participate in the Technical Agency Committee (TAC) if it is of interest to you, and to obtain any relevant background information from you as it relates to the study area. Information that would be of interest includes the following:

 Contact information and the identification of individuals that represent your agency or group that we should include as a potential participant and primary contact throughout the study process;

# Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

- Description of the existing conditions or sensitivities within the study area as they relate to your interests; and
- Specific issues or concerns that your agency or group may have.

Your comments are welcomed and we encourage you to provide us with your inputs. If you or your agency would like to be a member of the TAC, or if you simply have a question or comment on the study, please fill in and return the attached "Fax Back Form" to the contact shown either by fax, mail or email by October 15, 2010.

If you decide to become a member of the TAC, you will be invited to participate at three informal meetings during the course of the study with the Project Team; one initial meeting at the outset of the study and one meeting prior to each Public Information Centre. Invitations to attend these TAC meetings will be mailed/emailed out to TAC members in future.

Upon completion of the study, a comprehensive Environmental Study Report will be prepared and placed on the public record for a 30-day review period. The document will detail the planning process and the preferred alternative including how the public and agency input was received. A notice of completion will be issued at that stage.

If you have any questions or require additional information, please feel free to contact me directly at (905) 631-0500 ext. 105 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. – Halton Region

Attached: Fax Back Form





# **FAX BACK FORM**

Fax Number:

905-631-0570

Re:	Britannia Road (Regional Road 6) Transportation Corridor Improveme From Tremaine Road (Regional Road 22) to Highway 407, Halton Regi Class Environmental Assessment Study	
Plea	e fill in the following information and fax back before October 15, 2010.	
	Name:	
	Title:	
A	ency:	
A	dress:	
	hone:	
	Fax:	
	-Maii:	
Plea	e indicate the appropriate response.	
	My group/agency would like to volunteer to be a member of the Techni Committee (TAC) and will attend the TAC meetings.	cal Agency
	My group/agency would like to be kept informed of the project, but not be a me	ember of the
	Please remove me from the project mailing list.	
Com	nents:	

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To:

Manoj Dilwaria



	TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY	ADDRESS 1	ADDRESS 2	CITY	PROVINCE	POSTAL CODE
		Louise	Knox		Canadian Environmental Assessment Agency	55 St. Clair Avenue East, 9th Floor		Toronto	Ontario	M4T 1M2
	Ms.	Sheila	Allan		Environment Canada	867 Lakeshore Road	P.O. Box 5050	Burlington	Ontario	L7R 4A6
	۸r.	Rob	Dobos		Environment Canada - Environmental Assessment and Federal Programs			Burlington	Ontario	L7R 4A6
	۸r.	Steven	Woolfenden	Fish Habitat Biologist, Southern Ontario District - Burlington Office	Fisheries and Oceans Canada	3027 Harvester Road, Suite 304		Burlington	Ontario	L7R 4K3
- 1	Ms.	Karen	Ralph	Area Operations Chief for Ontario	Fisheries and Oceans Canada - OGLA Program Services	867 Lakeshore Road	Box 5050	Burlington	Ontario	L7R 4A6
- 1	۸r.	David	Cooper	Manager, Environmental & Land Use Policy	Ministry of Agriculture Food and Rural Affairs	1 Stone Road W	3rd Floor	Guelph	Ontario	N1G 4Y2
		Winston	Wong, MCIP		Ministry of Culture		4th Floor	Toronto	Ontario	M7A 2R9
- 1	۸r.	Vincent	Sferrazza	District Manager, Halton-Peel District Office	Ministry of the Environment		4145 North Service Road	Burlington	Ontario	L7L 6A3
		Alex	Phillips		Ministry of the Environment			North York	Ontario	M2M 4J1
		Sara	Paul		Ministry of the Environment, Attn: Michael Harrison		Floor 12A	Toronto	Ontario	M4V 1L5
		Bruce	Singbush	Manager	Central Municipal Services Office, Ministry of Municipal Affairs & Housing	777 Bay Street, 2nd Floor		Toronto	Ontario	M5G 2E5
		John	Pisapio		Ministry of Natural Resources	50 Bloomington Road West		Aurora	Ontario	L4G 3G8
		Bob	Edmondson		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Jennifer	Lawrence		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Mark	Frawley	Director	Niagara Escarpment Commission	232 Guelph Street		Georgetown,	Ontario	L7G 4B1
		John	MacKenzie		Asset Review, Ontario Realty Corporation	11th Floor, Ferguson Block, 77 Wellesley Street W.		Toronto	Ontario	M7A 1N3
		Vic	Gillman		Fisheries And Habitat Management - Ontario, Department of Fisheries and Oceans, Bayfield Institute		P.O. Box 5050	Burlington	Ontario	L7R 4A6
		Lou	Politano		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 2nd Floor		Toronto	Ontario	M3M 1J8
		Larry	Smith		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 6th Floor		Toronto	Ontario	M3M 1J8
		Brian	Ogden		Ministry of Transportation	1201 Wilson Avenue, Building 'B', 3rd Floor		Toronto	Ontario	M3M 1J8
		Jason	White		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 4th Floor		Toronto	Ontario	M3M 1J8
		Pat	Stone		Ontario Provincial Police	203 Steeles Avenue West		Milton	Ontario	L7T 1Y1
		Jeremy	Craigs	Environmental Officer	Transport Canada - Ontario Region		4th Floor	North York	Ontario	M2N 6A5
		Jennifer	Hughes		Transport Canada - Ontario Region			North York	Ontario	M2N 6A5 L4K 4B9
		John	McTaggert		C.N. Rail			Concord	Ontario	
		Dennis	Pasch		C.P. Rail (St. Lawrence & Hudson)	20 Studhomme Road		Hamilton	Ontario	L8N 4B6
		Gary	Crowell		Halton Region Police Services			Oakville	Ontario	L6J 5C7
	Detective Consta		Martin		Halton Region Police Service		Box 2700	Oakville	Ontario	L6M 3L1
		Nick	Buczynsky Kina		Halton Region - Emergency Management Halton Region - Ambulance Services	1151 Bronte Road 1151 Bronte Road		Oakville Oakville	Ontario Ontario	L6M 3L1
		Jim Alana	King Fulford	Director of Land Ambulance Services		1151 Bronte Road 1151 Bronte Road		Oakville	Ontario	L6M 3L1 L6M 3L1
		Alana Stephen	Fulford Baker		Halton E.E.A.C. (Ecological & Environmental Advisory Committee) H.A.A.C. (Halton Agricultural Advisory Committee)		RR #1	Acton	Ontario	L6M 3L1
		Nathan	Stewart			1151 Bronte Road		Oakville	Ontario	L/J 2L/
		June	Barnes	President	Halton Regional Cycling Advisory Committee Halton Region Federation of Agriculture		RR #1	Milton	Ontario	19T 2X5
		Linda	Tichell		Halton Region Federation of Agriculture Halton Region Museum	RR #3		Milton	Ontario	L9T 2X5
		Hassaan	Basit		Conservation Halton	2596 Britannia Rd W		Burlington	Ontario	L7P 0G3
		Susan	Lathan	Regional Clerk and Director of Council Services	Regional Clerks Office	1151 Bronte Road		Oakville	Ontario	L/F 003
		Craig	White	Director, Highway Operations	407 ETR Concession Co. Ltd.	6300 Steeles Avenue West		Milton	Ontario	L4H 1J1
		Paul			The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	19T 675
		Bill	Cripps Mann	Director, Engineering Services Director, Planning and Development Services	The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	L9T 6Z5
		Brian	Ellsworth	Fire Chief, Milton Fire Department	Town Fire Department	Fire Station #1	405 Steeles Avenue	Milton	Ontario	L9T 3G6
		Bev	McCarthy		Milton Community Services	150 Mary Street	400 Steeles Avenue	Milton	Ontario	L9T 6Z5
		Ann	Fisher		Heritage Milton	43 Brown Street		Milton	Ontario	L9T 5H2
		Troy	McHarg		Town of Milton's Clerks Office	150 Mary Street		Milton	Ontario	L9T 6Z5
		Tony	D'Alessandro		Milton Transit	150 Mary Street		Milton	Ontario	L9T 6Z5
		Domenico	Renzella	Administrator of Planning, Assessment and Transportation	Halton Catholic District School Board		P.O. Box 5308	Burlington	Ontario	L7R 4L3
		Sandra	Morgan		Halton Catholic District School Board			Burlington	Ontario	17R 4L3
		Elaine	Westerhof	Manager of Planning	Halton District School Board		P.O. Box 5005	Burlington	Ontario	L7R 3Z2
		Karen	Lacroix	Manager of Transportation	Halton District School Board	2050 Guelph Line		Burlington	Ontario	L7R 3Z2
		Lindsey	Ross		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
		Janice	Young		Bell Canada			Scarborough	Ontario	M1P 4W2
		Carol	Goossens		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
	Иs.	L	Cane	Planning Coordinator	COGECO	695 Lawrence Road		Hamilton	Ontario	L8K 6P1
		Brian	McCormick		Hydro One Networks Inc.	483 Bay Street	14th Floor	Toronto	Ontario	M5G 2P5
i	۸r.	Tony	lerullo	Manager	Hydro One Inc.		14th Floor	Toronto	Ontario	M5G 2P5
		Russ	Mcl ean		Enbridge Gas Distribution Inc.	500 Consumers Road		North York	Ontario	M2.I 1P8
	****	Paul	Whelan	Pipeline Technician	Trans Canada Pipelines	1020 Rymal Road East		Hamilton	Ontario	L8W 3N6
		Bob	Quick		Telus	82 Locust Street		Kitchener	Ontario	N2H 1W9
	۸r.	Bob	Wellington	District Engineer	Union Gas Ltd.	360 Strathearne Avenue N.	P.O. Box 10	Hamilton	Ontario	L8H 5L1
		Ann	Newman		Enbridge Pipelines Inc.		P.O. Box 128	Sarnia	Ontario	N7T 7H8
i	Иs.	Marion	Wright	OPE Co-ordinator - GTA West	Rogers Cable Communications Inc.	3573 Wolfedale Road		Mississauga	Ontario	L5C 3T6
		Satish	Kumar Korpal				Suite 310		Ontario	L4B 3P6
i	۸r.	Greg	Johnston	<del>.</del>	Allstream	50 Worcester Road		Etobicoke	Ontario	M9W 5X2
		George	Goulah		AT&T Canada	50 Worcester Road		Toronto	Ontario	M9W 5X2
	Ms.	Angela	Burley		Microcell	20 Bay Street	Suite 1601	Toronto	Ontario	M5J 2N8
- 1	۸r.	Frank	Lasowski	President & CEO	Milton Hydro Distribution Inc	8069 Lawson Rd		Milton	Ontario	L9T 5C4
	Chief	James	Marsden		Alderville First Nation	PO Box 46		Roseneath	Ontario	K0K 2X0
	۸r.	Alan	Dokis		Anishinabek Nation	P.O. Box 711		North Bay	Ontario	
	۸r.	Rolanda	Elijah	Director of Intergovernmental Affairs	Association of Iroquois & Allied Indians	387 Princess Avenue		London	Ontario	N6B 2A7
	۸r.	David	Donnelly	Gilbert's LLP Lawyers   Patent & Trademark Agents	Founding First Nation Circle	49 Wellington St. East, The Flatiron Building		Toronto	Ontario	M5E 1C9
		Laurie	Carr		Hiawatha First Nation	R.R. 2		Keene	Ontario	K0L 2G0
		William	K. Montour		Six Nations of the Grand River Territory	1953 Fourth Line, P.O.Box 5000		Ohsweken	Ontario	N0A 1H0
		Keith	Knott		Curve Lake First Nation	22 Winookeeda Road		Curve Lake	Ontario	K0L 1R0
	Grand Chief	Max	Gross Loil		Huronne-Wendat Nation	255 Place Chef-Michel Laveau		Wendake	Quebec	G0A 4V0
		Kris	Nahrgang		Kawartha-Nishnawbe First Nation of Burleigh Falls		General Delivery		Ontario	K0L 2H0
- 1		Leroy	Hill		Iroquois Confederacy	RR#2		Ohsweken	Ontario	N0A 1M0
		Bryan	LaForme		Mississaugas of the New Credit First Nation	2789 Mississauga Road, R.R.#6		Hagersville	Ontario	N0A 1H0
		Angie	Johnson		Mississaugas of Scugog Island	22521 Island Road		Port Perry	Ontario	L9L 1B6
		Tony	Belcourt	President	Metis Nation of Ontario	#3-500 Old St. Patrick St.		Ottawa	Ontario	K1N 9G4
- 1		Grant	Wedge		Ministry of the Attorney General - Aboriginal Legal Issues Office	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		Environment Unit			Indian and Northern Affairs Canada	25 St. Clair Avenue East, 8th Floor		Toronto	Ontario	M4T 1M2
		Pam	Wheaton		Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
-		Richard	Saunders	Director, Aboriginal Policy and Management Branch	Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		E.	Ria Tzimas	Councel, Ministry of the Attorney General	Ministry of Aboriginal Affairs	Policy and Relationships Branch 720 Bay Street, 4th		Toronto	Ontario	M5G 2K1





September 23, 2010

Delcan Ref. No: TN1390 Region Ref No: PR-2667

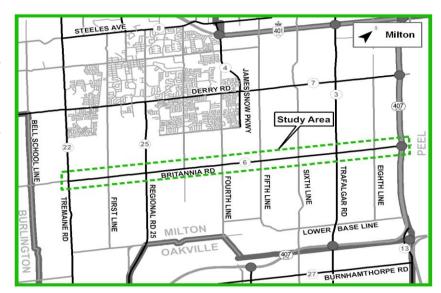
Ms. Louise Knox Regional Director Canadian Environmental Assessment Agency 55 St. Clair Avenue East, 9th Floor, Toronto, Ontario M4T 1M2

Re: Notice of Study Commencement and Development of Technical Agency Committee (TAC)

Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region Class Environmental Assessment Study

Delcan, on behalf of the Halton Region, has initiated a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407 (see study area figure below). In order to best address capacity deficiencies along Britannia Road, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross-sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

This studv is beina conducted in compliance with Schedule C of the Municipal Environmental Class Assessment (October 2000, amended 2007), which is approved under the Ontario Environmental Assessment Act. Public and review agency consultation is a key element of the Class EA process and input will be from sought parties throughout this study. At this time, it is anticipated that two (2) Public Information (PICs) will Centres



conducted. Details regarding the forthcoming PICs will be advertised as the study progresses.

The purpose of this letter is to introduce the study, to invite your agency or group to participate in the Technical Agency Committee (TAC) if it is of interest to you, and to obtain any relevant background information from you as it relates to the study area. Information that would be of interest includes the following:

 Contact information and the identification of individuals that represent your agency or group that we should include as a potential participant and primary contact throughout the study process;

# Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

- Description of the existing conditions or sensitivities within the study area as they relate to your interests; and
- Specific issues or concerns that your agency or group may have.

Your comments are welcomed and we encourage you to provide us with your inputs. If you or your agency would like to be a member of the TAC, or if you simply have a question or comment on the study, please fill in and return the attached "Fax Back Form" to the contact shown either by fax, mail or email by October 15, 2010.

If you decide to become a member of the TAC, you will be invited to participate at three informal meetings during the course of the study with the Project Team; one initial meeting at the outset of the study and one meeting prior to each Public Information Centre. Invitations to attend these TAC meetings will be mailed/emailed out to TAC members in future.

Upon completion of the study, a comprehensive Environmental Study Report will be prepared and placed on the public record for a 30-day review period. The document will detail the planning process and the preferred alternative including how the public and agency input was received. A notice of completion will be issued at that stage.

If you have any questions or require additional information, please feel free to contact me directly at (905) 631-0500 ext. 105 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. – Halton Region

Attached: Fax Back Form





# **FAX BACK FORM**

Fax Number:

905-631-0570

Re:	Britannia Road (Regional Road 6) Transportation Corridor Improveme From Tremaine Road (Regional Road 22) to Highway 407, Halton Regi Class Environmental Assessment Study	
Plea	e fill in the following information and fax back before October 15, 2010.	
	Name:	
	Title:	
A	ency:	
A	dress:	
	hone:	
	Fax:	
	-Maii:	
Plea	e indicate the appropriate response.	
	My group/agency would like to volunteer to be a member of the Techni Committee (TAC) and will attend the TAC meetings.	cal Agency
	My group/agency would like to be kept informed of the project, but not be a me	ember of the
	Please remove me from the project mailing list.	
Com	nents:	

This Information is being collected to assist the Consultant Team. It will be used in accordance with the Freedom of Information and Protection of Privacy Act and the Access to Information Act. With the exception of personal information, all information will become part of the public record.



To:

Manoj Dilwaria



	TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY	ADDRESS 1	ADDRESS 2	CITY	PROVINCE	POSTAL CODE
		Louise	Knox		Canadian Environmental Assessment Agency	55 St. Clair Avenue East, 9th Floor		Toronto	Ontario	M4T 1M2
	Ms.	Sheila	Allan		Environment Canada	867 Lakeshore Road	P.O. Box 5050	Burlington	Ontario	L7R 4A6
	۸r.	Rob	Dobos		Environment Canada - Environmental Assessment and Federal Programs			Burlington	Ontario	L7R 4A6
	۸r.	Steven	Woolfenden	Fish Habitat Biologist, Southern Ontario District - Burlington Office	Fisheries and Oceans Canada	3027 Harvester Road, Suite 304		Burlington	Ontario	L7R 4K3
- 1	Ms.	Karen	Ralph	Area Operations Chief for Ontario	Fisheries and Oceans Canada - OGLA Program Services	867 Lakeshore Road	Box 5050	Burlington	Ontario	L7R 4A6
- 1	۸r.	David	Cooper	Manager, Environmental & Land Use Policy	Ministry of Agriculture Food and Rural Affairs	1 Stone Road W	3rd Floor	Guelph	Ontario	N1G 4Y2
		Winston	Wong, MCIP		Ministry of Culture		4th Floor	Toronto	Ontario	M7A 2R9
- 1	۸r.	Vincent	Sferrazza	District Manager, Halton-Peel District Office	Ministry of the Environment		4145 North Service Road	Burlington	Ontario	L7L 6A3
		Alex	Phillips		Ministry of the Environment			North York	Ontario	M2M 4J1
		Sara	Paul		Ministry of the Environment, Attn: Michael Harrison		Floor 12A	Toronto	Ontario	M4V 1L5
		Bruce	Singbush	Manager	Central Municipal Services Office, Ministry of Municipal Affairs & Housing	777 Bay Street, 2nd Floor		Toronto	Ontario	M5G 2E5
		John	Pisapio		Ministry of Natural Resources	50 Bloomington Road West		Aurora	Ontario	L4G 3G8
		Bob	Edmondson		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Jennifer	Lawrence		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Mark	Frawley	Director	Niagara Escarpment Commission	232 Guelph Street		Georgetown,	Ontario	L7G 4B1
		John	MacKenzie		Asset Review, Ontario Realty Corporation	11th Floor, Ferguson Block, 77 Wellesley Street W.		Toronto	Ontario	M7A 1N3
		Vic	Gillman		Fisheries And Habitat Management - Ontario, Department of Fisheries and Oceans, Bayfield Institute		P.O. Box 5050	Burlington	Ontario	L7R 4A6
		Lou	Politano		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 2nd Floor		Toronto	Ontario	M3M 1J8
		Larry	Smith		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 6th Floor		Toronto	Ontario	M3M 1J8
		Brian	Ogden		Ministry of Transportation	1201 Wilson Avenue, Building 'B', 3rd Floor		Toronto	Ontario	M3M 1J8
		Jason	White		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 4th Floor		Toronto	Ontario	M3M 1J8
		Pat	Stone		Ontario Provincial Police	203 Steeles Avenue West		Milton	Ontario	L7T 1Y1
		Jeremy	Craigs	Environmental Officer	Transport Canada - Ontario Region		4th Floor	North York	Ontario	M2N 6A5
		Jennifer	Hughes		Transport Canada - Ontario Region			North York	Ontario	M2N 6A5 L4K 4B9
		John	McTaggert		C.N. Rail			Concord	Ontario	
		Dennis	Pasch		C.P. Rail (St. Lawrence & Hudson)	20 Studhomme Road		Hamilton	Ontario	L8N 4B6
		Gary	Crowell		Halton Region Police Services			Oakville	Ontario	L6J 5C7
	Detective Consta		Martin		Halton Region Police Service		Box 2700	Oakville	Ontario	L6M 3L1
		Nick	Buczynsky Kina		Halton Region - Emergency Management Halton Region - Ambulance Services	1151 Bronte Road 1151 Bronte Road		Oakville Oakville	Ontario Ontario	L6M 3L1
		Jim Alana	King Fulford	Director of Land Ambulance Services		1151 Bronte Road 1151 Bronte Road		Oakville	Ontario	L6M 3L1 L6M 3L1
		Alana Stephen	Fulford Baker		Halton E.E.A.C. (Ecological & Environmental Advisory Committee) H.A.A.C. (Halton Agricultural Advisory Committee)		RR #1	Acton	Ontario	L6M 3L1
		Nathan	Stewart			1151 Bronte Road		Oakville	Ontario	L/J 2L/
		June	Barnes	President	Halton Regional Cycling Advisory Committee Halton Region Federation of Agriculture		RR #1	Milton	Ontario	19T 2X5
		Linda	Tichell		Halton Region Museum	RR #3		Milton	Ontario	L9T 2X5
		Hassaan	Basit		Conservation Halton	2596 Britannia Rd W		Burlington	Ontario	L7P 0G3
		Susan	Lathan	Regional Clerk and Director of Council Services	Regional Clerks Office	1151 Bronte Road		Oakville	Ontario	L/F 003
		Craig	White	Director, Highway Operations	407 ETR Concession Co. Ltd.	6300 Steeles Avenue West		Milton	Ontario	L4H 1J1
		Paul			The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	19T 675
		Bill	Cripps Mann	Director, Engineering Services Director, Planning and Development Services	The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	L9T 6Z5
		Brian	Ellsworth	Fire Chief, Milton Fire Department	Town Fire Department	Fire Station #1	405 Steeles Avenue	Milton	Ontario	L9T 3G6
		Bev	McCarthy		Milton Community Services	150 Mary Street	400 Steeles Avenue	Milton	Ontario	L9T 6Z5
		Ann	Fisher		Heritage Milton	43 Brown Street		Milton	Ontario	L9T 5H2
		Troy	McHarg		Town of Milton's Clerks Office	150 Mary Street		Milton	Ontario	L9T 6Z5
		Tony	D'Alessandro		Milton Transit	150 Mary Street		Milton	Ontario	L9T 6Z5
		Domenico	Renzella	Administrator of Planning, Assessment and Transportation	Halton Catholic District School Board		P.O. Box 5308	Burlington	Ontario	L7R 4L3
		Sandra	Morgan		Halton Catholic District School Board			Burlington	Ontario	17R 4L3
		Elaine	Westerhof	Manager of Planning	Halton District School Board		P.O. Box 5005	Burlington	Ontario	L7R 3Z2
		Karen	Lacroix	Manager of Transportation	Halton District School Board	2050 Guelph Line		Burlington	Ontario	L7R 3Z2
		Lindsey	Ross		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
		Janice	Young		Bell Canada			Scarborough	Ontario	M1P 4W2
		Carol	Goossens		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
	Иs.	L	Cane	Planning Coordinator	COGECO	695 Lawrence Road		Hamilton	Ontario	L8K 6P1
		Brian	McCormick		Hydro One Networks Inc.	483 Bay Street	14th Floor	Toronto	Ontario	M5G 2P5
i	۸r.	Tony	lerullo	Manager	Hydro One Inc.		14th Floor	Toronto	Ontario	M5G 2P5
		Russ	Mcl ean		Enbridge Gas Distribution Inc.	500 Consumers Road		North York	Ontario	M2.I 1P8
	****	Paul	Whelan	Pipeline Technician	Trans Canada Pipelines	1020 Rymal Road East		Hamilton	Ontario	L8W 3N6
		Bob	Quick		Telus	82 Locust Street		Kitchener	Ontario	N2H 1W9
	۸r.	Bob	Wellington	District Engineer	Union Gas Ltd.	360 Strathearne Avenue N.	P.O. Box 10	Hamilton	Ontario	L8H 5L1
		Ann	Newman		Enbridge Pipelines Inc.		P.O. Box 128	Sarnia	Ontario	N7T 7H8
i	Иs.	Marion	Wright	OPE Co-ordinator - GTA West	Rogers Cable Communications Inc.	3573 Wolfedale Road		Mississauga	Ontario	L5C 3T6
		Satish	Kumar Korpal				Suite 310		Ontario	L4B 3P6
i	۸r.	Greg	Johnston	<del>.</del>	Allstream	50 Worcester Road		Etobicoke	Ontario	M9W 5X2
		George	Goulah		AT&T Canada	50 Worcester Road		Toronto	Ontario	M9W 5X2
	Ms.	Angela	Burley		Microcell	20 Bay Street	Suite 1601	Toronto	Ontario	M5J 2N8
- 1	۸r.	Frank	Lasowski	President & CEO	Milton Hydro Distribution Inc	8069 Lawson Rd		Milton	Ontario	L9T 5C4
	Chief	James	Marsden		Alderville First Nation	PO Box 46		Roseneath	Ontario	K0K 2X0
	۸r.	Alan	Dokis		Anishinabek Nation	P.O. Box 711		North Bay	Ontario	
	۸r.	Rolanda	Elijah	Director of Intergovernmental Affairs	Association of Iroquois & Allied Indians	387 Princess Avenue		London	Ontario	N6B 2A7
	۸r.	David	Donnelly	Gilbert's LLP Lawyers   Patent & Trademark Agents	Founding First Nation Circle	49 Wellington St. East, The Flatiron Building		Toronto	Ontario	M5E 1C9
		Laurie	Carr		Hiawatha First Nation	R.R. 2		Keene	Ontario	K0L 2G0
		William	K. Montour		Six Nations of the Grand River Territory	1953 Fourth Line, P.O.Box 5000		Ohsweken	Ontario	N0A 1H0
		Keith	Knott		Curve Lake First Nation	22 Winookeeda Road		Curve Lake	Ontario	K0L 1R0
	Grand Chief	Max	Gross Loil		Huronne-Wendat Nation	255 Place Chef-Michel Laveau		Wendake	Quebec	G0A 4V0
		Kris	Nahrgang		Kawartha-Nishnawbe First Nation of Burleigh Falls		General Delivery		Ontario	K0L 2H0
- 1		Leroy	Hill		Iroquois Confederacy	RR#2		Ohsweken	Ontario	N0A 1M0
		Bryan	LaForme		Mississaugas of the New Credit First Nation	2789 Mississauga Road, R.R.#6		Hagersville	Ontario	N0A 1H0
		Angie	Johnson		Mississaugas of Scugog Island	22521 Island Road		Port Perry	Ontario	L9L 1B6
		Tony	Belcourt	President	Metis Nation of Ontario	#3-500 Old St. Patrick St.		Ottawa	Ontario	K1N 9G4
- 1		Grant	Wedge		Ministry of the Attorney General - Aboriginal Legal Issues Office	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		Environment Unit			Indian and Northern Affairs Canada	25 St. Clair Avenue East, 8th Floor		Toronto	Ontario	M4T 1M2
		Pam	Wheaton		Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
-		Richard	Saunders	Director, Aboriginal Policy and Management Branch	Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		E.	Ria Tzimas	Councel, Ministry of the Attorney General	Ministry of Aboriginal Affairs	Policy and Relationships Branch 720 Bay Street, 4th		Toronto	Ontario	M5G 2K1



2596 Britannia Road West RR2, Milton, Ontario L9T 2X6 905.336.1158 Fax 905.336.7014 www.conservationhalton.on.ca

October 19, 2010

Mr. Manoj Dilwaria Delcan 3115 Harvester Road, Suite 102 Burlington, ON L7N 3N8

Dear Mr. Dilwaria:

Re: Notice of Study Commencement
Britannia Road Transportation Corridor Improvements
Tremaine Road to Highway 407
Class EA Study
CH File: MPR 558

Staff of Conservation Halton have reviewed the Notice of Study Commencement for the above noted project and offer the following comments. The purpose of the study is to address capacity deficiencies along Britannia Road. According to the notice, a number of road improvement alternatives will be examined including widening of the roadway, cross-sectional requirements, intersection improvements, overall traffic operations as well as the impacts of such improvements on the social and natural environment. As noted in the checklist below, there are numerous valleys and watercourse crossings within the Study Area. As such, we recommend that, in addition to the TAC meetings, individual meetings with Conservation Halton would be appropriate to ensure the final ESR contains the information that this agency will require to support a preferred alternative. The following checklist identifies a list of issues and criteria that Conservation Halton staff foresee as being important to evaluate during the study. The list is not meant to be exhaustive and additional requirements may become evident as the study progresses.

# Ontario Regulation 162/06

The study area contains several tributaries of Sixteen Mile Creek and Bronte Creek. Conservation Halton regulates the hazardous lands (erosion and flooding hazards) associated with the watercourses and the associated 15 metre adjacent tableland. In addition, Conservation Halton regulates all wetlands within the study corridor and the associated 30-120 metre adjacent lands. Ontario Regulation 162/06 requires that a Permit be obtained from Conservation Halton prior to development, interference with wetlands or alterations to shorelines and watercourses. A copy of Ontario Regulation 162/06 and the associated Policy document, *Policies, Procedures and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document* can be found at <a href="https://www.conservationhalton.ca">www.conservationhalton.ca</a>. Please ensure that the EA contains sufficient information to allow Conservation Halton staff to determine whether Permits could be issued at detailed design. Specific information requirements are detailed below.



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A MEMBER OF THE CONSERVATION ONTARIO NETWORK

- The EA should identify areas where Permits pursuant to Ontario Regulation 162/06 will be required and include such Permits as future commitments in the ESR. Some details related to future Permits may not be deferred to detailed design. This could include impacts to upstream/downstream flooding, delineation of hazardous lands (i.e. stable top of bank, flood plain and/or meander belt) and wetlands.
- Please review the requirements of Policy 3.51 (Public Infrastructure Utilities, Trails and Transportation) of Conservation Halton's *Policies Procedures and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document* (see enclosed).

The Region of Halton's GIS Department has access to all of Conservation Halton's GIS layers. The ARL mapping includes watercourses, flood plains, stable top of bank, meander belt limits and wetlands as well as the adjacent regulated tablelands. Please plot all areas regulated by CH on drawings. ARL mapping may be utilized if more detailed study is not required at this time however, please ensure that drawings indicate that limits shown are an approximation of the regulated area. A Data Request Form is required for all digital information requests. This form and additional information on data holdings can be found in the "GIS & Mapping" section of Conservation Halton's website:

www.conservationhalton.ca. However, as noted above, the Region of Halton should have all of the necessary information.

Staff have enclosed Approximate Regulation Limit (ARL) mapping for your information.

Please survey all drainage features, watercourses, ditchlines, culverts, etc.

 $\boxtimes$ 

- It is recommended that 'Potential Impacts to Natural Hazards' (flooding and/or erosion hazards) should be one of the evaluation criteria within the ESR. At a minimum, a proposed alternative must have no negative impacts on flooding and erosion hazards in order for Conservation Halton to issue a future approval under Ontario Regulation 162/06. Opportunities to improve any deficiencies with respect to flooding and erosion should be investigated.
- The EA should assess all flood plain impacts associated with each alternative including consideration of any change in storage, velocity and up and down stream water levels for a variety of flow conditions.
- Please identify any potential areas of unstable soils within the study area. These areas are regulated by Conservation Halton pursuant to Ontario Regulation 162/06.
- A hydrologic and/or hydraulic analysis will be required to support changes to any of the crossing structures, and may also be required for any areas where significant grade changes are proposed. This work must be included in the Environmental Study Report.
- Please consider MTO's flooding criteria, guidelines and/or the municipal engineering standards for flooding along/over roads. At a minimum, safe access & egress as defined in

the MNR's 2002 Technical Guide: River & Stream Systems - Flooding Hazard Limit, should be provided.

- If a roadway is considered by the local municipality to be an Emergency Route then there  $\boxtimes$ should be no overtopping of the road with flood waters.
- A fluvial geomorphological assessment may be required in the Environmental Study Report,  $\boxtimes$ should the document consider adjustment to any of the existing watercourses.
- Please contact staff to arrange a site visit to stake the physical top of bank of the confined  $\boxtimes$ valleys associated with Sixteen Mile Creek within the study area.
- A geotechnical assessment of slope stability is required in the Environmental Study Report. MNR guidelines should be followed. The assessment must demonstrate that any proposed changes to the valley of the main east and west branches of Sixteen Mile Creek will not  $\boxtimes$ negatively impact valley stability and demonstrate that the road will achieve an appropriate factor of safety. Please consult staff before the geotechnical assessment is initiated to establish a Terms of Reference.
- A hydrologic evaluation may be required to determine if there is an impact to the hydrological functions of wetlands within the study area as a result of the proposed works, X should works be required within the critical function zone of these features. Preconsultation with staff is recommended to determine if and where this study is required.

## Natural Heritage

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When undertaking any fieldwork and/or when making recommendations related to natural heritage and/or natural hazards, staff recommend that reference be made to the following guidelines prepared by the Ministry of Natural Resources: Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005, 2nd Edition, 2010; Significant Wildlife Habitat Technical Guideline; and, Natural Hazards Technical  $\boxtimes$ Guide and Understanding Natural Hazards. Field data sheets are required with the ESR submission (please include digital species spreadsheets). Please refer to Conservation Halton's Environmental Impact Study Guidelines for information on general study requirements, impact assessment and appropriate timing and protocols for surveys. These guidelines can be found at www.conservationhalton.ca. Pre-consultation is strongly encouraged to ensure correct methodologies and timing for the surveys is completed. The study area passes between natural features. As per Policy 2.1.2 of the Provincial Policy Statement, the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and groundwater features. Where applicable, the use of ecopassages or other measures to facilitate wildlife movement should be evaluated. Reference should be made to the Subwatershed Update Study, prepared by AMEC on behalf of the Town of Milton, as well as the Halton Natural Areas Inventory prepared by CH on behalf of the Region of Halton for further details with respect to wildlife and wildlife movement within the study area.

As noted above, the study area contains regulated wetlands. As per Policy 2.1.3 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant wetlands or significant coastal wetlands.

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 $\boxtimes$ 

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X

The study area may contain the habitat of Endangered or Threatened species. As per Policy 2.1.3 of the Provincial Policy Statement, development and site alteration shall not be permitted in the habitat of Endangered/Threatened Species. Please ensure that the EA considers the impact of any proposed works on these features/functions in-keeping with the PPS requirements. The provincial *Endangered Species Act* and/or federal *Species at Risk Act* may also apply. Please contact Melinda Thompson-Black (melinda.thompson-black@ontario.ca, (905) 713-7425) of Aurora District MNR for further information on *Endangered Species Act* requirements. Discussions with the MNR should be initiated as soon as possible and timelines may need to be adjusted to allow for the ESA permit requirements if warranted.

The study area abuts the Sixteen Mile Creek area of natural and scientific interest (ANSI).

As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in an ANSI unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please contact the MNR for further information on ANSI's.

The study area may contain significant wildlife habitat. As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant wildlife habitat unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please ensure that the EA considers the impact of any proposed works on these features/functions in-keeping with the PPS requirements. Please refer to the Ministry of Natural Resource's Significant Wildlife Habitat Technical Guidelines. Please refer to the Area 2 and 7 Subwatershed Update Study prepared by AMEC on behalf of the Town of Milton and the Natural Areas Inventory for further information.

The study area contains two significant valleylands (two branches of Sixteen Mile Creek). As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant valleylands unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please ensure that the EA considers the impact of any proposed works on these features/functions in-keeping with the PPS requirements.

The study area contains several significant woodlands as identified by the Region of Halton. As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant woodlands unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please ensure that the EA considers the impact of any development on these features/functions in-keeping with the PPS requirements. Please contact the Region of Halton for further information on significant woodlands.

- Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in Policies 2.1.3, 2.1.4 and 2.1.5 of the Provincial Policy Statement unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions. Please ensure that the EA considers the impact of any development on the adjacent land functions in-keeping with the PPS requirements.

  The Ministry of Natural Resources' Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement 2005, Second Edition (2010) considers adjacent lands to be within 120 metres. Given the number of natural heritage features and functions within the Britannia Road corridor, staff recommend that the Study Area for the EA be 120 metres north and south of the centerline of the existing road. If any road realignments are
- The study area contains the Sixteen Mile Creek Valley ESA as identified by the Region of Halton. The ESR must address impacts to the ESA. Please contact the Region of Halton for further information on the ESA.

recommended, the study area should be expanded accordingly.

- Please use Ecological Land Classification to map natural and semi-natural features to vegetation type and identify protection/mitigation measures. **ELC data sheets are required with the ESR submission (please include digital species spreadsheets).** Please refer to Conservation Halton's *Environmental Impact Study Guidelines* for information on general study requirements, impact assessment and appropriate timing and protocols for surveys. These guidelines can be found at www.conservationhalton.ca
- Conservation Halton's *Landscape Guidelines* should be consulted at detailed design. These guidelines can be found at <a href="https://www.conservationhalton.ca">www.conservationhalton.ca</a>.
  - Other: A Tree Preservation Plan may be required at detailed design. Please refer to Conservation Halton's Landscaping Guidelines for further assistance in this regard. These guidelines can be found at www.conservationhalton.ca.

# Fish Habitat

- Staff will review the EA under our Level II Agreement with DFO. As per Policy 2.1.5 of the Provincial Policy Statement, development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements. Please ensure that the EA considers the impact of development on fish habitat in-keeping with PPS requirements.
- Please include fish habitat mapping as per MTO Protocol "Environmental Guide for Fish and Fish Habitat, 2006". Please also include photo documentation of the study area with a key map indicating photo locations.
- Staff note that there are numerous local drainage features/hydrologic connections within

the study area. Please be advised that although these drainage features are not regulated under Ontario Regulation 162/06, future development may be subject to review or approvals under the Fisheries Act.

# Groundwater

- Please identify groundwater recharge/discharge areas. Refer to the Subwatershed Update Study prepared by AMEC on behalf of the Town of Milton.
- Please complete a water balance assessment to determine any infiltrative deficit. Please ensure that this assessment considers the impact of transitioning to an urban cross section if an urban cross section is an identified alternative. If a deficit is identified, all potential impacts should be identified and assessed.
- Please identify recommended mitigation measures for groundwater impacts and if appropriate, any opportunities to improve infiltration.
- All proposed works must consider Policies 2.2.1 and 2.2.2 of the Provincial Policy Statement regarding water.

# Stormwater Management/Drainage

- Please discuss quality/quantity/erosion controls within the Stormwater Management Section of the Environmental Study Report.
- As per the Subwatershed Update Study please be advised that the quality requirements are Enhanced (Level 1)
- The Town of Milton, and their consultant AMEC is currently engaged in the completion of the FSEMS which incorporates this study area. Please contact the Town and/or their consultant AMEC to obtain the appropriate quantity and erosion control targets.
- Please examine the potential to combine SWM with adjacent development.
- Please identify existing vs. proposed drainage areas. Every effort should be taken to maintain existing drainage divides. Any proposed diversions must be clearly identified and the potential impacts fully assessed as part of the project's evaluation.
- Please discuss the mitigation of thermal impacts.

## Other

- Recommendations and requirements from the Area 2 and 7 Subwatershed Update Study should be followed, as well as the recommendations from the forthcoming FSEMS.
- The EA should identify whether infrastructure is proposed within existing easements/r-o-w or whether there are additional property requirements.

- Please assess the impacts of utility relocation (i.e. telephone poles, union gas, etc.) on natural heritage features, natural hazard areas and fish habitat. This should not be left to detailed design as the relocation can have a significant impact on natural heritage features.
- Please note that Conservation Halton staff do not screen on behalf of MNR for *Lakes and Rivers Improvement Act* or *Endangered Species Act* implications. We recommend you contact the MNR to determine if these Acts will apply to the proposed works.
- In order to allow sufficient time to review the Draft Environmental Study Report, staff would appreciate it if a review timeline of 8 weeks could be incorporated into the project schedule. We would like to request 3 copies of the draft and final ESR for review.

We trust the above is of assistance. If you require additional information please contact the undersigned at extension 266.

Yours truly,

Jennifer Lawrence

Manager, Environmental Planning

Encl.

cc: Mr. Andrew Head, Region of Halton, email

Mr. Paul Cripps and Mr. Martin Bateson, Town of Milton, email

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#### **MEETING MINUTES**

# Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study

Date: Thursday June 30, 2011

Location: Conservation Halton Main Office

#### **Attendance:**

Chris Parent (Aquafor Beech)
Chris Lorenz (Aquafor Beech)
Brent Tegler (North-South Environmental)
Andrew Head (Halton Region)
Alicia Jakaitis (Halton Region)

Stanley Pijl (Delcan)
Samantha Mason (Conservation Halton)
Kim Barrett (Conservation Halton)
Jennifer Lawrence (Conservation Halton)

# 1. Options for Improvements to Britannia Road

Stanley Pijl provided an overview of Delcan's options for improvements to the Britannia Road corridor. Specific elements of relevance to the Natural Heritage component of the EA study include the following:

- Britannia Road is proposed to be widened to four lanes initially; the road is proposed to be further widened to six lanes at some point during 2021-2031.
- The ultimate right-of-way will be 47 m wide; this includes the roadway, sidewalks and shoulder.
- Culverts will generally match the existing road grade.
- Existing culverts will have to be replaced or extended to at least 47 m in length; each culvert will need to be assessed individually to determine whether it is replaced or extended.
- Between First Line and Regional Road 25 the proposed alignment shifts north to avoid impacts to a woodland block that abuts the southern edge of the existing Britannia Road alignment.
- The bridge crossing the Main Branch of 16 Mile Creek will have to be replaced. Widening is currently proposed to occur on both sides of the existing alignment. Kim Barrett indicated that the northern limit of the Sixteen Mile Creek Valley Environmentally Sensitive Area (ESA 16) extends to Britannia Road and that it would be desirable to limit the intrusion of proposed road improvements into the ESA.

- Kim Barrett also indicated that portions of the Boyne Natural Heritage System (NHS) extend into the study area along the north side of Britannia Road. Figure NHS-2A of the draft Functional Servicing and Environmental Management Strategy (FSEMS) for the Boyne Survey shows a number of 'Enhanced Wildlife Crossing Locations' that Conservation Halton recommends be taken into account in the EA. The Region of Halton's Planning Department has a copy of this report for reference.
- Jennifer Lawrence noted that a proposed stormwater management facility associated with future development of the Boyne Survey lands may discharge into the Main Branch of 16 Mile Creek immediately upstream (i.e. north) of Britannia Road.
- The bridge crossing the East Branch of 16 Mile Creek will have to be replaced. Immediately west of this crossing the width of the roadway is proposed to be reduced to minimize impacts on adjacent properties; the reduced roadway width is likely to continue to Trafalgar Road.
- Immediately west of Highway 407 the proposed road alignment shifts south to avoid impacts to a woodland block that abuts the northern edge of the existing Britannia Road alignment.
- There are three options for the future alignment of Britannia Road at Omagh: (i) Option 5A follows the existing alignment through Omagh, (ii) Option 5B involves a bypass to the north of Omagh, and (iii) Option 5C involves a bypass to the south of Omagh. These options will need to be assessed to determine the preferred alternative.
- Jennifer Lawrence noted that a flood damage centre of approximately 12 homes is located in Omagh. The assessment of Options 5A, 5B and 5C should address their implications to this flood damage centre.
- Option 5B and Option 5C both involve watercourse crossings; to achieve a perpendicular crossing, the current configuration of Option 5C would require a realignment of a portion of the Omagh Tributary.
- Options 5B and 5C are not fixed and could be revised to address environmental issues.

## 2. Work Plan to Address Natural Heritage Component of EA Study

Jennifer Lawrence asked why calling amphibian surveys were not completed in the spring. Chris Parent indicated that existing information is adequate to characterize the amphibian species of the study area; knowledge of potential amphibian habitat (particularly breeding ponds) is sufficient to inform the evaluation of options and assess potential impacts.

#### Kim Barrett noted the following:

• ELC should be completed to Vegetation Type level at the crossings of the Main Branch and East Branch of 16 Mile Creek; ELC could be completed to more general levels (i.e. Community Series or Ecosite) at other portions of the study area.

- A general characterization of plant species is sufficient but specimen trees should be identified.
- The boundary of the wetland in the woodland block immediately west of Highway 407 should be delineated as soon as possible. Conservation Halton will confirm the staking of the wetland limits.
- The EA Study should consider the need to incorporate wildlife crossings at existing culverts, and recommendations should be made for the installation of additional culverts (or similar wildlife crossing structures) to accommodate wildlife movements where considered necessary.
- A road mortality survey should be completed to identify areas where wildlife road crossing structures may be appropriate.

Brent Tegler agreed that the Project Team would complete the Natural Heritage fieldwork per the above points.

# Samantha Mason noted the following:

- Silver Shiner (*Notropis photogenis*) is present in 16 Mile Creek (East Branch). Silver Shiner was caught at or near this bridge in 2011.
- Silver Shiner was recommended for uplisting to "threatened" status in May 2011 by COSEWIC. Accordingly, there is the potential that an authorization under the *Fisheries Act* may be required for the replacement of this bridge and there is also the potential that a permit may be required under the *Species at Risk Act* (SARA). This should be noted in the ESR.
- Conservation Halton would like data loggers to be installed to obtain data on the thermal regimes of all permanently flowing watercourses.
- Conservation Halton would prefer open bottom culverts for all watercourse crossings, particularly coldwater streams and those that receive groundwater inputs.

The Project Team noted the potential presence of Silver Shiner in 16 Mile Creek in the vicinity of Britannia Road. It was agreed that data loggers would be installed to obtain data on the thermal regimes of all permanent flowing watercourses.

# 3. Access to Private Property

The requirements to access private property were discussed and the following indicated:

• There has been no general mail-out to solicit permission for the Project Team to access private property.

- Brent Tegler noted that to date, most terrestrial fieldwork has been completed from the edge
  of the road. He noted that access to private property would be required to address elements
  of the Natural Heritage component of the EA Study, such as the assessment of Option 5B and
  Option 5C at Omagh.
- Andrew head noted that, if required, Halton Region can provide the Study Team with landowner contact information.
- Jennifer Lawrence noted that permission should be obtained to access private property upstream and downstream of the crossings of the Main Branch and East Branch of 16 Mile Creek.

#### 4. Evaluation Criteria

Chris Parent noted that the project team would like to review evaluation criteria with Conservation Halton staff. It was agreed that the Project Team will prepare and circulate to Conservation Halton draft evaluation criteria for review and comment.

## 5. Next Steps

Aquafor Beech Limited will prepare and circulate draft meeting minutes.

# Fluvial Geomorphology Summary

#### Overview of Fieldwork Conducted

- Collection of watercourse inventory data began on May 18<sup>th</sup>, 2011 and continued for 3 more field visits (last one June 20, 2011)
- During this time, the crossings experienced higher flow conditions as well as low flow conditions
- At each crossing a visual assessment was completed both upstream and downstream of the road crossing
- This visual assessment included identification of:
  - o floodplain land-use on both sides of the channel and whether there were any constraints; floodplain gradient; channel connection to the floodplain; bank face vegetation; bank erosion, description and the distance from the culvert; bank/riparian vegetation; in-channel vegetation; presence of roadside ditches; evidence of backwater and potential cause; bar types; planform/setting; additional notes
  - Streambed composition was identified at each crossing were access permitted; pebble counts were completed at crossings were sediment sizes were large enough to measure
- At each crossing culvert data was collected both upstream and downstream of the crossing:
  - Culvert dimensions (bridge span, width x height or diameter, headwall height); length of culvert; culvert or bridge condition; culvert type; whether there is material in the culvert; angle of the channel approaching and leaving the culvert; water depth in culvert downstream, identification of wood debris or sediment obstructing the opening; identification of a pool immediately downstream of culvert; as well as additional notes
- At each crossing (where the channel was accessible) cross section measurements were taken upstream and downstream.
  - This was completed using a tape measure and meter stick
  - At bridge crossings 7 and 15 a total station was used due to the size of the watercourses
  - Measurements included bankfull width, water's edge, and depth. This data was not collected at locations were fences or an on-line pond impeded access to the channel
  - Width and depth measurements were taken close to the culvert for culvert hydraulics and if possible were taken further upstream and downstream
- North, South, East and West pictures were taken at each crossing at both the upstream and downstream side of the crossing

Detailed survey data collected by Delcan was also used as part of the analysis.

#### Overview of Methods Used

Data analysis took into consideration the shear stress, velocity, and the grain size entrained for each crossing. Velocities and shear stress values for existing and proposed conditions were taken from the hydraulic analyses (HEC RAS and HY8). Grain Size Entrained was calculated using the boundary shear stress calculated by the hydraulic analysis.  Survey data taken from Delcan fieldwork was used to calculate slope (culvert invert elevation and downstream channel bed elevation) and field measurements of channel parameters contributed to the hydraulic output. Hydraulic analysis was completed using HEC RAS and HY8 analysis.

# Example of Boundary Shear Stress and Grain Size Entrained calculation

Shields Equation  $\tau cr = kg(\rho s - \rho)D$ 

 $\tau$ cr - critical shear stress, k - co-efficient in velocity discharge relation (0.045), g - gravitational force,  $\rho$ s – sediment density,  $\rho$  – water density, D – grain size

Example (crossing 1)  $\tau cr = 0.045(9.810 \text{m/s})(1650 \text{Kg/m}^3)D$ 

= 728D

Grain size entrained = Boundary Shear/728

Grain Size Entrained (crossing 1) 46.94 N/m<sup>2</sup> / 728

 $= 0.06 \, \text{m}$ 

- This was completed for the 19 crossings and various scenarios (crossing 10 and 11) and then repeated for various flow return periods (2yr, 5yr, 10yr, 20yr, 50yr, and 100yr).
- This data was then compared to the field estimated permissible shear stress and permissible velocity values for various boundary materials (Fischenich, 2001). These estimated values were chosen based on field collected data (i.e. streambed composition and identification of vegetation within the channel).

#### Overview of Preliminary Results (crossing 10, 11 and 5a not included)

- Analysis of velocity was completed by a comparison of the velocities determined from the HEC RAS and HY8 output for the proposed and existing conditions.
- This analysis showed that 7 crossings experienced either a decrease or an increase in velocity (Table 1).
- Comparison of the proposed velocities (HEC RAS and HY8) to the field estimated permissible velocities (Fischenich, 2001) shows that some of the crossing velocities above the 20-year Return begin to exceed the field estimated permissible velocities.

Crossing	Flow Return Period Experiencing the Maximum Difference in Velocity	Proposed Velocity m/s	Existing Velocity m/s	Change in Downstream Velocity m/s (proposed – existing)
3	100 year	0.69	0.78	-0.61
4	50 year	0.75	0.83	-0.08
8	100 year	1.26	1.06	0.20
12	100 year	0.36	0.60	-0.24
13	100 year	0.37	0.58	-0.21
16	100 year	0.88	0.44	0.44
17	10 year	0.73	0.57	0.16

Table 1 Results of analysis show that 7 crossings experienced either a decrease or an increase in velocity. This chart shows the flow return period that experiences the maximum difference in velocity.

- Analysis of boundary shear stress was completed by a comparison of existing and proposed boundary shear stress values.
- These values were determined using HEC RAS and HY8.
- All of the crossings analyzed experienced either an increase, decrease, or no change in boundary shear stress (Table 2).
- Comparison of the proposed boundary shear stresses to the field estimated permissible boundary shear stresses (Fischenich, 2001) show that Crossing 8 and Crossing 13 are the only crossings that exceed the field estimated Permissible Boundary Shear Stresses. Crossing 13 has bare soil exposed along the channel with no vegetation along the banks or bed and therefore has a low field estimated Permissible Boundary Shear Stress.
- Analysis of grain size entrained was completed by a comparison of the estimated existing and proposed grain sizes entrained.
- These values were determined using the formula mentioned above.
- All of the crossings analyzed experienced either an increase, decrease, or no change in grain size entrained (Table 2).

Crossing	Flow Return Period Experiencing the Maximum Difference in Boundary Shear Stress	Proposed Boundary Shear Stress N/m <sup>2</sup>	Existing Boundary Shear Stress N/m <sup>2</sup>	Change in Downstream Boundary Shear Stress N/m2 (proposed - existing)	Proposed Grain Size Entrained (m)	Existing Grain Size Entrained (m)	Change in Downstream Grain Size Entrained (m) (proposed - existing)
1	100	46.94	46.94	0	0.06	0.06	0
2	100	28.55	28.55	0	0.04	0.04	0
3	100	17.42	69.12	-51.7	0.02	0.09	-0.07
4	100	20.80	31.11	-10.31	0.03	0.04	-0.01
5	100	56.92	56.92	0	0.08	0.08	0
6	20	24.84	33.70	-8.86	0.03	0.05	-0.02
7	100	4.58	4.58	0	0.01	0.01	0
8	100	68.42	33.82	34.6	0.09	0.05	0.04
9	100	42.76	42.76	0	0.06	0.06	0
12	100	7.40	13.50	-6.10	0.01	0.02	-0.01
13	100	7.95	43.27	-35.32	0.01	0.06	-0.05
14	100	16.39	42.23	-25.84	0.02	0.06	-0.04
15	100	35.20	35.92	-0.72	0.05	0.05	0
16	100	41.10	9.33	-31.77	0.06	0.01	0.05
17	100	27.31	35.45	-8.14	0.04	0.05	-0.01
18	100	10.21	10.21	0	0.01	0.01	0

Table 2 Results show that the crossings analyzed experienced a decrease, increase, or no change in boundary shear stress. This chart shows the flow return period that experienced the maximum difference in boundary shear stress. The maximum change in grain size entrained is also shown.

# **Preliminary Mitigation Measures**

Some of the preliminary mitigation measures that can be used include:

- Addition of vegetation to the channel to alter the permissible boundary shear stress
- Adjusting culvert parameters, such as culvert size and slope
- Incorporating a scour pool at the downstream end of the culvert

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Fischenich, C. (2001). "Stability Thresholds for Stream Restoration Materials," EMRRP Technical Notes Collection (ERDC TN-EMRRP-SR—29), U.S. Army Engineer Research and Development Center, Vicksburg, MS.

# **Aquatic Ecology - Summary**

## Field Work Completed

- Aquafor Beech Limited (ABL) staff completed assessment of existing aquatic habitat conditions between August 17, 2011 and November 24, 2011.
- As requested by Conservation Halton (CH) in their letter dated October 19, 2010, ABL staff
  completed fish habitat mapping per Ministry of Transportation (MTO) Protocols documented in
  the Environmental Guide for Fish and Fish Habitat (Ministry of Transportation, June 2009). Fish
  habitat mapping was completed for all watercourse crossings deemed fish habitat as defined by
  the Interim Guidelines for the Evaluation, Classification and Management of Headwater
  Drainage Features (CVC and TRCA, March 2009).
- Fish habitat mapping was completed between August 17, 2011 and November 4, 2011. In total, 11 reaches upstream of a Britannia Road crossing were mapped as well as 14 downstream reaches and 14 culverts or bridges. The remaining reaches were either classified as Not Fish Habitat or Aquafor Beech Limited did not receive permission to enter private land (see Table 1).
- On November 16, 2011, ABL received permission from the MNR to undertake a fisheries
  assessment in the form of a License to Collect Fish for Scientific Purposes. On November 24,
  2011, ABL staff performed an exploratory fisheries assessment using a backpack electrofisher on
  watercourse crossings within the study area with no history of fish community assessment for
  the purpose of classifying watercourses per the Interim Guidelines for the Evaluation,
  Classification and Management of Headwater Drainage Features (CVC and TRCA, March 2009).

## Overview of Results

Table 1 illustrates the reach lengths of each of the 18 watercourse crossings within the study area assessed by Aquafor Beech Limited staff using MTO habitat mapping protocols. Certain reaches were not assessed because they were deemed Not Fish Habitat as defined in the Interim Guidelines for the Evaluation, Classification and Management of Headwater Drainage Features (CVC and TRCA, March 2009) and reported in AMEC, 2010 (AMEC) or by Aquafor Beech Limited staff (ABL).

Exploratory fish surveys were performed on watercourses where fish communities have not previously been established. These surveys yielded fish upstream and downstream of Crossing 18 and downstream of Crossing 14. At Crossing 18, eight (8) Brook Stickleback and one (1) Pumpkinseed were caught, with one (1) Lepomis sp. observed but not captured. Downstream of Crossing 14, one (1) Cyprinid sp. was observed but not caught.

Table 1:

Crossing Number	Upstream Section (m)	Culvert/Bridge (m)	Downstream Section (m)
1	50	7.35	200
2	50	11.1	200
3	No Channel	19	200
4	50	11.35	200
5	50	19.45	200
6	50	15.9	200
7	50	11.6	200
8	NO	OT FISH HABITAT (SWS)	
9	NO PERMIS	SSION TO ENTER PRIVA	TE LAND
10	NO	OT FISH HABITAT (SWS)	
11	50	24	200
12	NOT FISH HABITAT (ABL)	25.2	200
13	N	OT FISH HABITAT (ABL)	
14	50	9.9	200
15	48.1 + 45.3 side channel	11.45	200
16	NOT FISH HABITAT (ABL)	14.5	200
17	50	12	200
18	34	47	200

# Preliminary Recommendations

- Within the boundaries of the study area, there are no particularly sensitive fish species or fish
  habitat present within the smaller tributaries or Main Branch of 16 Mile Creek. Therefore
  standard construction and mitigation measures should be applied around fish habitat when
  widening Britannia Road.
- Silver Shiner is present in the East Branch of 16 Mile Creek and was caught near the Britannia Road crossing in 2011 (Conservation Halton Letter to Andrew Head, October 27, 2011). Silver Shiner is currently listed as Special Concern under the Species at Risk Act (SARA) and has been recommended for uplisting to "Threatened" status in May 2011 by COSEWIC. As such, a permit may be required under SARA for construction activities near the bridge crossing the East Branch of 16 Mile Creek.
- If impacts to fish and fish habitat cannot be fully mitigated during construction activities there is the potential that an authorization under the *Fisheries Act* may be required.

# **Terrestrial Ecology - Summary**

#### 1.0 INTRODUCTION

#### **Natural Environment Assessment**

As part of the Environmental Assessment of the proposed widening of Britannia Road between Highway 407 and Tremaine Road a comprehensive field survey and assessment of terrestrial resources was undertaken. This information documents existing conditions and permits an assessment of potential environmental impacts of design alternatives. The terrestrial ecological studies include the following work program:

- 1. Review background reports / studies / models
- 2. Vegetation Inventory/Assessment for the preferred alternative, this included:
  - Tree inventory documenting species and caliper of tree; the location of trees >
     250 mm DBH have been recorded by handheld GPS for mapping.
  - Ecological Land Classification of the East and Main branches of Sixteen Mile Creek 125 meters north and south of Britannia Road.
- 3. Wildlife Inventory –Breeding bird point counts will be conducted along Britannia Road in order to identify any species at risk and document any significant wildlife habitat
- 4. Wildlife habitats will be identified based on available information
  - o opportunities for species migrations will be identified
  - o occupied habitats for any species at risk will be identified
  - o propose mitigation strategies
- 5. Delineate wetlands within 125 m of Britannia Road according to the Ontario Wetland Evaluation System (OWES)
  - o map wetlands and propose mitigation strategies

#### 2.0 METHODS

Field inventories were completed between June 26<sup>th</sup> and October 4<sup>th</sup> 2011. The following table provides a summary of the dates for which field work was undertaken.

Table 1. Dates of field work completed for the terrestrial ecology assessment of the Britannia Road EA.

Field Work Tasks	Date(s) Completed
Breeding bird survey	June 26, and June 27, 2011
Vegetation surveys and ELC	September 16 and 22, 2011
Tree inventory	July 18 and 19, 2011
Wetland staking and delineation	October 4, 2011.

# 2.1 Ecological Land Classification

Vegetation communities along the proposed road widening were classified according to ELC protocols (Lee et al. 1998). In the locations where Britannia Road crosses the Main Branch and the East Branch of Sixteen Mile Creek more detailed and more extensive ELC studies were completed including vegetation classification to "Vegetation Type" and the area of study extended 125 meters north and south of Britannia Road and included the valley slopes and floodplain of Sixteen Mile Creek. In other areas the ELC survey classified vegetation communities to "Community Series" for areas adjacent to the existing roadway.

#### 2.2 Wetland Delineation

In order to better understand the potential impact of the proposed road widening on wetlands the boundary of a larger wetland located on the north side of Britannia Road west of Highway 407 was delineated. Wetland delineation was completed following the protocols in the Ontario Wetland Evaluation System Southern Manual (OMNR, 2002). Wetland boundaries determined in the field were flagged by North-South Environmental and verified by Conservation Halton staff on October 4<sup>th</sup>, 2011. UTM coordinates were recorded at each flag using a hand-held GPS.

# 2.3 Breeding Bird Surveys

Breeding bird surveys were completed along the existing roadway following Breeding Bird Atlas protocols whereby open communities were surveyed every 500 m and closed communities were surveyed every 250 m. At each survey point Forest Bird Monitoring Program point counts (10 min) were made.

#### 2.4 Tree Inventory and Assessment

Trees of a size greater than 25 cm DBH located within 40 meters north and south of Britannia Rd. were included in the inventory excluding trees within two woodland blocks. The approximate average size and condition of the trees within the woodlands was noted Tree diameter was measured using a DBH tape and tree health was recorded according to trunk integrity, crown structure, and crown vigour using criteria provided in Appendix 1. The tree health parameters are combined to provide a tree vigour class from excellent (1) to dead (6) for each tree recorded (refer to Appendix 1 for further explanations of each tree vigour class). The location of each tree was recorded using a handheld GPS unit.

# 2.5 Significant Species

Significant species and significant vegetation communities previously documented from the study area were determined using the biodiversity explorer tool on the Ministry of Natural Resources Natural Heritage Information Centre website (<a href="http://nhic.mnr.gov.on.ca/">http://nhic.mnr.gov.on.ca/</a>). The Species at Risk biologist from the Aurora District office of the MNR was also contacted to obtain the most current information relevant to study area. During all field studies an effort was made to look for significant species and vegetation communities that could potentially exist within the study area and adjacent lands.

References used to evaluate significance of plant and animal species recorded during field work include:

- Committee On the Status of Endangered Wildlife In Canada (COSEWIC) which determines the national status of wild Canadian species that are suspected of being at risk of extinction or extirpation;
- Committee on the Status of Species At Risk in Ontario (COSSARO) which uses criteria developed by COSEWIC and COSSARO to assess and classifying species at risk in Onario; and
- Species at Risk in Ontario (SARO) which includes endangered and threatened species that are protected by the Endangered Species Act in Ontario.

#### 3.0 RESULTS

# 3.1 Ecological Land Classification

#### Sixteen Mile Creek Main Branch

Four vegetation communities were identified along the creek including cultural meadow (CUM1-1), dry-fresh sugar maple deciduous forest (FOD5-1), dry-fresh hickory deciduous forest (FOD2-3), and silver maple mineral deciduous swamp (SWD3-2). The majority of the study area consisted of flood plain occupied by the cultural meadow community. The silver maple swamp was under one hectare in size and was found in the flood plain. The slopes of the valley were comprised of the upland forest communities FOD5-1 and FOD2-3. The soil texture in all communities was classified as sandy clay loam. The soil moisture class varied from 3 (very fresh) on slopes to 4 (moderately moist) within the floodplain. More detailed description of each of the communities is provided below.

#### Cultural Meadow (CUM1-1)

This community occupies the floodplain of Sixteen Mile Creek. The cultural meadow is partly dominated by Canada goldenrod (*Solidago canadensis*), riverbank grape (*Vitis riparia*), and red raspberry (*Rubus idaeus*) with a lesser abundance of New England aster (*Symphyotrichum novae-angliae*), cow vetch (*Vicia cracca*), giant hogweed (*Heracleum mantegazzianum*). There are scattered trees and shrubs throughout this community where successional processes are leading to the transition of this community to a cultural thicket/woodland in parts.

# Dry-fresh sugar maple deciduous forest (FOD5-1)

This community is found along the valley slopes on both east and west slopes of the valley north of Britannia Rd. The canopy is composed primarily of sugar maple (*Acer saccharum*) with a lesser abundance of bur oak (*Quercus macrocarpa*), red oak (*Quercus rubra*), shagbark hickory (*Carya ovata*) and bitternut hickory (*Carya cordiformis*). The understory is partly composed of sugar maple, hop hornbeam (*Ostrya virginiana*) and choke cherry (*Prunus virginiana*). The dominance in ground cover species varies with the slope due to differences in microclimate where the northeast facing slope is more shaded than the southwest. Ground cover species includes spreading dogbane (*Apocynum androsaemifolium*) dames rocket (*Hesperis matrionalis*), zig-zag goldenrod (*Solidago flexicaulis*) and garlic mustard (*Alliaria petiolata*) to name a few.

#### Dry-fresh hickory deciduous forest (FOD2-3)

The hickory deciduous forest community is located on the drier and warmer west facing slope on the east side of Sixteen Mile Creek Main Branch south of Britannia Rd. The dominant canopy species is bitternut hickory followed by shagbark hickory with a lesser abundance of hop hornbeam and black cherry (*Prunus serotina*). The understory was dominated by hop hornbeam and the understory contained a moderate abundance of enchanters nightshade (*Circaea lutetiana*), poison ivy (*Rhus rydbergii*), Virginia creeper (*Parthenocissus quinquefolia*), and spreading dogbane.

## Silver maple mineral deciduous swamp (SWD3-2)

The silver maple swamp is located in the floodplain north of Britannia Rd. The only canopy species in this community was silver maple. Few individuals of black walnut (*Juglans nigra*) were found in the understory. The groundcover was dominated by giant hogweed.

#### Sixteen Mile Creek East Branch

Five vegetation communities were identified along the creek including cultural meadow (CUM1-1), cultural thicket (CUT1-1), dry-fresh hickory deciduous forest (FOD2-3), dry-fresh white ash deciduous forest (FOD4-2), and dry-fresh sugar maple-ironwood deciduous forest (FOD5-4). The majority of the study area consisted of flood plain occupied by the cultural meadow community. The cultural thicket was located partly on the flood plain and along the slope north of Britannia Rd, east of the Creek. The slopes of the valley were comprised of the upland forested communities. The soil texture in all communities was classified as silty clay loam. The soil moisture class varied from 3 (very fresh) on slopes to 4 (moderately moist) within the floodplain. More detailed description of each of the communities is provided below.

#### Cultural Meadow (CUM1-1)

This community occupies the floodplain of Sixteen Mile Creek in the study area. The cultural meadow is mainly dominated by Canada goldenrod, reed canarygrass (*Phalaris arundinacea*), New England aster, and panicled aster (*Symphyotrichum lanceolatum*) with a lesser abundance of cow vetch (*Vicia cracca*), and riverbank grape to name a few. There are scattered trees and shrubs throughout this community including white ash (*Fraxinus americana*), American elm (*Ulmus americana*), hybrid willow (*Salix x rubens*) and Manitoba maple (*Acer negundo*).

#### Cultural Thicket (CUT1-1)

The cultural thicket community is located partly in the floodplain and partly up the slope of the valley. This thicket represents an early successional community partly composed of white ash, apple species (*Malus pumila*), willow species (*Salix* spp.) and hawthorn species (*Crataegus* spp.) in the sub-canopy and shrub layers. The groundcover is mainly composed of asters, goldenrods, wild carrot (*Daucus carota*), and butter-and-eggs (*Linaria vulgaris*).

#### Dry-fresh hickory deciduous forest (FOD2-3)

The hickory deciduous forest community is located on the drier and warmer west facing slope on the east side of Sixteen Mile Creek East Branch south of Britannia Rd. The dominant canopy species is bur oak, and white ash which only provide a 10-25% canopy cover. The dominant sub-canopy species were bitternut hickory with a lesser abundance of bur oak, white ash, and American elm with a canopy cover over 60%. Although the dominant canopy species were bur oak and white ash, based on the prism sweep these species were much less abundant than bitternut hickory which had a higher relative abundance resulting in the classification of this community as a hickory deciduous forest. The understory was dominated by black cherry, shagbark hickory, and to a lesser abundance American elm and hawthorn species. The ground cover was sparse, covering only 10-25%, including such species as common buckthorn (*Rhamnus cathartica*), Virginia strawberry (*Fragaria virginiana*), avens species (*Geum* spp.), and enchanters nightshade (*Circaea lutetiana*).

# Dry-fresh white ash deciduous forest (FOD4-2)

This community is found along the valley slopes on the west slope of the valley, south of Britannia Rd. The canopy is composed mainly of white ash and bur oak a much lesser abundance of hybrid willow. The subcanopy includes species found in the canopy as well as American elm, and shinning willow (*Salix lucida*). The understory is partly composed of common buckthorn, white ash, black walnut, and black locust (*Robinia pseudo-acacia*). The ground cover was sparse with only a 10-25% cover and included Virginia strawberry, riverbank grape, Canada goldenrod, poison ivy (*Rhus rydbergii*) with a lesser abundance of herb robert (*Geranium robertanium*).

# <u>Dry-fresh sugar maple – ironwood deciduous forest (FOD5-4)</u>

The sugar maple forest is located on the west valley slope north of Britannia Rd. Sugar maple was the dominant canopy species with a lesser abundance of bur oak, red oak, and American elm, The sub-canopy was also dominated by sugar maple with a lesser abundance of hop hornbeam, red oak, and common buckthorn. Common buckthorn dominated the understory which also included hawthorn species, white ash, and trembling aspen (*Populus tremuloides*). The groundcover was sparse (10-25% cover) and included Canada goldenrod, large-leaved aster (*Eurybia macrophylla*), Pennsylvania sedge (*Carex pennsylvanica*), and much lesser abundance of Virginia strawberry, Canada anemone (*Anemone canadensis*), and poison ivy to name a few.

At the ecotone of the toe-slope of this community and the cultural meadow community was a small (<0.5 ha) meadow marsh inclusion containing wetland species including American burreed (*Sparganium americanum*), hard-stemmed bulrush (*Scirpus acutus*), soft-stemmed bulrush (*Scirpus validus*), and broad-leaved water-plantain (*Alisma plantago-aquatica*). These species were mainly found surrounding a seasonally wet depression that is devoid of vegetation indicating the presence of a vernal pond.

#### 3.1.1 Wetlands

Two wetland areas were identified near the intersection of Britannia Road East and Eighth Line: a meadow marsh within an area of woodland, and a meadow marsh within a cleared area. These wetlands were staked and the boundaries verified by Conservation Halton staff on October 4<sup>th</sup>, 2011. The following paragraphs provided a brief description of the wetlands.

## Meadow Marsh within the Woodland

A meadow marsh community was identified within the woodland patch along Britannia Road, east of Highway 407. This community is located within a portion of the woodland that appears to have been recently cut. Dominant species include reed canary grass (*Phalaris arundinacea*), purple loosestrife (*Lythrum salicaria*), red osier dogwood (*Cornus stolonifera*), American bugleweed (*Lycopus americanus*) and several different species of sedge. Several piles of felled trees were located within and at the perimeter of this wetland community. Within the clearing, non-wetland portions were dominated by grass-leaved goldenrod (*Euthamia graminifolia*), lance-leaved aster (*Symphyotrichum lanceolatum*) and Canada goldenrod (*Solidago canadensis*). trembling aspen (*Populus tremuloides*) is beginning to regenerate along the western edge of the clearing, some reaching 2 m in height.

#### Meadow Marsh within the cleared area

A meadow marsh community was identified within a cleared areas located north of Britannia Road East and east of Eight Line. This community borders Britannia Road and Eighth Line, and the adjacent woodland. This community is dominated by purple loosestrife, several species of willowherb (*Epilobium* spp.), Small-flowered water plantain (*Alisma plantago-aquatica*), *Eleocharis* spp., cattail (*Typha angustifolia*) and redtop (*Agrostis gigantea*). reed canary grass is dominant along ditches, adjacent to roadways. Upland portions of the field are dominated by wild carrot (*Daucus carota*), curly dock (*Rumex crispus*) and Canada thistle (*Cirsium arvense*).

#### 3.2 Flora of East and Main Branches of Sixteen Mile Creek

## 3.2.1 Floristics

Appendix 2 and 3 provide summary statistics for all plants identified within each of the vegetation types identified along the East and Main branches of Sixteen Mile Creek.

Table 2.	Floristics of the East and Main Branches of Sixteen Mile Creek (see below for a
	discussion of native Floristic Quality Index (FQI) and Native Mean C).

Ecosite	Number of Native Plant Species	Number of Non-native Plant Species	Total	Percent Non-native Plants	Native FQI	
		East	t Branc	h		
CUM1-1	37	18	58	31	17.91	2.94
CUT1-1	13	10	25	40	9.61	2.67
FOD2-3	12	4	19	21	10.71	3.09
FOD4-2	16	4	21	19	12.00	3.00
FOD5-4	32	4	39	10	17.91	3.17
		Mai	n Branc	eh		
CUM1-1	41	17	59	29	17.48	2.73
FOD2-3	21	7	31	23	17.37	3.79
FOD5-1	33	11	48	23	21.68	3.77
SWD3-2	16	2	20	10	13.71	3.43

FQI and Native Mean C provide a measure of "naturalness" of a vegetation community and the degree to which a vegetation community is composed of plant species that are habitat demanding or require more unique or rare natural habitat conditions. Typically, an urban plant community composed of predominantly native species is found to have a Native Mean C of over 4 and a native FQI greater than 40 (NSE 2011). The floristics of all of these communities is relatively low which is likely a result of a single season inventory. A full three season inventory would have yielded a higher number of species, particularly in the woodland communities, resulting in a higher FQI and Native Mean C. See Appendix 3 for the full list of flora identified on the subject property.

#### 3.2.2 Significant Plant Communities

The Natural Heritage Information Centre (NHIC) database notes one plant community as S3S4 (vulnerable – apparently secure): dry-fresh hickory deciduous forest type (FOD2-3). This community is also considered a significant woodland within Peel Region because it is considered a rare-uncommon community (North-South Environmental Inc. *et al.* 2009).

#### 3.2.3 Significant Flora Species

#### **Provincially Significant Flora**

No provincially significant species were documented during the field surveys.

The Natural Heritage Information Centre (NHIC) database notes five provincially significant plant species documented from the general area: Carey's sedge (*Carex careyana*), northern hawthorn (*Crataegus dissona*), Schreber's wood aster (*Eurtbia schreberi*), Virginia lungwort (*Mertensia virginica*), and large round-leaved orchid (*Platanthera macrophylla*). These are ranked S2 (imperiled), S3 (vulnerable), S2S3, S3, and S2 respectively using the provincial standards for rarity<sup>1</sup>. These species were not observed within the study area during field studies.

In reply to our request for information the MNR reported no records for flora Species at Risk within the study area.

#### Regionally Significant Flora

#### **East Branch of Sixteen Mile Creek**

The survey of the east branch of Sixteen Mile Creek found four species ranked as uncommon (HU) and two ranked as rare (HR) based on the Halton Natural Areas Inventory (2006) species ranks for rarity. The four uncommon species include speckled alder (*Alnus incana* spp. *Rugosa*), shinning willow (*Salix lucida*), ditch-stonecrop (*Penthorum sedoides*), and cow parsnip (*Heracleum lanatum*); these species are all ranked as S5 (secure - common, widespread, and abundant within the province). The two species ranked as rare include hard-stemmed bulrush (*Scirpus acutus*) and American bur-reed (*Sparganium americanum*); these species are ranked as S4? (apparently secure within the province) and S5 respectively. All of the regionally significant floral species were located within the cultural meadow (CUM) community.

#### Main Branch of Sixteen Mile Creek

The survey of the Main Branch of Sixteen Mile Creek found four species ranked as uncommon and two ranked as rare. The four uncommon species include shinning willow, great ragweed (*Ambrosia trifida*), smooth goldenrod (*Solidago gigantea*), and hairy aster (*Symphyotrichum pilosum*); these species are ranked S5 in the province. The two species ranked as rare include common juniper (*Juniperus communis*) and river wild-rye (*Elymus riparius*); these species are ranked as S5 and S4? respectively within the province. All of the regionally significant floral species were located within the cultural meadow (CUM) community.

<sup>&</sup>lt;sup>1</sup> S1 – Critically Imperiled – Critically imperilled in the province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the province.

S2 – Imperilled – Imperiled in the province because of rarity due to a very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the province.

S3 – Vulnerable – Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

#### 3.3 Fauna

#### 3.3.1 Breeding Bird Survey

Road side breeding bird point counts recorded 41 species of birds along Britannia Road. (Appendix 4). Most of the birds recorded are common to agricultural fields and smaller woodlots including species such as killdeer, eastern wood-pewee, eastern kingbird, warbling vireo, horned lark, gray catbird, chipping sparrow, and yellow warbler. A discussion of significant bird species recorded is provided below.

It should be noted that although conditions were favourable for conducting breeding bird surveys, the point counts were somewhat hindered due to the noise from traffic along Britannia Road.

# 3.3.2 Significant Fauna Species

## Federally and Provincially Significant Bird Species

Bobolink, listed as threatened provincially with COSSARO and federally with COSEWIC was recorded at four point count locations during the breeding bird surveys. There were two pairs recorded as probable breeders, one individual observed entering the field, and one individual carrying food. Bobolink is a ground-nesting grassland species that nests in native tall-grass prairies, agricultural fields such as hayfields consisting of timothy (*Phleum pratense*), clover (*Trifolium* sp.), and other broadleaved plants, pasture, and a variety of other grassland habitats (COSEWIC, 2010). Bobolink has been listed as threatened due to the trending decline in population mainly due to habitat loss. Although hayfields provide suitable habitat for breeding, the continual decline of this species has been attributed in large part to early cutting of these fields (COSEWIC, 2010).

Barn Swallow is listed as threatened federally by COSEWIC. Although barn swallow was observed during both surveys, they nest in structures such as barns and were seen foraging for insects during the survey but were not nesting within the study area (they were likely nesting in the barns located along Britannia Rd.). The population of this species is in decline. The reasons for the decline of the barn swallow are not well understood, but one reason for the possible decline is the removal of nesting sites, such as old barns (COSEWIC, 2011b).

#### **Regionally Significant Bird Species**

Five species classified as uncommon in the Halton Natural Areas Inventory (2006) were recorded during the field surveys, they include, willow flycatcher, horned lark, northern roughwinged swallow, northern mockingbird, and vesper sparrow.

#### Area Sensitive Bird Species

Three birds recorded during the surveys are considered area sensitive species, they include:

- hairy woodpecker;
- savannah sparrow (also classified as Special Concern by COSEWIC); and
- bobolink, (also classified as Threatened by both COSEWIC and COSSARO).

Hairy woodpecker are mildly area sensitive forest nesting birds that require relatively large woodlands (>10ha) for breeding, particularly in areas where forest cover is less than 15% (Sandilands, 2005). There was one individual observed during the survey. Savannah sparrow, and bobolink are both grassland nesting species that require large areas for nesting (Farina, 2006). Savannah sparrow was observed at 19 of the 22 survey locations with a breeding status of probable at three point count locations.

## Historic Records of Provincially Significant Fauna

The NHIC has documented three provincially significant fauna species from the vicinity of the study area, they include: northern long-eared bat, eastern milksnake, and Jefferson X blue-spotted salamander. The most recent record for northern long-eared bat was in the year1920 suggesting either this species is not longer present within this area or surveys for this species have not been conducted. The records for eastern milksnake and Jefferson X blue-spotted salamander are 1990 and 2002 respectively.

The Jefferson X blue-spotted salamander is ranked as S2 (imperilled) in the province. These salamanders require vernal ponds for breeding. Vernal ponds suitable for breeding are most often found in and around woodlands where the salamanders forage and overwinter (Jefferson Salamander Recovery Team, 2009). A vernal pond is located at the base of the western valley slope of the East Branch of Sixteen Mile Creek, approximately 100 m north of Britannia Rd which is described in section 3.1 in the description of the Dry-fresh sugar maple – ironwood deciduous forest (FOD 5-4) community. It may be possible that this vernal pond is suitable for amphibian breeding. There may also be vernal ponds located within the larger woodlands located along Britannia Rd. Additional surveys for salamanders or vernal ponds were not conducted as part of this study.

Eastern milksnake, an S3 species considered special concern federally and provincially, inhabits old fields and open woodlands. There is suitable habitat for milksnake along Britannia Rd. Milksnake are often found along hedgerows, specifically in rock piles and around larger rocks/boulders scattered in the hedgerows. These habitats provide suitable cover for egg laying, hibernation and thermoregulation (COSEWIC, 2002).

# 3.4 Significant Wildlife Habitat

During the site visits a survey for significant wildlife habitat was conducted. Significant Wildlife Habitat is defined in the Significant Wildlife Habitat Technical Guide (SWHTG) (2000) as habitat that is "ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or

Natural Heritage System. Criteria for determining significance may be recommended by the Province, but municipal approaches that achieve the same objective may also be used." The SWHTG is a technical manual developed to assist in the identification of SWH in regard to the Provincial Policy Statement (PPS, 2005) Section 2.3.1 and as discussed in the Natural Heritage Reference Manual.

Examples of significant wildlife habitat include areas where there are seasonal concentrations of wildlife, rare vegetation communities, specialized wildlife habitat, habitat of species of conservation concern, and wildlife movement corridors.

Significant wildlife habitat identified during field surveys includes areas of woodland and grass land adjacent to Britannia Road that provide habitat for the area-sensitive bird species recorded, and the valley systems associated with the East and Main Branches of Sixteen Mile Creek that serve as wildlife movement corridors.

# 3.5 Tree Inventory

A total of 221 trees were surveyed and assessed within 40 meters north and south of Britannia Rd.. Appendix 5 provides a detailed list of all trees surveyed, including information regarding species, location, and tree condition and vigour class. A summary table organized by tree species is provided in Table 4.

At total of 31 tree species were recorded, 21 are native and 10 are non-native species (see Table 4). The majority of the trees recorded (172 of the 221; 78%) are species native to southern Ontario and include: Most notable of the native trees were eight large bur oak, including one that measured 119 cm DBH located on the south side of Britannia Rd. west of Regional Rd 25. Of the non-native trees recorded Manitoba maple, Norway maple, Scott's pine, black locust, and hybrid willow are considered invasive. species

Table 4. Summary of the 221 trees recorded within 40 meters north and south of Britannia Rd. (see Appendix 1 for an explanation of tree vigour classes and Appendix 5 for detailed information on individual trees, \* denotes non-native species).

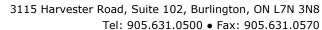
Trees Recorded		Total	Total in each Tree Vigour Class				
Scientific Name	<b>Common Name</b>	Recorded	1	2	3	4	5
*Acer negundo	Manitoba maple	15	2	11	1	1	
*Acer platanoides	Norway maple	5	3		1	1	
Acer rubra	red maple	1		1			
Acer saccharinum	silver maple	18	3	8	1	5	1
Acer saccharum	sugar maple	5	2			2	1
Acer x freemanii	Freeman's maple	6	3		1	1	1
Betula papyrifera	white birch	2	2				

Trees Recorded		Total	Total in each Tree Vigour Class				
Scientific Name	<b>Common Name</b>	Recorded	1	2	3	4	5
Carya cordiformis	bitternut hickory	3	2	1			
Carya ovata	shagbark hickory	21	11	8	1	1	
*Catalpa speciosa	catalpa	1	1				
Crataegus sp.	hawthorn species	3		1	2		
Fraxinus americana	white ash	25	5	10	9		1
Fraxinus pennsylvanica	green ash	1		1			
Juglans nigra	black walnut	3	3				
*Malus pumila	common apple	11	3	7		1	
*Picea abies	Norway spruce	1	1				
Picea glauca	white spruce	2	2				
*Picea pungens	blue spruce	2	2				
*Pinus nigra	Austrian pine	2	2				
Pinus strobus	white pine	1	1				
*Pinus sylvestris	Scots pine	2	1	1			
Populus balsamifera	balsam poplar	1		1			
Populus tremuloides	trembling aspen	1			1		
Quercus alba	white oak	1				1	
Quercus macrocarpa	bur oak	54	21	27	4	2	
Quercus rubra	red oak	5	3		1	1	
*Robinia pseudo- acacia	black locust	1			1		
*Salix x rubens	hybrid willow	9	1	5	2	1	
Tilia americana	basswood	10	2	5	3		
Ulmus americana	American elm	9	5	2	2		
	TOTAL	221					

## 4.0 ENDANGERED SPECIES ACT PROTECTION

The Endangered Species Act 2007 (ESA), protects species listed by COSSARO as provincially endangered, threatened, or extirpated. In addition, the habitat of these species is protected under the ESA. Where development is proposed in an area that contains a listed species and their associated habitat the proponent of development must address requirements of the ESA related to permits, regulations, and agreements. With suitable stewardship, protection, or rehabilitation development may be permitted.

Bobolink, a bird species listed as threatened by COSSARO, was recorded in open habitat adjacent to Britannia Road. The species and its habitat is protected under the ESA. Construction and road work may require a permit under section 17 (c) of the ESA to "damage or destroy" habitat for bobolink.







November 19, 2010

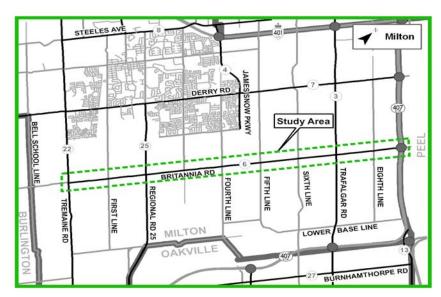
Ms. Sandy Martin
Executive Director
Milton Chamber of Commerce

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Re: Invitation to Attend Stakeholder Advisory Group Meeting #1
Britannia Road (Regional Road 6) Transportation Corridor Improvements
From Tremaine Road (Regional Road 22) to Highway 407, Halton Region
Class Environmental Assessment Study

Delcan, on behalf of the Halton Region, has initiated a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407 (see study area figure below). In order to best address capacity deficiencies along Britannia Road, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross-sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

This study being conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007), which is approved under the Ontario Environmental Assessment Act. Public and review agency consultation is a key element of the Class EA process and input will be from sought parties throughout this study. At this time, it is anticipated that two (2)Public Information Centres (PICs) will



conducted. Details regarding the forthcoming PICs will be advertised as the study progresses.

The study was initiated in August of 2010. Since then, we have compiled and reviewed various background studies and information and would like your input prior to the first Public Information Centre (PIC #1) on the problem being addressed, background information, the alternative solutions being considered and a preliminary preferred alternative solution.

# Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

We would like to invite you to attend the first Stakeholder Advisory Group meeting scheduled for Monday, December 6, 2010, from 2:00 pm to 4:00 pm at the following address:

Public Works Nelson Room Region of Halton 1151 Bronte Road, Oakville, Ontario L6M 3L1

Please confirm that you wish to participate in the Stakeholder Advisory Group and/or plan to attend this meeting. You will also receive further notification of the first PIC that is scheduled for January 2011.

If you have any questions or require additional information, please feel free to contact me directly at (905) 356–7003 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. - Halton Region





# Britannia Road (Regional Road 6) Transportation Corridor Improvements Class Environmental Assessment Stakeholders

TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY
Ms.	Sandy	Martin	Executive Director	Milton Chamber of Commerce
Mr.	Mike	Grimwood	President	Milton Rural Residents Association
Mr.	Peter	Meiklejohn		Piper's Heath Golf Club
Mr.	York	Gruehl		Piper's Heath Golf Club
Mr.	Roland	Willis		Willis Family Fruit Farm
Mr.	Harold	Ellis		The Omagh Church of Christ
Mr.	Sak	Al-Joundi		Omagh Presbyterian Church
Mrs.	Laura	Marshall		Omagh Presbyterian Church
Mr.	Michael	Telawski		Trinison Management Corp.
Mrs.	Ivano	Manias		Trinison Management Corp.
Mr.	Tom	Rae		Milton Phase 3 Landowners Group (MP3LOG)
Mr.	Chris	Matson		Sundial Homes (4th Line) Limited
Mr.	Chris	Ewen	Project Manager	TMIG (Representing Landowners between First Line and Tremaine Road)
Mr.	William	Maria		Milton Phase 3 Landowners Group (MP3LOG)



# **Agenda**



# Stakeholder Advisory Group Meeting #1

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

Monday, December 6th, 2010 at 2:00 p.m. Nelson Room - Halton Region

#### 1. Introductions

# 2. Study Overview

- Purpose of the study
- Key issues/ constraints to be addressed
- Where we are in the study

# 3. Input from Group members

Additional concerns and/or opportunities?

# 4. Next Steps

- Develop study problem statement and identify recommended planning solution
- Second Stakeholder Advisory Group Meeting (week of January 17<sup>th</sup>?)
- Public Information Centre No. 1 (Scheduled for Jan 26<sup>th</sup>, 2011)

## 5. Other Items

# STAKEHOLDER ADVISORY GROUP MEETING #1 HANDOUT PACKAGE

BRITANNIA ROAD (REGIONAL ROAD 6) TRANSPORTATION
CORRIDOR IMPROVEMENTS
CLASS ENVIRONMENTAL ASSESSMENT
TOWN OF MILTON, REGION OF HALTON

## **Study Background**

Delcan, on behalf of the Halton Region, has initiated a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407 (see **Figure 1** below). Britannia Road is a major east-west arterial roadway under the jurisdiction of the Region of Halton and serves as a significant link between Mississauga/Brampton in the east and Milton in the west. The 12.5 kilometre long Britannia Road corridor within the project limits is a two-lane roadway with a rural cross section. The predominant land uses within the study area consist of agricultural uses, single family residences, industrial uses and commercial uses.

TREMAINE ROAD

TREGIONAL ROAD 25

JAMES SNOW PKWY

FIFTH LINE

FIGHTH LINE

HIGHWAY 407

Figure 1 – Study Area

The purpose of this handout is to introduce the study to the Stakeholder Advisory Group (SAG) formed for this study. Membership of the Stakeholder Advisory Group is comprised of representatives from communities, businesses, special interest groups, geographically spread throughout the study area.





## **The Need For Corridor Improvements**

The original Town of Milton Urban Area (to Derry Road) is being expanded further south to Britannia Road, as envisioned in the Sherwood Survey Secondary Plan and the ongoing Boyne Survey Secondary Plan. In addition, the Town is contemplating development west of Tremaine Road between Derry Road and Britannia Road to create the Milton Education Village. In response to the development pressures currently facing this area, the Region of Halton has decided to initiate a Class Environmental Assessment Study for the Britannia Road corridor to identify the roadway improvements required to meet the travel demands of the Region by 2031. A Class Environmental Assessment (EA) for the section of Tremaine Road between Derry Road and Britannia Road was initiated in January 2010 and a Class EA for James Snow Parkway (Regional Road 4) from Derry Road to south of Britannia Road has already been completed by the Region of Halton. James Snow Parkway is being constructed as a multi-phase project as part of the Milton Accelerated Transportation Capital Program with the delivery of the section between Derry Road and Britannia Road anticipated by 2012.

The need to widen Britannia Road has been identified recently by the Boyne Survey Secondary Plan/Milton Education Village as well as in the Halton Transportation Master Plan (HTMP). The HTMP identified the need to widen Britannia Avenue from two to four lanes by 2021 where as the Boyne Survey Secondary Plan/Milton Education Village identified a need to widen from two to six lanes to meet demands forecasted for 2031.

## **Key Issues and Constraints**

There are a range of key considerations and issues that will be addressed through the public process for this study as follows:

#### **Transportation**

Existing and Future Capacity Deficiencies

Safety Deficiencies

Transit Initiatives

Active Transportation

Re-alignment at Tremaine Road and Gateway Intersections

Level Railway Crossing

Geometric Considerations

Integration with Other Studies and Planned Improvements

#### **Structural**

**Bridge Conditions** 

Watercourse Culverts

#### **Natural Environment**

Environmentally Sensitive Areas, Greenlands, and Woodlots

Watercourse, Aquatic and Terrestrial Features





#### Adjacent and Existing/Future Land Uses Including

Rural Settlement Areas and Agricultural Uses

**Existing Businesses** 

Recreational Resources, Community Centres and Schools

#### **Existing and Future Utilities**

Municipal Services and Utility Impacts

Any additional issues or constraints that may be identified by the Stakeholder Advisory Group will also be considered in developing the preferred solution.

## The Municipal Class Environmental Assessment (EA) Process

Municipal road projects are subject to the Ontario EA Act. A class environmental assessment is an approved process under the Ontario EA Act for a specific "group" or class of projects. Therefore, a project is approved subject to compliance with an approved Class EA process. Since the proponent for this project is Halton Region, this study is being conducted in accordance with the requirements of the municipal Class Environmental Assessment (October 2000, as amended in 2007).

The Municipal Class EA process includes five phases of a planning and design process. Schedule C projects have the potential for significant environmental effects and must proceed under the full planning and documentation procedures specified in the Municipal Class EA.

The five phases of the Class EA planning process are summarized as follows:

- **Phase 1** Identify the problem (deficiency) or opportunity.
- Phase 2 Identify alternative solutions to address the problem or opportunity by taking into consideration the existing environment, and establish the preferred solution while considering public and review agency input.
- Phase 3 Examine alternative design concepts of implementing the preferred solution, based on the existing environment, public and review agency input, anticipated environmental effects and methods of minimizing negative effects and maximizing positive effects.
- Phase 4 Document, in an Environmental Study Report (ESR), a summary of the rationale and the planning, design and consultation process established through Phases 1 to 3. The ESR is made available for public and agency review and comment.
- Phase 5 Complete contract drawings and documents and proceed to construction and operation along with the monitoring of construction activities and operations to ensure adherence to environmental provisions and mitigation (*Phase 5 is not part of this study*).

The Britannia Road Improvements study has been identified by the Regional Municipality of Halton as a Schedule "C" under the Municipal Class Environmental Assessment. As such, the work program for this study as been structured to follow the **first four phases** of the Class EA planning





process. **Figure 2** summarizes the basic structure of the Class EA process and highlights the planning phases that will be followed to complete this study.

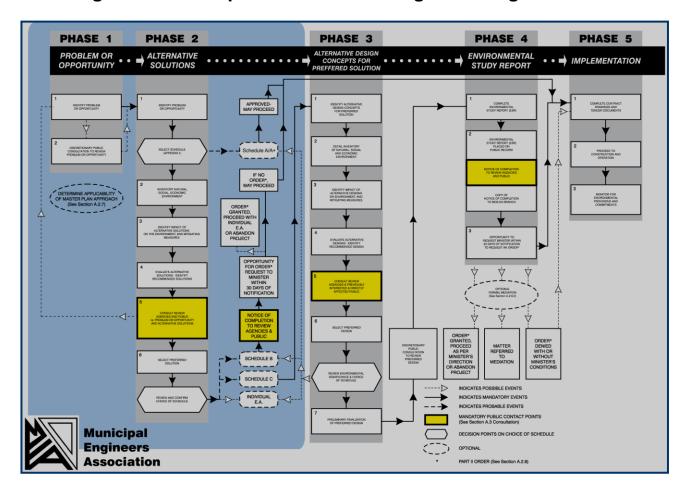


Figure 2 – Municipal Class EA Planning and Design Process

## How the Study is Organized

This study will follow the Class Environmental Assessment planning and design process with the Regional Municipality of Halton acting as the proponent. The overall study is made up of two distinct components consisting of a technical segment and a public consultation segment. These two components will be conducted simultaneously throughout the study. The findings of the technical segment will be communicated to various agencies and the public at several points during the study. The public consultation component has been structured to allow the opportunity for continuous public and agency input into the study during the planning and design process.

The Project Team, with members from Region of Halton staff and the Consultant Team, is responsible for the overall study. The Regional Municipality of Halton Council will be responsible for the review and approval of the overall study recommendations and will be advised by Regional staff at several times during the EA process. Opportunities for external study input will be extended to Technical Agencies and Stakeholder Groups through Technical Agencies Committee and Stakeholder Group meetings, respectively. Additional public input will be received via two Public Information Centres during the process.





## **Proposed Schedule**

The proposed work program reflects the study scope, the requirements of the Municipal Class EA and the Region's Terms of Reference for the study.

The following milestones and preliminary completion dates have been identified:

Notice of Study Commencement
Public Information Centre # 1
Public Information Centre # 2
Filing of Environmental Study Report

September 2010 January 2011 Late Fall 2011 Early Spring 2012

## **Stakeholder Advisory Group Information**

#### Stakeholder Advisory Group and its member's responsibilities

In order to facilitate the consultation with affected stakeholders within the study area, a Stakeholder Advisory Group has been formed. Membership of the Stakeholder Advisory Group is comprised of representatives from communities, businesses, special interest groups, geographically spread throughout the study area.

The purpose of the Stakeholder Advisory Group is to:

- Provide advice and act as a source of input to the Consultant Team on ideas and concerns related to the study.
- Provide a forum for sharing of ideas and concerns with the Consultant Team, testing of solutions and alternatives and providing direction on the findings from the study from a community perspective.
- Provide a sense of broad community reactions and concerns, and how these might be addressed.
- Provide advice to the Consultant Team in the development of solutions to address the problem statement and the preferred solution for the Britannia Road corridor.
- Assist the Consultant Team in working toward consensus on the preferred solution for the Britannia Road corridor.
- Serve as a mechanism for receiving, understanding and evaluating public input.

In order to fulfill the Stakeholder Advisory Group's purpose, members are expected to:

- Prepare for and actively participate in the meetings
- Respect any issues of confidentiality arising in meetings or other proceedings of the Stakeholder Advisory Group
- Respect and listen to the views and contributions of others in the Stakeholder Advisory Group
- Discuss items of interest with their respective constituency (neighbours, group members, etc.) and provide any feedback.





#### **Stakeholder Advisory Group Participation**

Participation in the Stakeholder Advisory Group is entirely voluntary and non-compensated. The Stakeholder Advisory Group will operate during the period from October 2010 until the Britannia Road Class Environmental Assessment Study is completed in early spring, 2012.

Three informal meetings with the Consultant Team will be held during the course of the study; one initial meeting at the outset of the study and one meeting prior to each Public Information Centre. Similar invitations to attend subsequent SAG meetings will be mailed/emailed out to you prior to each meeting.

#### **Additional Consultation Opportunities**

Parties who are not available to attend or cannot be accommodated on the Stakeholder Advisory Group are invited to follow the study and submit comments through the Region's website and attend the public information centres that will be held during this process.

#### Public Information Centres

Two Public Information Centres (PICs) are planned during the EA study. These provide an opportunity for stakeholders/the public to provide input to the study process. The first public information centre will present the existing conditions, problems and opportunities, and an assessment of the planning alternatives for public review and comment. The second public information centre will present the evaluation and determination of the preferred design for public review and comment.

Comments can be forwarded anytime by mail or e-mail, or in person at the public information centres.

Information requests, comments or questions may be directed to the individuals identified below:

#### Mr. Andrew Head, C.E.T.

Project Manager, Transportation Services Regional Municipality of Halton 1151 Bronte Road Oakville, Ontario L6M 3L1

Telephone: 905-825-6000 ext. 7475

Toll Free:1-866-442-5866 (1-866-4HALTON)

Fax: 905-847-2192

Email: andrew.head@halton.ca

#### Mr. Manoj Dilwaria, B.Eng., M.Pl. (Transp.), MCIP, RPP, AVS

Principal and Technical Director Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-631-0500 ext. 105

Fax: 905-631-0570

Email: m.dilwaria@delcan.com





Meeting Notes / Comments
(You may use this page to provide your comments to the Project Team)







### **Meeting Minutes**



#### Stakeholder Advisory Group Meeting #1

#### Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** Monday, December 6, 2010 at 2:00 p.m.

**LOCATION:** Nelson Room, Halton Region

**PRESENT:** Andrew Head Halton Region Brian Hudson Halton Region

Manoj Dilwaria Delcan Corporation

Ana Gall UEM

Stanley Pijl Delcan Corporation (Minutes)
Sak Al-Joundi Omagh Presbyterian Church
William Maria Transtech (Boyne Survey Log)

Harold Ellis Omagh Church of Christ

Chris Ewen TMIG (Milton Phase 3 Land Owners)

York Gruehl Piper's Heath Golf Club Melissa Salviato Trinison Management Corp.

Items Discussed Action

#### 1. Introductions

Andrew Head provided a brief introduction to the stakeholders attending the meeting. All attendees took turns briefly introducing themselves.

#### 2. Study Overview

- Manoj Dilwaria provided a brief explanation of the EA process, followed by a description purpose of the study as well as the key issues and constraints that have been identified to date and need to be addressed in the study. Attendees were invited to comment on the issues and concerns and provide additional input.
- A stakeholder handout package was distributed to all attendees which
  described the study background, the need for corridor improvements,
  key issues and constraints, the Municipal Class EA process, study
  organization, project schedule, and stakeholder advisory group
  information.
- In addition, two large format drawings were displayed at the meeting.
  The first drawing highlighted the key issues and constraints and the
  second drawing illustrated the existing roadway conditions with an aerial
  photographic base for reference.
- Ana Gall described the results of the existing and future (2031) transportation analysis. The analysis of existing conditions confirmed the need for additional through capacity on this two lane roadway. During the AM and PM peak hours, Britannia Road currently experiences significant queuing and delays. However, during the off peak periods, the





roadway operates satisfactorily. The future analysis shows that Britannia Road will need to be widened to 6 lanes by 2031 to provide adequate capacity for the anticipated traffic volumes. A significant portion of the future travel demands are from full development of the Boyne Survey which will increase Milton's population by 50,000 persons.

#### 3. Input from Group Members

- Sak Al-Joundi, representing the Omagh Presbyterian Church expressed concerns with any possible road widening unmarked/marked graves outside of the limits of the existing cemetery. Sak suggested that any road realignment undertaken near the church be done to the south to avoid these grave sites as well as the church. Sak advised that there are unmarked/marked graves within the Britannia Road right-of-way on the south side of the cemetery and north of the travelled lane. Manoj ensured Sak that as a part of the EA process, all reasonable alternatives would be considered and analyzed. As such, widening to the south to avoid impacting the church and the cemetery will be considered as an alternative. Manoj also mentioned that an archaeological assessment will be done as part of the study which may help identify or confirm any areas or buildings of historical significance.
- Sak also inquired as to what the future development will look like. Brian Hudson presented plans from the Boyne Survey planning documents and directed the Stakeholder Advisory Group members to view the document on the Town of Milton Website. Brian noted that the Boyne Survey has status as elements have been approved by Town Council but the planning documents has not as yet been fully reviewed by Regional Staff. The Boyne Survey will need Regional approval.
- York Gruehl, representing Piper's Heath golf course had no comment, but would like to remain involved in the study.
- Melissa Salviato, representing Trinison Management Corp, informed the project team that a building located on the south east corner of the intersection of Britannia Road and 4<sup>th</sup> Line has been designated as a heritage building. Her group has committed to restoring this building and several trees near the building.
- Harold Ellis, representing Omagh Church of Christ, stated that he is concerned with the impact the road widening on the church and church lands. The cemetery grounds are on both sides of the Church building. The cemetery is still active and will likely remain active for some time as there are five or six burial plots promised to members. The Church planted a row of trees along Britannia Road and wish to have these trees preserved. Unlike the Omagh Presbyterina church, the option to widen to the opposite side of the right of way is not viable, since there are houses across the street from the Omagh Church of Christ. In addition, the McCann Farm on the north side of Britannia Road has opted out of the Boyne Survey as agricultural uses will be maintained on these lands. The presence of the farm and residences on the north side constrain widening options. Harold was also concerned with the impacts that the road improvements would have on accessing the church and parking





along the roadside. Currently, parishioners park on the south shoulder area along the Church frontage. Brian Hudson indicated that the Boyne Survey planning documents show Britannia Road as "by-passing" the Omagh community on the south. Brian noted that there is considerable interest in preserving Omagh as a heritage village. Harold also indicated that the church would like to have municipal services to connect to. Church currently trucks in water and has a holding tank. Harold noted that these lands have a very high water table and the Church's sump pump is on a lot. He looks forward to storm sewers in this area.

- Chris Ewen, representing TMIG (Milton Phase 3 Land Owners), indicated that based on his previous experience in the area, that culverts/drainage and impacts to channel works are significant issues with Conservation Halton. Chris also wanted to remind the project team to protect for future servicing requirements. Brian and Andrew both advised that the Region is currently in the design process of several water and wastewater truck main services for this area. Andrew to provide further details on these projects to Delcan. Brian noted that the Region is awaiting information on the municipal services master plan for Boyne Survey.
- William Maria, representing Transtech (Boyne Survey Log), had no comments at this time.

#### 4. Next Steps

Develop study problem statement and identify recommended planning solution

Delcan

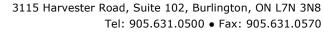
• Second Stakeholder Advisory Group Meeting (week of January 17th?)

Delcan/ Region

• Public Information Centre No. 1 (Scheduled for Wednesday, January 26th, 2011)

#### 5. Other Items

No other items were brought forward.







May 20, 2011

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Mr. Tom Rae Milton Phase 3 Landowners Group (MP3LOG) 141 Brunel Road

Mississauga, Ontario L4Z 1X3

Re: Invitation to Attend Stakeholder Advisory Group Meeting #2 and

**Notice of Public Information Center #2** 

Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

**Class Environmental Assessment Study** 

Delcan, on behalf of the Halton Region, is conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407. In order to best address operational deficiencies and the need for additional capacity along the corridor, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

In accordance with the planning process for Schedule "C" projects under the *Municipal Class Environmental Assessment, October 2000, as Amended in 2007*, a Public Information Centre (PIC) was held in January, 2011 to present and obtain comments on the problem statement and broad level planning solutions. A second PIC is being held to to review the preliminary findings and provide additional opportunity for public comments. Interested members of the public, local business community and agencies are encouraged to attend. Information pertaining to the Study will be on display and members of the project team on hand to discuss any issues/concerns you may have. The second PIC is to be held as follows:

Date: Wednesday, June 8th, 2011

Time: 7:00 p.m. to 9:00 p.m. (drop-in format)

Place: Milton Sports Centre, 605 Santa Maria Boulevard, Milton

Please note that the PIC display material will be available on the Halton Regions website the day after the PIC. If you cannot attend and would like to provide comments, please forward them by June 24, 2011 to Halton Region. Following the PIC the study findings will be reviewed in light of comments received. A third PIC is tentatively scheduled for Fall of 2011.

As a member of the Stakeholder Advisory Group for this project, we would also like to invite you to the second Stakeholder Advisory Group meeting to be held as follows:

Date: Monday, June 6th, 2011 Time: 2:00 p.m. to 4:00 p.m.

Place: Nelson Room, Halton Region, 1151 Bronte Road, Oakville

## Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

Please note, that in order to provide each stakeholder equal representation at the stakeholder meeting, it is kindly requested that only one member from your organization attend. Also, if required, you may feel free to send an alternate member to represent your organization, should the invited member be unable to attend.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. - Halton Region





# Britannia Road (Regional Road 6) Transportation Corridor Improvements Class Environmental Assessment Stakeholders

TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY
Ms.	Sandy	Martin	Executive Director	Milton Chamber of Commerce
Mr.	Mike	Grimwood	President	Milton Rural Residents Association
Mr.	Peter	Meiklejohn		Piper's Heath Golf Club
Mr.	York	Gruehl		Piper's Heath Golf Club
Mr.	Roland	Willis		Willis Family Fruit Farm
Mr.	Harold	Ellis		The Omagh Church of Christ
Mr.	Sak	Al-Joundi		Omagh Presbyterian Church
Mrs.	Laura	Marshall		Omagh Presbyterian Church
Mr.	Michael	Telawski		Trinison Management Corp.
Mrs.	Ivano	Manias		Trinison Management Corp.
Mr.	Tom	Rae		Milton Phase 3 Landowners Group (MP3LOG)
Mr.	Chris	Matson		Sundial Homes (4th Line) Limited
Mr.	Chris	Ewen	Project Manager	TMIG (Representing Landowners between First Line and Tremaine Road)
Mr.	William	Maria		Milton Phase 3 Landowners Group (MP3LOG)

From: <u>Stanley Pijl</u>
To: <u>"Manoj Dilwaria"</u>

Bcc: "Mr. Chris Ewen"; "Mr. Chris Matson"; "Mr. Harold Ellis"; "Mr. Michael Telawski"; "Mr. Mike Grimwood"; "Mr.

Peter Meiklejohn"; "Mr. Roland Willis"; "Mr. Sak Al-Joundi"; "Mr. Tom Rae"; "Mr. William Maria"; "Mr. York

Gruehl"; "Mrs. Ivano Manias"; "Mrs. Laura Marshall"; "Ms. Sandy Martin"

Subject: Invitation to Stakeholder Advisory Group Meeting #2 - Britannia Road Transportation Corridor Improvements

Class EA

**Date:** Tuesday, May 31, 2011 1:22:00 PM

#### Dear Ma'am/Sir:

Delcan, on behalf of the Halton Region, is conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407. In order to best address operational deficiencies and the need for additional capacity along the corridor, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

As a member of the Stakeholder Advisory Group for this project, we would also like to invite you to the second Stakeholder Advisory Group meeting to be held as follows:

Date: Monday, June 6th, 2011 Time: 2:00 p.m. to 4:00 p.m.

Place: Nelson Room, Halton Region, 1151 Bronte Road, Oakville

Please note, that in order to provide each stakeholder equal representation at the stakeholder meeting, it is kindly requested that only one member from your organization attend. Also, if required, you may feel free to send an alternate member to represent your organization, should the invited member be unable to attend. Please RSVP if you plan to attend.

In addition, a second PIC is being held to to review the preliminary findings and provide additional opportunity for public comments. Interested members of the public, local business community and agencies are encouraged to attend. Information pertaining to the Study will be on display and members of the project team on hand to discuss any issues/concerns you may have. The second PIC is to be held as follows:

Date: Wednesday, June 8th, 2011

Time: 7:00 p.m. to 9:00 p.m. (drop-in format)

Place: Milton Sports Centre, 605 Santa Maria Boulevard, Milton

Please note that the PIC display material will be available on the Halton Regions website the day after the PIC. If you cannot attend and would like to provide comments, please forward them by June 24, 2011 to Halton Region. Following the PIC the study findings will be reviewed in light of comments received. A third PIC is tentatively scheduled for Fall of 2011.

Yours truly,



#### **Delcan Corporation**

4342 Queen Street, Suite 407 Niagara Falls, Ontario, L2E 7J7

T: 905.356.7003 ext 225

F: 905.356.7008

http://www.delcan.com







#### Stakeholder Advisory Group Meeting #2

#### Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** Monday, June 6, 2011 at 2:00 p.m.

**LOCATION:** Nelson Room, Halton Region

**PRESENT:** Andrew Head Halton Region

Brian Hudson Halton Region
Stanley Holiday Halton Region
Manoj Dilwaria Delcan Corporation

Stanley Pijl Delcan Corporation (Minutes)
Sak Al-Joundi Omagh Presbyterian Church

Tom Rae Sernas Transtech (Boyne Survey Log)

Harold Ellis Omagh Church of Christ

David Scott TMIG (Milton Phase 3 Land Owners)

Ivano Manias Trinison Management Corp.

Robert McBride BA Group

Rick McConnell Matson, McConnel Ltd. (Sundial)

Peter Meiklejohn York Trafalgar Corp

Items Discussed Action

#### 1. Introductions

 Andrew Head provided a brief introduction to the stakeholders attending the meeting. Andrew detailed the reasoning for the interim Public Meeting (long time frame between proposed 2 public meetings). Manoj provided draft PIC board handouts to all attendees.

#### 2. General Discussion

- Harold asked if it was possible to get a reduced 4-lane cross section through Omagh. Manoj indicated that the Project Team would review this to see if it feasible.
- Robert asked if it is standard Halton Region policy to provide both a
  multi-use trail and on-road bike lanes for the same road. Andrew stated
  it is the Regions policy to protect for 3m of additional ROW and it is for
  the Town to decide what they want to provide.
- Harold asked if the planned growth to the south of Britannia Road was included in the traffic analysis. Manoj stated that all planned and anticipated growth is included in the Regional Model.
- Tom Rae asked when the Transportation Master Plan (TMP) will be finalized. Andrew stated the TMP would be finalized in the fall of 2011 and the EA in the spring of 2012. Tom stated that he would like to get information pertaining to these documents as they become available. Tom also stated he would like to review options prior to going to the







Public.

- Ivano asked if noise attenuation would be required. Brian stated that it was still early to know, but it would be studied.
- Tom Rae asked if the location of the new 5 ½ Line arterial road would be shown. Andrew indicated it would be shown on the roll plan, which will be shown at the PIC and available on the Regions website following that.
- Tom Rae expressed concern that the North and South bypasses at Omagh may have traffic implications at the existing Britannia Road intersection.

#### **Andrew McGregor**

**Subject:** RE: Britannnia Road Stakeholder Meeting #3

From: Stanley Pijl

**Sent:** November-24-11 3:22 PM

To: 'Head, Andrew' Cc: 'Manoj Dilwaria'

Subject: Britannnia Road Stakeholder Meeting #3

#### Dear Stakeholders:

Delcan, on behalf of the Halton Region, is conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407. In order to best address operational deficiencies and the need for additional capacity along the corridor, a number of road improvement alternatives have be examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments. Based on a detailed evaluation of the various road improvement alternatives, a preliminary preferred design has been selected.

Prior to the third Public Information Center, the project team will be presenting the preliminary preferred design to the Stakeholder Advisory Group. As a member of the Stakeholder Advisory Group for this project, we would like to invite you to the third Stakeholder Advisory Group meeting to be held as follows:

Date: Tuesday, December 6th, 2011

Time: 2:00 p.m. to 4:00 p.m.

Place: Halton Room, Halton Region, 1151 Bronte Road, Oakville

Please note, that in order to provide each stakeholder equal representation at the stakeholder meeting, it is kindly requested that only one member from your organization attend. Also, if required, you may feel free to send an alternate member to represent your organization, should the invited member be unable to attend. Please RSVP if you plan to attend.

In addition, a third PIC is being held to to present the preliminary preferred design and provide additional opportunity for public comments. Interested members of the public, local business community and agencies are encouraged to attend. Information pertaining to the Study will be on display and members of the project team on hand to discuss any issues/concerns you may have. The third PIC is to be held as follows:

Date: Wednesday, December 14th, 2011

Time: 7:00 p.m. to 9:00 p.m. (Presentation at 7:00 p.m.)

Place: Boyne Community Centre, 2287 Britannia Road, Milton

Please note that the PIC display material will be available on the Halton Regions website the day after the PIC. If you cannot attend and would like to provide comments, please forward them by January 6, 2012 to Halton Region. Following the PIC the study findings will be reviewed in light of comments received.

Yours truly,

Stanley Pijl, P.Eng.,



4342 Queen Street, Suite 407 Niagara Falls, Ontario, L2E 7J7 T: 905.356.7003 ext 6412 F: 905.356.7008

http://www.delcan.com



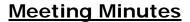
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# Britannia Road (Regional Road 6) Transportation Corridor Improvements Class Environmental Assessment Stakeholders

TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY
Ms.	Sandy	Martin	Executive Director	Milton Chamber of Commerce
Mr.	Mike	Grimwood	President	Milton Rural Residents Association
Mr.	Peter	Meiklejohn		Piper's Heath Golf Club
Mr.	York	Gruehl		Piper's Heath Golf Club
Mr.	Roland	Willis		Willis Family Fruit Farm
Mr.	Harold	Ellis		The Omagh Church of Christ
Mr.	Sak	Al-Joundi		Omagh Presbyterian Church
Mrs.	Laura	Marshall		Omagh Presbyterian Church
Mr.	Michael	Telawski		Trinison Management Corp.
Mrs.	Ivano	Manias		Trinison Management Corp.
Mr.	Tom	Rae		Milton Phase 3 Landowners Group (MP3LOG)
Mr.	Chris	Matson		Sundial Homes (4th Line) Limited
Mr.	Chris	Ewen	Project Manager	TMIG (Representing Landowners between First Line and Tremaine Road)
Mr.	William	Maria		Milton Phase 3 Landowners Group (MP3LOG)







#### Stakeholder Advisory Group Meeting #3

#### Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** Tuesday, December 6, 2011 at 2:00 p.m.

**LOCATION:** Nelson Room, Halton Region

**PRESENT:** Andrew Head Halton Region Alicia Jakaitis Halton Region

Manoj Dilwaria Delcan Corporation

Stanley Pijl Delcan Corporation (Minutes)
Dick VanDerDeen Omagh Presbyterian Church

Tom Rae Sernas Transtech (Boyne Survey Log)

Harold Ellis Omagh Church of Christ Ivano Manias Trinison Management Corp.

Anita Sparre MTE Consultants

Robert McBride BA Group
Chris Matson Sundial Homes
York Gruehl York Trafalgar Corp

Clarence McCann Landowner Dave McCann Landowner

Items Discussed Action

#### 1. Introductions

 Andrew Head provided a brief introduction to the stakeholders attending the meeting. Manoj provided a project status update since the last stakeholder meeting, including the evaluation of alternatives, the bypasses considered at Omagh, the meetings with the individual stakeholders affected by the potential bypasses, and the selection of the south bypass as the preferred alternative.

#### 2. General Discussion

- Dick asked if only farmland and not residential properties were affected by the south bypass. Manoj stated that no residential properties would be affected. Harold asked if the ball diamond would be impacted, and Manoj confirmed it would be. Andrew stated that the alignment could be fined tuned somewhat during detailed design to reduce or eliminate this impact.
- Harold asked if todays meeting was to only confirm the project teams position on the evaluation. Manoj described the analysis and evaluation undertaken for the alternatives, which included technical as well as socio-economic criteria as well as the input received from the public.
- York asked what the timing of construction would be. Manoj stated that construction would begin at Tremaine and proceed easterly. Alicia stated that construction was to commence in 2013. Chris asked if there was





budget available to fund the construction. Alicia confirmed there was.

- Harold asked if the construction would be staged from 2 to 4 to 6 lanes or if the 6 lanes would be built from the beginning. Andrew confirmed that the first section, from Tremaine to RR25 would be 6 lanes, with the rest being recommended as phased from 2 to 4 to 6. Andrew stated that this could change though based on Regional council.
- Ivano asked if property had been acquired yet. Andrew stated that property would be acquired following the approval of the ESR.
- Clarence asked if the widening at his property (farm) was distributed evenly between the north and south sides. Manoj stated that various options were explored, including widening to the north, widening to the south and an even widening on both the north and the south. Following the meeting, it was described to Clarence that the property required along his property varied along the length, with more property being taken on the south at the west end and more property being taken on the north at the east end. The average property taken from the north and south is about the same.
- Manoj reiterated the reasoning for selecting the south alignment as preferred, including the social, socio-economic, technical and cost criteria.
- Ivano asked if the future servicing needs would be considered. Andrew stated they would be considered in the design stage, and stakeholder meetings would be held to facilitate this.
- Tom asked if the railway crossing east of Tremaine Road would be an underpass or overpass. Manoj confirmed an overpass is the preferred alternative.
- Anita asked if the design profile would be available. Manoj stated that
  the profile would not be shown at the PIC, but has been done and will be
  included in the ESR.
- Tom asked about the roundabout at Tremaine Road and why it wasn't
  included in the roll plan or presented to the stakeholders. Andrew
  explained that the roundabout was part of the Tremaine Road EA and
  was presented to the stakeholders from that study.
- Ivano asked about SWM ponds and whether the Britannia Road drainage would be utilizing the ponds identified in the secondary are plan for the developments. Alicia stated it was not the intention of the project team to utilize these ponds. Chris stated that the project team should consider this. Alicia stated that it would be considered, but it is not assumed that they will be used.
- Tom stated that he could not find the traffic numbers in the TMP that
  justified 6 lanes. He stated that he needs proof of this to convince his
  clients that 6 lanes are needed. Andrew stated that the TMP group has
  done the analysis up to 2031. Alicia also indicated that the TMP requires





a 47m ROW in order to provide a multi-modal corridor. Tom stated that the accumulated effect of a 47m ROW results in a large area of property being required. Alicia stated that the idea is to provide the facilities now to encourage future use. Alicia also stated there is a need to provide this capacity now. Andrew stated that the Region does not want to construct additional widening 20 years in the future. Andrew reminded Tom that the TMP went through a public process and in the end it was council endorsed and MOE approved. Andrew suggested a meeting with the Regions modelling group to provide clarification to Tom regarding the need for 6 lanes.

- Clarence asked if there would be roadside access for the farm. Andrew stated that the Region is currently developing policies to deal with this issue.
- York asked why the staging of construction would begin at the west.
   Andrew explained that the development is happening there, so the improvements will happen there as well.
- Robert asked about transit lanes. Andrew stated that the HOV/RBL lanes would be painted as such from the beginning.

Meeting adjourned at 3:05pm



# NOTICE OF PUBLIC INFORMATION CENTRE #1 CLASS ENVIRONMENTAL ASSESSMENT STUDY

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) to Highway 407,
Town of Milton
PR-2667

### **Background**

The Halton Transportation Master Plan identified the need to address transportation capacity issues along the Britannia Road corridor from Tremaine Road to Highway 407. Therefore, Halton Region is undertaking a Class Environmental Assessments to consider a wide range of options for transportation corridor improvements in the Britannia Road corridor to the year 2031.

### **Problem Statement**

In order to best address operational deficiencies and the need for additional capacity along the Britannia Road corridor, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

### **The Process**

This notice signals the advertisement for Public Information Centre #1 for the Britannia Road Class EA study. This study will define existing problems/opportunities, consider and evaluate solutions, and identify the optimum transportation improvements to the year 2031. To comply with the Environmental Assessment Act, the study is being conducted in accordance with the requirements of the Municipal Class Environmental Assessment (EA), (October 2000, as amended in 2007).

A key component of the study will be consultation with interested stakeholders including the public, interest groups and regulatory agencies. The study work plan provides for a minimum two rounds of public consultation sessions. This notice advises the public of the first Public Information Centre being held:

Date: Wednesday, January 26th, 2011 Time: 7:00 p.m. to 9:00 p.m. (drop-in format)

Place: Our Lady of Victory School

540 Commercial Street

Milton

Please contact the undersigned if you wish to obtain more information or provide written comment.

Mr. Andrew Head, C.E.T.
Project Manager
Transportation Services
Halton Region
1151 Bronte Road
Oakville, Ontario L6M 3L1
Telephone: 905-825-6000 ext. 7475

Fax: 905-847-2192

Email: andrew.head@halton.ca

Mr. Manoj Dilwaria B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director Delcan Corporation

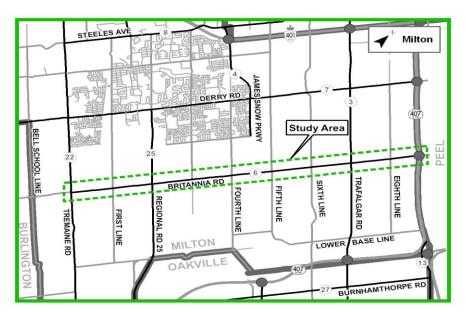
3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8 Telephone: 905-631-0500 ext. 105

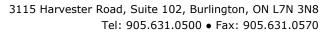
Fax: 905-631-0570

Email: m.dilwaria@delcan.com

Additional information related to the studies and consultation process may be obtained through the website: www.halton.ca

The map below shows the approximate limits of the study area.









January 10, 2011

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Ms. Louise Knox Regional Director Canadian Environmental Assessment Agency 55 St. Clair Avenue East, 9th Floor, Toronto, Ontario M4T 1M2

Re: Notice of Public Information Center #1

Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region Class Environmental Assessment Study

Delcan, on behalf of the Halton Region, has initiated a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407. In order to best address operational deficiencies and the need for additional capacity along the corridor, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

In accordance with the planning process for Schedule "C" projects under the *Municipal Class Environmental Assessment, October 2000, as Amended in 2007*, a Public Information Centre (PIC) is being held to present and obtain comments on the problem statement and broad level planning solutions. Interested members of the public, local business community and agencies are encouraged to attend. Information pertaining to the Study will be on display and members of the project team on hand to discuss any issues/concerns you may have. The first PIC is to be held as follows:

Date: Wednesday, January 26th, 2011

Time: 7:00 p.m. to 9:00 p.m. (drop-in format)

Place: Our Lady of Victory School, 540 Commercial Street, Milton

Please note that the PIC display material will be available on the Halton Regions website the day after the PIC. If you cannot attend and would like to provide comments, please forward them by February 11, 2011 to Halton Region. Following the PIC the study findings will be reviewed in light of comments received. A second PIC is tentatively scheduled for Fall of 2011.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. - Halton Region





Public Information Centre No. 1 January 26, 2011

**PUBLIC COMMENT SHEET** 

Please return the comment sheet by: February 11, 2011.

Address:				
Email:		P	one/fax:	
Britannia Reinutes to co	oad from Tremaine Road to Hig	hway 407. Your commen	onmental Assessment (Class EA) s s and suggestions are important to ered and included in the documer	o us. Please take a few
My proper	ty/interest is: (please check a	ll that apply).		
[ ] Direct ac	cess onto Britannia Road	[]	Residential property	
[] User of E	Britannia Road	[]	Commercial/industrial property	
[] General	interest	[]	Institutional property	
[ ] Other:				
[ ] Daily	[ ] Weekly	[ ] Monthly	[ ] Rarely	
Please pro		g the following (extra si	[ ] Rarely neet has been provided for additi	onal comments):
Please pro	ovide your comments regarding	ng the following (extra si		onal comments):

The Region of Halton and Delcan thank you for your involvement in this Class EA. Comments and information regarding this study are being collected to assist the Region in meeting the requirements of the Environmental Assessment Act. With the exception of personal information, all comments will be included in the Environmental Study Report and will become part of the public record.





Public Information Centre No. 1 January 26, 2011

### **PUBLIC COMMENT SHEET**

c.	The evaluation criteria considered in the study:
d.	The alternative solutions considered:
e.	The materials and PIC #1 display boards presented today:
f.	Based on "study issues" that have been identified, are there other issues that the study team should be aware of?
g.	Similar to question 3c, please identify any other criteria (not highlighted on the display boards), which you feel should be considered when analyzing and evaluating alternative designs during the next phase of the study.

The Region of Halton and Delcan thank you for your involvement in this Class EA. Comments and information regarding this study are being collected to assist the Region in meeting the requirements of the Environmental Assessment Act. With the exception of personal information, all comments will be included in the Environmental Study Report and will become part of the public record.





Public Information Centre No. 1 January 26, 2011

### **PUBLIC COMMENT SHEET**

4.	How did you hear ab	out this public me	eting?			
[	] Newspaper Ad	[ ] Notice	e in the mail	[]0	other:	
5.	Please indicate your	satisfaction with	the following:			
		Satisfied Yes / No	lf r	ot, please specif	y your preference here.	
Loc	cation of meeting					
Tim	ne of meeting					
Day	y of week					
	On a scale of 1 to 5,			t all", please rate	the following by circlin	g the appropriate number:
	Very		Somewhat		Not at all	
	1	2	3	4	5	
	b. How helpful were	the staff and cons	sultants in att	endance?		
	Very		Somewhat		Not at all	
	1	2	3	4	5	
7.	Were all your question	ons answered sati	sfactorily?			
	[]Yes	[ ] No				

### THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by February 11, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 1 January 26, 2011

**PUBLIC COMMENT SHEET** 

# **Other Comments:**

The Region of Halton and Delcan thank you for your involvement in this Class EA. Comments and information regarding this study are being collected to assist the Region in meeting the requirements of the Environmental Assessment Act. With the exception of personal information, all comments will be included in the Environmental Study Report and will become part of the public record.

	TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY	ADDRESS 1	ADDRESS 2	CITY	PROVINCE	POSTAL CODE
		Louise	Knox		Canadian Environmental Assessment Agency	55 St. Clair Avenue East, 9th Floor		Toronto	Ontario	M4T 1M2
	Ms.	Sheila	Allan		Environment Canada	867 Lakeshore Road	P.O. Box 5050	Burlington	Ontario	L7R 4A6
	۸r.	Rob	Dobos		Environment Canada - Environmental Assessment and Federal Programs			Burlington	Ontario	L7R 4A6
	۸r.	Steven	Woolfenden	Fish Habitat Biologist, Southern Ontario District - Burlington Office	Fisheries and Oceans Canada	3027 Harvester Road, Suite 304		Burlington	Ontario	L7R 4K3
- 1	Ms.	Karen	Ralph	Area Operations Chief for Ontario	Fisheries and Oceans Canada - OGLA Program Services	867 Lakeshore Road	Box 5050	Burlington	Ontario	L7R 4A6
- 1	۸r.	David	Cooper	Manager, Environmental & Land Use Policy	Ministry of Agriculture Food and Rural Affairs	1 Stone Road W	3rd Floor	Guelph	Ontario	N1G 4Y2
		Winston	Wong, MCIP		Ministry of Culture		4th Floor	Toronto	Ontario	M7A 2R9
- 1	۸r.	Vincent	Sferrazza	District Manager, Halton-Peel District Office	Ministry of the Environment		4145 North Service Road	Burlington	Ontario	L7L 6A3
		Alex	Phillips		Ministry of the Environment			North York	Ontario	M2M 4J1
		Sara	Paul		Ministry of the Environment, Attn: Michael Harrison		Floor 12A	Toronto	Ontario	M4V 1L5
		Bruce	Singbush	Manager	Central Municipal Services Office, Ministry of Municipal Affairs & Housing	777 Bay Street, 2nd Floor		Toronto	Ontario	M5G 2E5
		John	Pisapio		Ministry of Natural Resources	50 Bloomington Road West		Aurora	Ontario	L4G 3G8
		Bob	Edmondson		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Jennifer	Lawrence		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Mark	Frawley	Director	Niagara Escarpment Commission	232 Guelph Street		Georgetown,	Ontario	L7G 4B1
		John	MacKenzie		Asset Review, Ontario Realty Corporation	11th Floor, Ferguson Block, 77 Wellesley Street W.		Toronto	Ontario	M7A 1N3
		Vic	Gillman		Fisheries And Habitat Management - Ontario, Department of Fisheries and Oceans, Bayfield Institute		P.O. Box 5050	Burlington	Ontario	L7R 4A6
		Lou	Politano		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 2nd Floor		Toronto	Ontario	M3M 1J8
		Larry	Smith		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 6th Floor		Toronto	Ontario	M3M 1J8
		Brian	Ogden		Ministry of Transportation	1201 Wilson Avenue, Building 'B', 3rd Floor		Toronto	Ontario	M3M 1J8
		Jason	White		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 4th Floor		Toronto	Ontario	M3M 1J8
		Pat	Stone		Ontario Provincial Police	203 Steeles Avenue West		Milton	Ontario	L7T 1Y1
		Jeremy	Craigs	Environmental Officer	Transport Canada - Ontario Region		4th Floor	North York	Ontario	M2N 6A5
		Jennifer	Hughes		Transport Canada - Ontario Region			North York	Ontario	M2N 6A5 L4K 4B9
		John	McTaggert		C.N. Rail			Concord	Ontario	
		Dennis	Pasch		C.P. Rail (St. Lawrence & Hudson)	20 Studhomme Road		Hamilton	Ontario	L8N 4B6
		Gary	Crowell		Halton Region Police Services			Oakville	Ontario	L6J 5C7
	Detective Consta		Martin		Halton Region Police Service		Box 2700	Oakville	Ontario	L6M 3L1
		Nick	Buczynsky Kina		Halton Region - Emergency Management Halton Region - Ambulance Services	1151 Bronte Road 1151 Bronte Road		Oakville Oakville	Ontario Ontario	L6M 3L1
		Jim Alana	King Fulford	Director of Land Ambulance Services		1151 Bronte Road 1151 Bronte Road		Oakville	Ontario	L6M 3L1 L6M 3L1
		Alana Stephen	Fulford Baker		Halton E.E.A.C. (Ecological & Environmental Advisory Committee) H.A.A.C. (Halton Agricultural Advisory Committee)		RR #1	Acton	Ontario	L6M 3L1
		Nathan	Stewart			1151 Bronte Road		Oakville	Ontario	L/J 2L/
		June	Barnes	President	Halton Regional Cycling Advisory Committee Halton Region Federation of Agriculture		RR #1	Milton	Ontario	19T 2X5
		Linda	Tichell		Halton Region Museum	RR #3		Milton	Ontario	L9T 2X5
		Hassaan	Basit		Conservation Halton	2596 Britannia Rd W		Burlington	Ontario	L7P 0G3
		Susan	Lathan	Regional Clerk and Director of Council Services	Regional Clerks Office	1151 Bronte Road		Oakville	Ontario	L/F 003
		Craig	White	Director, Highway Operations	407 ETR Concession Co. Ltd.	6300 Steeles Avenue West		Milton	Ontario	L4H 1J1
		Paul			The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	19T 675
		Bill	Cripps Mann	Director, Engineering Services Director, Planning and Development Services	The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	L9T 6Z5
		Brian	Ellsworth	Fire Chief, Milton Fire Department	Town Fire Department	Fire Station #1	405 Steeles Avenue	Milton	Ontario	L9T 3G6
		Bev	McCarthy		Milton Community Services	150 Mary Street	400 Steeles Aveilde	Milton	Ontario	L9T 6Z5
		Ann	Fisher		Heritage Milton	43 Brown Street		Milton	Ontario	L9T 5H2
		Troy	McHarg		Town of Milton's Clerks Office	150 Mary Street		Milton	Ontario	L9T 6Z5
		Tony	D'Alessandro		Milton Transit	150 Mary Street		Milton	Ontario	L9T 6Z5
		Domenico	Renzella	Administrator of Planning, Assessment and Transportation	Halton Catholic District School Board		P.O. Box 5308	Burlington	Ontario	L7R 4L3
		Sandra	Morgan		Halton Catholic District School Board			Burlington	Ontario	17R 4L3
		Elaine	Westerhof	Manager of Planning	Halton District School Board		P.O. Box 5005	Burlington	Ontario	L7R 3Z2
		Karen	Lacroix	Manager of Transportation	Halton District School Board	2050 Guelph Line		Burlington	Ontario	L7R 3Z2
		Lindsey	Ross		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
		Janice	Young		Bell Canada			Scarborough	Ontario	M1P 4W2
		Carol	Goossens		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
	Иs.	L	Cane	Planning Coordinator	COGECO	695 Lawrence Road		Hamilton	Ontario	L8K 6P1
		Brian	McCormick		Hydro One Networks Inc.	483 Bay Street	14th Floor	Toronto	Ontario	M5G 2P5
i	۸r.	Tony	lerullo	Manager	Hydro One Inc.		14th Floor	Toronto	Ontario	M5G 2P5
		Russ	Mcl ean		Enbridge Gas Distribution Inc.	500 Consumers Road		North York	Ontario	M2.I 1P8
	****	Paul	Whelan	Pipeline Technician	Trans Canada Pipelines	1020 Rymal Road East		Hamilton	Ontario	L8W 3N6
		Bob	Quick		Telus	82 Locust Street		Kitchener	Ontario	N2H 1W9
	۸r.	Bob	Wellington	District Engineer	Union Gas Ltd.	360 Strathearne Avenue N.	P.O. Box 10	Hamilton	Ontario	L8H 5L1
		Ann	Newman		Enbridge Pipelines Inc.		P.O. Box 128	Sarnia	Ontario	N7T 7H8
i	Иs.	Marion	Wright	OPE Co-ordinator - GTA West	Rogers Cable Communications Inc.	3573 Wolfedale Road		Mississauga	Ontario	L5C 3T6
		Satish	Kumar Korpal				Suite 310		Ontario	L4B 3P6
i	۸r.	Greg	Johnston	<del>.</del>	Allstream	50 Worcester Road		Etobicoke	Ontario	M9W 5X2
		George	Goulah		AT&T Canada	50 Worcester Road		Toronto	Ontario	M9W 5X2
	Ms.	Angela	Burley		Microcell	20 Bay Street	Suite 1601	Toronto	Ontario	M5J 2N8
- 1	۸r.	Frank	Lasowski	President & CEO	Milton Hydro Distribution Inc	8069 Lawson Rd		Milton	Ontario	L9T 5C4
	Chief	James	Marsden		Alderville First Nation	PO Box 46		Roseneath	Ontario	K0K 2X0
	۸r.	Alan	Dokis		Anishinabek Nation	P.O. Box 711		North Bay	Ontario	
	۸r.	Rolanda	Elijah	Director of Intergovernmental Affairs	Association of Iroquois & Allied Indians	387 Princess Avenue		London	Ontario	N6B 2A7
	۸r.	David	Donnelly	Gilbert's LLP Lawyers   Patent & Trademark Agents	Founding First Nation Circle	49 Wellington St. East, The Flatiron Building		Toronto	Ontario	M5E 1C9
		Laurie	Carr		Hiawatha First Nation	R.R. 2		Keene	Ontario	K0L 2G0
		William	K. Montour		Six Nations of the Grand River Territory	1953 Fourth Line, P.O.Box 5000		Ohsweken	Ontario	N0A 1H0
		Keith	Knott		Curve Lake First Nation	22 Winookeeda Road		Curve Lake	Ontario	K0L 1R0
	Grand Chief	Max	Gross Loil		Huronne-Wendat Nation	255 Place Chef-Michel Laveau		Wendake	Quebec	G0A 4V0
		Kris	Nahrgang		Kawartha-Nishnawbe First Nation of Burleigh Falls		General Delivery		Ontario	K0L 2H0
- 1		Leroy	Hill		Iroquois Confederacy	RR#2		Ohsweken	Ontario	N0A 1M0
		Bryan	LaForme		Mississaugas of the New Credit First Nation	2789 Mississauga Road, R.R.#6		Hagersville	Ontario	N0A 1H0
		Angie	Johnson		Mississaugas of Scugog Island	22521 Island Road		Port Perry	Ontario	L9L 1B6
		Tony	Belcourt	President	Metis Nation of Ontario	#3-500 Old St. Patrick St.		Ottawa	Ontario	K1N 9G4
- 1		Grant	Wedge		Ministry of the Attorney General - Aboriginal Legal Issues Office	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		Environment Unit			Indian and Northern Affairs Canada	25 St. Clair Avenue East, 8th Floor		Toronto	Ontario	M4T 1M2
		Pam	Wheaton		Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
-		Richard	Saunders	Director, Aboriginal Policy and Management Branch	Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		E.	Ria Tzimas	Councel, Ministry of the Attorney General	Ministry of Aboriginal Affairs	Policy and Relationships Branch 720 Bay Street, 4th		Toronto	Ontario	M5G 2K1

# WELCOME

# **Class Environmental Assessment Study**

**Britannia Road (Regional Road 6) Transportation Corridor Improvements** 

Public Information Centre No. 1
January 26, 2011
7:00 p.m. to 9:00 p.m.

Please sign in so we can keep you updated on this study.

Please provide your comments by February 11, 2011.





# **PURPOSE OF THE PUBLIC INFORMATION CENTRE**

The Purpose for holding this Public Information Centre is to:

- ⇒ Introduce the study and provide an opportunity for the public to review the display boards
- ⇒ Provide background information
- ⇒ Present needs and justification for improvements
- ⇒ Present alternative solutions
- ⇒ Present existing conditions and land uses
- ⇒ Identify the next steps in the process





# STUDY AREA

- ⇒ Britannia Road is a major east-west 2-lane arterial roadway under the jurisdiction of the Region of Halton.
- ⇒ The project limits for this study extend from Tremaine Road (Regional Road 22) in the west to Highway 407 in the east, a length of approximately 12.5 kilometres.





# **STUDY ORGANIZATION**

# Technical Agencies

Municipal/Provincial/Federal
Town of Milton
Conservation Halton
Utilities

### <u>Public</u>

### <u>Stakeholders</u>

Adjacent property owners
Community Associations
Developers
Local Business Owners

### PROJECT TEAM

Halton Region
Delcan and its
Subconsultants

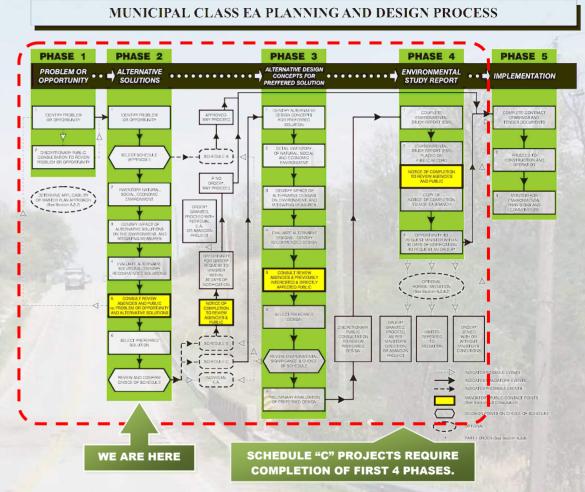
Britannia Road (Regional Road 6) Transportation Corridor Improvements Class EA, Region of Halton





# THE EA PROCESS

- ⇒ The "Class Environmental Assessment (EA)" process is a formal planning process approved under the Ontario Environmental Assessment Act that must be undertaken in advance of road, water and wastewater construction projects.
- ⇒ The process ensures that all reasonable alternatives are considered and that a selected alternative would have minimal impact on the surrounding environment.



⇒ This project is being planned as a "Schedule C" Class EA project.





# **PURPOSE OF THE EA STUDY**

The Purpose of the EA Study is to conduct a Schedule C Class Environmental Assessment to:

- ⇒ address existing/future capacity deficiencies:
  - ⇒ confirmed by the Halton Transportation Master Plan Update.
  - ⇒ resulting from proposed Boyne Survey Secondary Plan/Milton Education Village and other area developments.
- ⇒ consider the effects of all aspects of environment and systematic evaluation of alternatives.
- ⇒ develop preliminary preferred design(s) of recommended alternative.

### Review opportunities for:

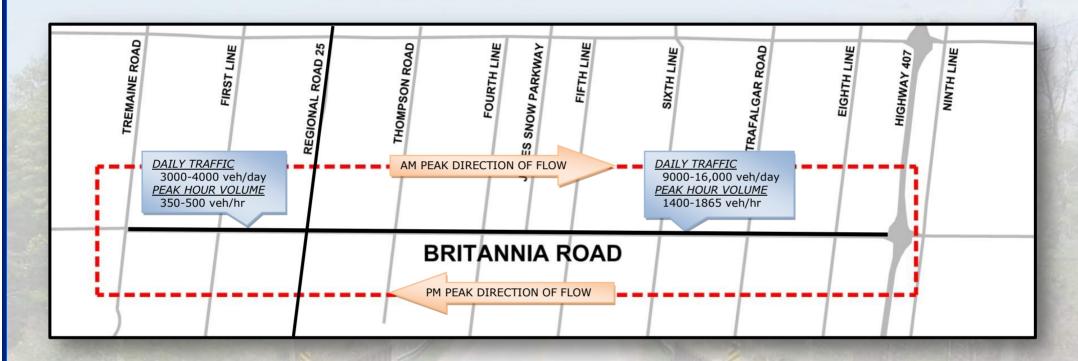
- ⇒ improved transit services.
- ⇒ improved pedestrian and bicycle facilities.
- ⇒ improved intersection operations.
- ⇒ streetscaping/landscaping.





# **EXISTING CONDITIONS - TRANSPORTATION**

⇒ Severe traffic congestion along Britannia Road.



⇒ Traffic comprised mainly of auto trips. Commercial and heavy vehicles represent only about 2-3% of the total traffic.





# EXISTING CONDITIONS - COLLISION ANALYSIS/SAFETY

- ⇒ A total of 312 collisions occurred on Britannia Road from January 1, 2005 to June 30, 2010; 201 (about 64%) occurred at the study intersections and 111 (about 36%) occurred at mid-block locations.
- ⇒ The most notable collision patterns found included:

### **Collision Attribute Description**

Types: Rear-end / turning movement / Single Motor Vehicle

Location: Intersections

Lighting Conditions: Daylight

Weather Conditions: Clear Road Surface Conditions: Dry

Time of Day: Off-peak / Overnight / PM peak period

Day of Week: Monday, Tuesday and Wednesday

Month: March, December

Season: Winter



- ⇒ Nine Britannia Road sections and/or intersections are identified in the Region's 2010 Comprehensive Road Safety Action Plan (CROSAP) as needing improvement.
- ⇒ Opportunities exist to enhance safety within the Britannia Road corridor.





### **EXISTING CONDITIONS - NATURAL ENVIRONMENT**

# **WATERCOURSES**

- ⇒ The study area includes crossings of 18 watercourses 15 within the *Sixteen Mile Creek Watershed* and 3 within the *Indian Creek watershed*.
- ⇒ Two watercourses support permanent fish habitat and approximately eight support seasonal fish habitat.
- ⇒ Previous sampling of study area watercourses identified a variety of fish species.











### EXISTING CONDITIONS - NATURAL ENVIRONMENT

# **TERRESTRIAL**

- ⇒ The study area is dominated by agricultural land use with little forest or wetland remaining. The most extensive remaining natural vegetation communities are generally associated with the *Sixteen Mile Creek* Environmentally Sensitive Area (ESA).
- ⇒ South of Britannia Road the Sixteen Mile Creek ESA is also designated a candidate Life Science Area of Natural and Scientific Interest (ANSI).
- ⇒ The Sixteen Mile Creek ESA supports 18 rare vegetation community types. More than 550 plant and 175 wildlife species have been observed in this ESA, including many considered to be nationally, provincially or locally significant.
- ⇒ The study area contains two significant valley lands and significant woodlands, the Main Branch and East Branch of Sixteen Mile Creek, which function as wildlife movement corridors.









### EXISTING CONDITIONS - SOCIO-ECONOMIC ENVIRONMENT

- ⇒ The study area corridor is primarily comprised of open space and agricultural land uses, along with some residential and institutional land uses.
- ⇒ The majority of residential properties are found within three heritage settlement areas (Boyne, Omagh and Drumquin).



⇒ A number of businesses are located throughout the study area,



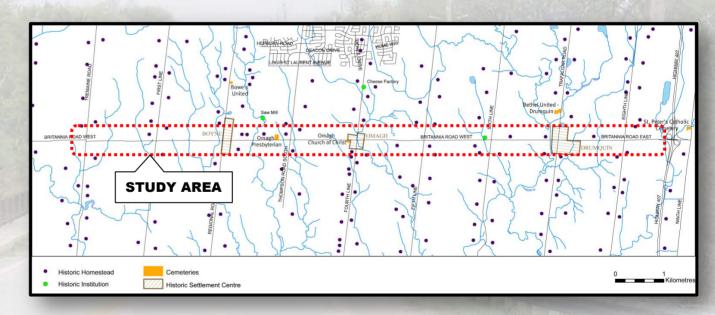
including Terra Greenhouses and Willis Family Fruit Farm.

⇒ Two churches are located along the Britannia Road study area, Omagh Presbyterian Church and Omagh Church of Christ. Both churches have cemeteries located adjacent to the church buildings.



# EXISTING CONDITIONS - CULTURAL HERITAGE ENVIRONMENT

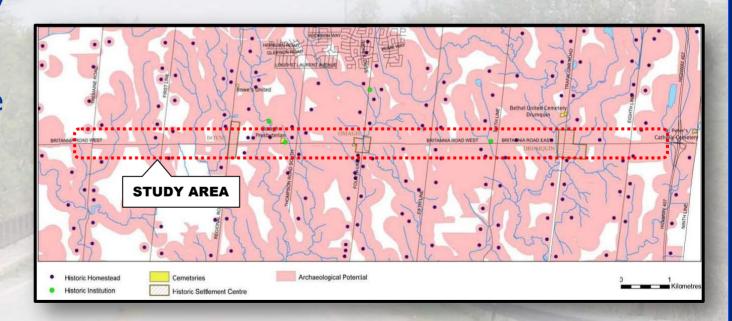
- ⇒ A Cultural Heritage Resource Assessment is currently being undertaken to identify cultural heritage and/or built heritage resources within the study area.
- ⇒ 28 previously identified cultural heritage resources have been documented within and in the vicinity of the study area.
- ⇒ 1 has been designated under Part IV of the Ontario Heritage Act.
- ⇒ 2 additional cultural heritage resources have been recommended to be designated under Part IV of the Ontario Heritage Act.





### EXISTING CONDITIONS - ARCHAEOLOGICAL ASSESSMENT

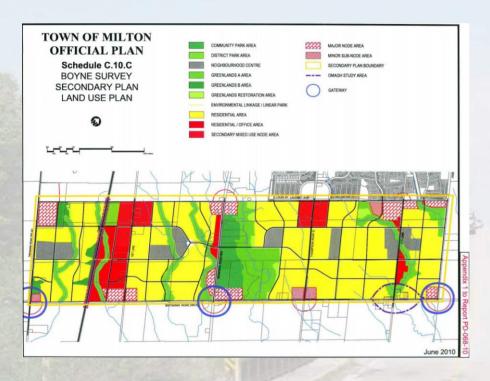
- ⇒ A Stage 1 Archaeological Assessment has been undertaken to determine if there is archaeological potential within the study area.
- ⇒ 27 previously identified archaeological sites are located within the study area.
- Due to the relatively undisturbed nature of the land from agricultural land use and proximity to watercourses, there is archaeological potential along most of Britannia Road.

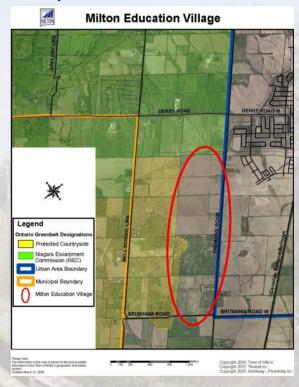




# **FUTURE CONDITIONS - LAND USE**

⇒ The Boyne Survey Secondary Plan extends from Britannia Road, north, between Tremaine Road and James Snow Parkway.





⇒ The Milton Education Village extends north of Britannia Road on the west side of Tremaine Road.



# **FUTURE CONDITIONS - TRANSPORTATION**

- ⇒ Peak hour traffic volumes on Britannia Road have increased at approximately 4 to 12% per year since 2005.
- ⇒ Traffic volumes are expected to increase with continued development in Milton including the Boyne Survey Secondary Plan.

2031 PM Peak Hour Volumes from Halton Transportation Planning Model

Road Section	Eastbound	Westbound
West of Regional Road 25	1,350 - 1,580 veh/hr	1,385 - 1,620 veh/hr
Regional Road 25 – Eighth Line	1,275 - 2,180 veh/hr	1,325 - 2,705 veh/hr
East of Eighth Line	1,560 - 1,740 veh/hr	1,555 - 1,790 veh/hr

⇒ Projected 2031 travel demands indicates the need to widening Britannia Road



# PROBLEM/OPPORTUNITY STATEMENT

The Region of Halton/Town of Milton is experiencing high population and employment growth that will continue over the next several decades.

Roadway capacity and intersection operations will continue to deteriorate without transportation improvements.

As presently configured, Britannia Road will not be able to accommodate the travel demand growth anticipated by 2031.

If no roadway improvements are undertaken, traffic congestion during peak periods will increase resulting in longer travel delays and decreasing levels of service, which will affect the level of safety, emergency vehicle response, convenience and vehicle emissions.



# **ALTERNATIVE SOLUTIONS**

Planning	Alternative Solutions	Description
Alternative 1	Do nothing	The existing transportation system is not changed
Alternative 2	Limit Development	Restrict development of the surrounding land now and in the future
Alternative 3	Travel Demand Management Measures	Introduce Travel Demand Management measures (such as carpooling, etc).
Alternative 4	Accommodate Other Travel Modes	Accommodate other modes of travel (e.g. transit, cycling, walking)
Alternative 5	Intersection Improvements	Improve traffic signal timing and/or adding through and turn lanes at existing and proposed intersections
Alternative 6	Improve Adjacent Roads	Widen adjacent north-south road networks (e.g. Lower Base Line Road)
Alternative 7	Provide Additional Traffic Lanes	Provide additional capacity along Britannia Road with additional lanes



# **EVALUATION CRITERIA**

Following the identification of alternative planning solutions, the Project Team considered a number of criteria (representing the broad definition of the environment as described in the EA Act) to comparatively evaluate the alternative solutions.

Transportation/Technical	Socio-Economic Environment	Natural Environment	Cost
<ul> <li>⇒ Roadway Performance</li> <li>⇒ Roadway Safety</li> <li>⇒ Other Modes</li> <li>⇒ Network Continuity</li> <li>⇒ Commercial Vehicles</li> <li>⇒ Emergency Services</li> <li>⇒ Planning Objectives</li> <li>⇒ Utility Relocations</li> </ul>	<ul> <li>⇒ Direct Property Impacts</li> <li>⇒ Compatibility with Area Land Use</li> <li>⇒ Business Access Impact</li> <li>⇒ Noise Impact</li> <li>⇒ Illumination Impact</li> <li>⇒ Visual/Aesthetic Impact</li> <li>⇒ Archaeology and Cultural Heritage Resources</li> <li>⇒ Construction Disruption</li> </ul>	<ul> <li>⇒ Vegetation Impact</li> <li>⇒ Wildlife and Habitat Impact</li> <li>⇒ Special Designation Areas</li> <li>⇒ Fish Community/Habitat</li> <li>⇒ Ground Water Impacts</li> <li>⇒ Surface Water Impacts</li> <li>⇒ Air Quality</li> <li>⇒ Natural Hazards</li> </ul>	<ul> <li>⇒ Capital Cost</li> <li>⇒ Operation and Maintenance</li> <li>⇒ Property Costs</li> </ul>





# **NEXT STEPS**

Following this Public Information Centre, the Region of Halton and its consultant, Delcan, will:

- ⇒ Review and respond to all written questions and comments.
- ⇒ Select the preferred alternative solution based on evaluation criteria and consideration of comments received from the public/agencies.
- ⇒ Generate and develop alternative design concepts to implement the Preliminary Preferred Solution.
- ⇒ Identify the net impacts of the alternative design concepts on the environment, undertake a comparative evaluation and develop a Preliminary Preferred design.
- ⇒ Conduct a second Public Information Centre in Fall 2011 and present the alternative and preliminary preferred design concepts.
- ⇒ Confirm the recommended design concept based on comments received.





# THANK YOU FOR ATTENDING THE FIRST PIC

Please provide you comments pertaining to the material presented here tonight by completing a comment sheet and depositing it in the provided comment drop-box. Alternatively, please mail, fax, or email your comment sheet by February 11, 2011

If you have any questions or comments after tonight's meeting, please contact:

Mr. Andrew Head, C.E.T.
Project Manager
Transportation Services

Regional Municipality of Halton 1151 Bronte Road Oakville, Ontario L6M 3L1

Telephone: 905-825-6000, Ext. 7475

Fax: 905-847-2192

Email: andrew.head@halton.ca

Mr. Manoj Dilwaria
B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS
Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com

We appreciate your time and interest in this study and thank you for attending the public information centre.





# NOTICE OF PUBLIC INFORMATION CENTRE #2 CLASS ENVIRONMENTAL ASSESSMENT STUDY

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) to Highway 407,
Town of Milton
PR-2667

### **Background**

The Halton Transportation Master Plan identified the need to address transportation capacity issues along the Britannia Road (Regional Road 6) corridor from Tremaine Road (Regional Road 22) to Highway 407. Therefore, Halton Region is undertaking a separate Class Environmental Assessment to consider a wide range of options for transportation corridor improvements in the Britannia Road corridor to the year 2031.

### **Problem Statement**

In order to best address operational deficiencies and the need for additional capacity along the Britannia Road corridor, a number of road improvement alternatives are being examined as part of the study including widening of the roadway, cross-sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

### **The Process**

The First Public Information Centre (PIC) was held on January 26<sup>th</sup>, 2011. Thereafter, the process began for the development of design alternatives, taking into consideration the problem being addressed, alternative solutions, environmental impacts and comments that were received from the Town of Milton, regulatory agencies and the public.

A second Public Information Centre has been arranged to review the preliminary findings and provide additional opportunity for public comments. Following the PIC, design alternatives will be evaluated in consideration of comments received and in the Fall of 2011, those design alternatives and the preliminary preferred alternative will be presented at a third public meeting. To comply with the Environmental Assessments Act, this Study is being conducted in accordance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007), which is approved under the Ontario Environmental Assessment Act.

This PIC will provide an opportunity for you to review the preliminary findings, provide additional comments on the design alternatives and discuss any questions or concerns with representatives from Halton Region and Delcan Corporation. This notice advises the public of the second Public Information Centre being held:

Wednesday, June 8, 2011 Open House format: 7 – 9 PM Milton Sports Centre, 605 Santa Maria Boulevard, Milton.

If you have any questions related to the studies or wish to be added to the mailing list, please contact:

Mr. Andrew Head C.E.T. Project Manager Halton Region

Phone: 905-825-6000, Ext. 7475

Fax: 905-847-2192

Email: andrew.head@halton.ca

Mr. Manoj Dilwaria, B.Eng., M.Pl. (Transp.), MCIP, RPP, AVS

Principal and Technical Director

Delcan Corporation

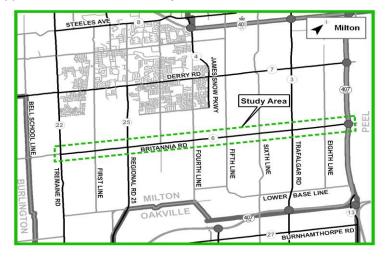
Phone: 905- 631-0500 Ext. 105

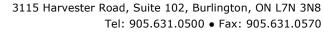
Fax: 905-631-0570

Email:m.dilwaria@delcan.com

Additional information related to the studies and consultation process may be obtained through the website:

The map below shows the approximate limits of the study area.









May 20, 2011

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Mr. Tom Rae Milton Phase 3 Landowners Group (MP3LOG) 141 Brunel Road

Mississauga, Ontario L4Z 1X3

Re: Invitation to Attend Stakeholder Advisory Group Meeting #2 and

**Notice of Public Information Center #2** 

Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

**Class Environmental Assessment Study** 

Delcan, on behalf of the Halton Region, is conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407. In order to best address operational deficiencies and the need for additional capacity along the corridor, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

In accordance with the planning process for Schedule "C" projects under the *Municipal Class Environmental Assessment, October 2000, as Amended in 2007*, a Public Information Centre (PIC) was held in January, 2011 to present and obtain comments on the problem statement and broad level planning solutions. A second PIC is being held to to review the preliminary findings and provide additional opportunity for public comments. Interested members of the public, local business community and agencies are encouraged to attend. Information pertaining to the Study will be on display and members of the project team on hand to discuss any issues/concerns you may have. The second PIC is to be held as follows:

Date: Wednesday, June 8th, 2011

Time: 7:00 p.m. to 9:00 p.m. (drop-in format)

Place: Milton Sports Centre, 605 Santa Maria Boulevard, Milton

Please note that the PIC display material will be available on the Halton Regions website the day after the PIC. If you cannot attend and would like to provide comments, please forward them by June 24, 2011 to Halton Region. Following the PIC the study findings will be reviewed in light of comments received. A third PIC is tentatively scheduled for Fall of 2011.

As a member of the Stakeholder Advisory Group for this project, we would also like to invite you to the second Stakeholder Advisory Group meeting to be held as follows:

Date: Monday, June 6th, 2011 Time: 2:00 p.m. to 4:00 p.m.

Place: Nelson Room, Halton Region, 1151 Bronte Road, Oakville

# Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

Please note, that in order to provide each stakeholder equal representation at the stakeholder meeting, it is kindly requested that only one member from your organization attend. Also, if required, you may feel free to send an alternate member to represent your organization, should the invited member be unable to attend.

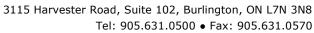
Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. - Halton Region











May 20, 2011

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Ms. Louise Knox Regional Director Canadian Environmental Assessment Agency 55 St. Clair Avenue East, 9th Floor, Toronto, Ontario M4T 1M2

Re: Notice of Public Information Center #2

Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region Class Environmental Assessment Study

Delcan, on behalf of the Halton Region, is conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407. In order to best address operational deficiencies and the need for additional capacity along the corridor, a number of road improvement alternatives will be examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

In accordance with the planning process for Schedule "C" projects under the *Municipal Class Environmental Assessment, October 2000, as Amended in 2007*, a Public Information Centre (PIC) was held in January, 2011 to present and obtain comments on the problem statement and broad level planning solutions. A second PIC is being held to to review the preliminary findings and provide additional opportunity for public comments. Interested members of the public, local business community and agencies are encouraged to attend. Information pertaining to the Study will be on display and members of the project team on hand to discuss any issues/concerns you may have. The second PIC is to be held as follows:

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Yours truly.

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. - Halton Region





Public Information Centre No. 2 June 8, 2011

### **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

A al alasa a c				
Address:				
Email:		Ph	one/fax:	
Britannia Road fr	om Tremaine Road to Hig e this comment sheet. All	hway 407. Your comment	nmental Assessment (Class EA) Study for in and suggestions are important to us. Pleas ared and included in the documentation of the	e take a few
My property/int	erest is: (please check a	ll that apply).		
[ ] Direct access	onto Britannia Road	[]	Residential property	
[ ] User of Britanr	nia Road	[]	Commercial/industrial property	
[ ] General interes	st	[]	nstitutional property	
[ ] Other:				
How froguently	do vou uso Pritonnio Pa	and between Tremeine Be	ad and Highway 1072	
now frequently	do you use Britannia Ro	ad between Tremaine Ro	ad and nighway 407?	
[ ] Daily	[] Weekly	[ ] Monthly	[ ] Rarely	
a. The evalua				
	ation of the Alternative S	olutions:		

The Region of Halton and Delcan thank you for your involvement in this Class EA. Comments and information regarding this study are being collected to assist the Region in meeting the requirements of the Environmental Assessment Act. With the exception of personal information, all comments will be included in the Environmental Study Report and will become part of the public record.





Public Information Centre No. 2 June 8, 2011

### **PUBLIC COMMENT SHEET**

c.	The Design Concepts being considered:
d.	Are there any additional Design Concepts that you feel should also be considered?:
e.	The considerations used in developing the Design Concepts:
f.	Are there any additional considerations that you feel should be used in developing the Design Concepts?:

4. How did you hear about this public meeting?

The Region of Halton and Delcan thank you for your involvement in this Class EA. Comments and information regarding this study are being collected to assist the Region in meeting the requirements of the Environmental Assessment Act. With the exception of personal information, all comments will be included in the Environmental Study Report and will become part of the public record.





Public Information Centre No. 2 June 8, 2011

**PUBLIC COMMENT SHEET** 

[ ] Newspaper Ad	[ ] Notice	e in the mail	[]Othe	r <u>:</u>	
5. Please indicate your	satisfaction with t	he following:			
	Satisfied Yes / No	If not, p	please specify yo	our preference here.	
Location of meeting					
Time of meeting					
Day of week					
<ul><li>6. On a scale of 1 to 5,</li><li>a. How informative v</li></ul>			', please rate the	e following by circling the ap	propriate number:
	were the display bo		', please rate the	e following by circling the app  Not at all	oropriate number:
a. How informative v	were the display bo	pards?	', please rate the		oropriate number:
a. How informative v	were the display bo	oards? Somewhat	4	Not at all	oropriate number:
<ul><li>a. How informative v</li><li>Very</li><li>1</li></ul>	were the display bo	oards? Somewhat	4	Not at all	oropriate number:
<ul><li>a. How informative v</li><li>Very</li><li>1</li><li>b. How helpful were</li></ul>	were the display bo	pards? Somewhat  3 sultants in attenda	4	Not at all 5	oropriate number:
<ul><li>a. How informative volume</li><li>Very</li><li>1</li><li>b. How helpful were Very</li></ul>	were the display bo  2 the staff and cons	Somewhat  3 sultants in attenda Somewhat  3	4 ance?	Not at all 5  Not at all	oropriate number:

### THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET Other Comments:**

	TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY	ADDRESS 1	ADDRESS 2	CITY	PROVINCE	POSTAL CODE
		Louise	Knox		Canadian Environmental Assessment Agency	55 St. Clair Avenue East, 9th Floor		Toronto	Ontario	M4T 1M2
	Ms.	Sheila	Allan		Environment Canada	867 Lakeshore Road	P.O. Box 5050	Burlington	Ontario	L7R 4A6
	۸r.	Rob	Dobos		Environment Canada - Environmental Assessment and Federal Programs			Burlington	Ontario	L7R 4A6
	۸r.	Steven	Woolfenden	Fish Habitat Biologist, Southern Ontario District - Burlington Office	Fisheries and Oceans Canada	3027 Harvester Road, Suite 304		Burlington	Ontario	L7R 4K3
- 1	Ms.	Karen	Ralph	Area Operations Chief for Ontario	Fisheries and Oceans Canada - OGLA Program Services	867 Lakeshore Road	Box 5050	Burlington	Ontario	L7R 4A6
- 1	۸r.	David	Cooper	Manager, Environmental & Land Use Policy	Ministry of Agriculture Food and Rural Affairs	1 Stone Road W	3rd Floor	Guelph	Ontario	N1G 4Y2
		Winston	Wong, MCIP		Ministry of Culture		4th Floor	Toronto	Ontario	M7A 2R9
- 1	۸r.	Vincent	Sferrazza	District Manager, Halton-Peel District Office	Ministry of the Environment		4145 North Service Road	Burlington	Ontario	L7L 6A3
		Alex	Phillips		Ministry of the Environment			North York	Ontario	M2M 4J1
		Sara	Paul		Ministry of the Environment, Attn: Michael Harrison		Floor 12A	Toronto	Ontario	M4V 1L5
		Bruce	Singbush	Manager	Central Municipal Services Office, Ministry of Municipal Affairs & Housing	777 Bay Street, 2nd Floor		Toronto	Ontario	M5G 2E5
		John	Pisapio		Ministry of Natural Resources	50 Bloomington Road West		Aurora	Ontario	L4G 3G8
		Bob	Edmondson		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Jennifer	Lawrence		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Mark	Frawley	Director	Niagara Escarpment Commission	232 Guelph Street		Georgetown,	Ontario	L7G 4B1
		John	MacKenzie		Asset Review, Ontario Realty Corporation	11th Floor, Ferguson Block, 77 Wellesley Street W.		Toronto	Ontario	M7A 1N3
		Vic	Gillman		Fisheries And Habitat Management - Ontario, Department of Fisheries and Oceans, Bayfield Institute		P.O. Box 5050	Burlington	Ontario	L7R 4A6
		Lou	Politano		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 2nd Floor		Toronto	Ontario	M3M 1J8
		Larry	Smith		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 6th Floor		Toronto	Ontario	M3M 1J8
		Brian	Ogden		Ministry of Transportation	1201 Wilson Avenue, Building 'B', 3rd Floor		Toronto	Ontario	M3M 1J8
		Jason	White		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 4th Floor		Toronto	Ontario	M3M 1J8
		Pat	Stone		Ontario Provincial Police	203 Steeles Avenue West		Milton	Ontario	L7T 1Y1
		Jeremy	Craigs	Environmental Officer	Transport Canada - Ontario Region		4th Floor	North York	Ontario	M2N 6A5
		Jennifer	Hughes		Transport Canada - Ontario Region			North York	Ontario	M2N 6A5 L4K 4B9
		John	McTaggert		C.N. Rail			Concord	Ontario	
		Dennis	Pasch		C.P. Rail (St. Lawrence & Hudson)	20 Studhomme Road		Hamilton	Ontario	L8N 4B6
		Gary	Crowell		Halton Region Police Services			Oakville	Ontario	L6J 5C7
	Detective Consta		Martin		Halton Region Police Service		Box 2700	Oakville	Ontario	L6M 3L1
		Nick	Buczynsky Kina		Halton Region - Emergency Management Halton Region - Ambulance Services	1151 Bronte Road 1151 Bronte Road		Oakville Oakville	Ontario Ontario	L6M 3L1
		Jim Alana	King Fulford	Director of Land Ambulance Services		1151 Bronte Road 1151 Bronte Road		Oakville	Ontario	L6M 3L1 L6M 3L1
		Alana Stephen	Fulford Baker		Halton E.E.A.C. (Ecological & Environmental Advisory Committee) H.A.A.C. (Halton Agricultural Advisory Committee)		RR #1	Acton	Ontario	L6M 3L1
		Nathan	Stewart			1151 Bronte Road		Oakville	Ontario	L/J 2L/
		June	Barnes	President	Halton Regional Cycling Advisory Committee Halton Region Federation of Agriculture		RR #1	Milton	Ontario	19T 2X5
		Linda	Tichell		Halton Region Federation of Agriculture Halton Region Museum	RR #3		Milton	Ontario	L9T 2X5
		Hassaan	Basit		Conservation Halton	2596 Britannia Rd W		Burlington	Ontario	L7P 0G3
		Susan	Lathan	Regional Clerk and Director of Council Services	Regional Clerks Office	1151 Bronte Road		Oakville	Ontario	L/F 003
		Craig	White	Director, Highway Operations	407 ETR Concession Co. Ltd.	6300 Steeles Avenue West		Milton	Ontario	L4H 1J1
		Paul			The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	19T 675
		Bill	Cripps Mann	Director, Engineering Services Director, Planning and Development Services	The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	L9T 6Z5
		Brian	Ellsworth	Fire Chief, Milton Fire Department	Town Fire Department	Fire Station #1	405 Steeles Avenue	Milton	Ontario	L9T 3G6
		Bev	McCarthy		Milton Community Services	150 Mary Street	400 Steeles Avenue	Milton	Ontario	L9T 6Z5
		Ann	Fisher		Heritage Milton	43 Brown Street		Milton	Ontario	L9T 5H2
		Troy	McHarg		Town of Milton's Clerks Office	150 Mary Street		Milton	Ontario	L9T 6Z5
		Tony	D'Alessandro		Milton Transit	150 Mary Street		Milton	Ontario	L9T 6Z5
		Domenico	Renzella	Administrator of Planning, Assessment and Transportation	Halton Catholic District School Board		P.O. Box 5308	Burlington	Ontario	L7R 4L3
		Sandra	Morgan		Halton Catholic District School Board			Burlington	Ontario	17R 4L3
		Elaine	Westerhof	Manager of Planning	Halton District School Board		P.O. Box 5005	Burlington	Ontario	L7R 3Z2
		Karen	Lacroix	Manager of Transportation	Halton District School Board	2050 Guelph Line		Burlington	Ontario	L7R 3Z2
		Lindsey	Ross		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
		Janice	Young		Bell Canada			Scarborough	Ontario	M1P 4W2
		Carol	Goossens		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
	Λs.	L	Cane	Planning Coordinator	COGECO	695 Lawrence Road		Hamilton	Ontario	L8K 6P1
		Brian	McCormick		Hydro One Networks Inc.	483 Bay Street	14th Floor	Toronto	Ontario	M5G 2P5
i	۸r.	Tony	lerullo	Manager	Hydro One Inc.		14th Floor	Toronto	Ontario	M5G 2P5
		Russ	Mcl ean		Enbridge Gas Distribution Inc.	500 Consumers Road		North York	Ontario	M2.I 1P8
	****	Paul	Whelan	Pipeline Technician	Trans Canada Pipelines	1020 Rymal Road East		Hamilton	Ontario	L8W 3N6
		Bob	Quick		Telus	82 Locust Street		Kitchener	Ontario	N2H 1W9
	۸r.	Bob	Wellington	District Engineer	Union Gas Ltd.	360 Strathearne Avenue N.	P.O. Box 10	Hamilton	Ontario	L8H 5L1
		Ann	Newman		Enbridge Pipelines Inc.		P.O. Box 128	Sarnia	Ontario	N7T 7H8
i	Иs.	Marion	Wright	OPE Co-ordinator - GTA West	Rogers Cable Communications Inc.	3573 Wolfedale Road		Mississauga	Ontario	L5C 3T6
		Satish	Kumar Korpal				Suite 310		Ontario	L4B 3P6
i	۸r.	Greg	Johnston	<del>.</del>	Allstream	50 Worcester Road		Etobicoke	Ontario	M9W 5X2
		George	Goulah		AT&T Canada	50 Worcester Road		Toronto	Ontario	M9W 5X2
	Ms.	Angela	Burley		Microcell	20 Bay Street	Suite 1601	Toronto	Ontario	M5J 2N8
- 1	۸r.	Frank	Lasowski	President & CEO	Milton Hydro Distribution Inc	8069 Lawson Rd		Milton	Ontario	L9T 5C4
	Chief	James	Marsden		Alderville First Nation	PO Box 46		Roseneath	Ontario	K0K 2X0
- 1	۸r.	Alan	Dokis		Anishinabek Nation	P.O. Box 711		North Bay	Ontario	
- 1	۸r.	Rolanda	Elijah	Director of Intergovernmental Affairs	Association of Iroquois & Allied Indians	387 Princess Avenue		London	Ontario	N6B 2A7
	۸r.	David	Donnelly	Gilbert's LLP Lawyers   Patent & Trademark Agents	Founding First Nation Circle	49 Wellington St. East, The Flatiron Building		Toronto	Ontario	M5E 1C9
		Laurie	Carr		Hiawatha First Nation	R.R. 2		Keene	Ontario	K0L 2G0
		William	K. Montour		Six Nations of the Grand River Territory	1953 Fourth Line, P.O.Box 5000		Ohsweken	Ontario	N0A 1H0
		Keith	Knott		Curve Lake First Nation	22 Winookeeda Road		Curve Lake	Ontario	K0L 1R0
	Grand Chief	Max	Gross Loil		Huronne-Wendat Nation	255 Place Chef-Michel Laveau		Wendake	Quebec	G0A 4V0
		Kris	Nahrgang		Kawartha-Nishnawbe First Nation of Burleigh Falls		General Delivery		Ontario	K0L 2H0
- 1		Leroy	Hill		Iroquois Confederacy	RR#2		Ohsweken	Ontario	NOA 1M0
		Bryan	LaForme		Mississaugas of the New Credit First Nation	2789 Mississauga Road, R.R.#6		Hagersville	Ontario	N0A 1H0
		Angie	Johnson		Mississaugas of Scugog Island	22521 Island Road		Port Perry	Ontario	L9L 1B6
		Tony	Belcourt	President	Metis Nation of Ontario	#3-500 Old St. Patrick St.		Ottawa	Ontario	K1N 9G4
- 1		Grant	Wedge		Ministry of the Attorney General - Aboriginal Legal Issues Office	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		Environment Unit			Indian and Northern Affairs Canada	25 St. Clair Avenue East, 8th Floor		Toronto	Ontario	M4T 1M2
		Pam	Wheaton		Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
-		Richard	Saunders	Director, Aboriginal Policy and Management Branch	Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		E.	Ria Tzimas	Councel, Ministry of the Attorney General	Ministry of Aboriginal Affairs	Policy and Relationships Branch 720 Bay Street, 4th		Toronto	Ontario	M5G 2K1

# WELCOME

# **Class Environmental Assessment Study**

**Britannia Road (Regional Road 6) Transportation Corridor Improvements** 

Public Information Centre No. 2
June 8, 2011
7:00 p.m. to 9:00 p.m.

Please sign in so we can keep you updated on this study.

Please provide your comments by June 24, 2011.





# **PURPOSE OF THE PUBLIC INFORMATION CENTRE**

The Purpose for holding this Public Information Centre is to:

- ⇒ Provide an opportunity for the public to review the display boards
- ⇒ Provide a summary of the first Public Information Centre
- ⇒ Present Preferred Alternative Solutions
- ⇒ Present Alternative Design Concepts
- ⇒ Provide an update on the ongoing technical studies
- ⇒ Identify the next steps in the process



# STUDY AREA

⇒ Britannia Road is a major east-west 2-lane arterial roadway under the jurisdiction of the Region of Halton.

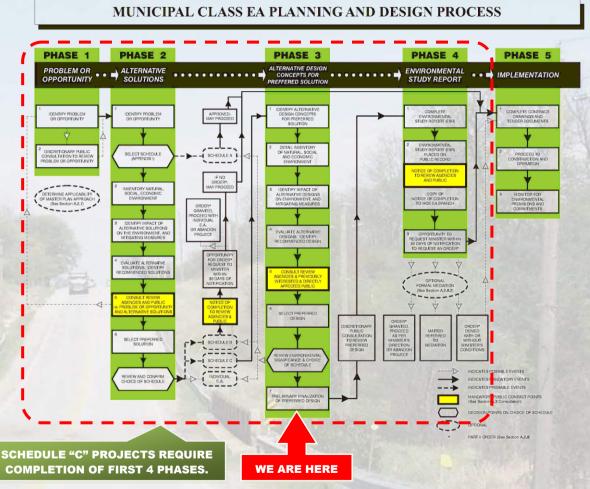


⇒ The project limits for this study extend from Tremaine Road (Regional Road 22) in the west to Highway 407 in the east, a length of approximately 12.5 kilometres.



# THE EA PROCESS

- ⇒ The "Class Environmental Assessment (EA)" process is a formal planning process approved under the Ontario Environmental Assessment Act that must be undertaken in advance of road, water and wastewater construction projects.
- ⇒ The process ensures that all reasonable alternatives are considered and that a selected alternative would have minimal impact on the surrounding environment.

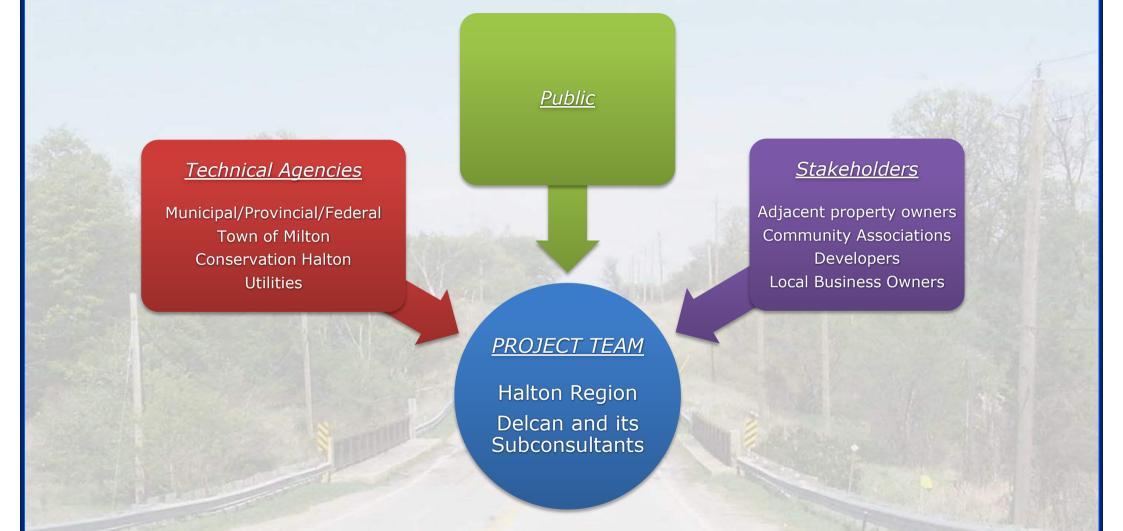


⇒ This project is being planned as a "Schedule C" Class EA project.





# **STUDY ORGANIZATION**



Britannia Road (Regional Road 6) Transportation Corridor Improvements Class EA, Region of Halton





# **PURPOSE OF THE EA STUDY**

The Purpose of the EA Study is to conduct a Schedule C Class Environmental Assessment to:

- ⇒ address existing/future capacity deficiencies:
  - ⇒ confirmed by the Halton Transportation Master Plan Update.
  - ⇒ resulting from proposed Boyne Survey Secondary Plan/Milton Education Village and other area developments.
- ⇒ consider the effects of all aspects of environment and systematic evaluation of alternatives.
- ⇒ develop preliminary preferred design(s) of recommended alternative.

## Review opportunities for:

- ⇒ improved transit services.
- ⇒ improved pedestrian and bicycle facilities.
- ⇒ improved intersection operations.
- ⇒ streetscaping/landscaping.





# **INFORMATION PRESENTED AT PIC #1**

The following information was presented at the first Public Information Centre:

- ⇒ Study Background and Purpose
- **⇒** Existing Conditions
  - Transportation/Safety
  - Natural Environment
  - Socio-Economic Environment
  - Cultural Heritage Environment
  - Archaeological Assessment
- **⇒** Future Conditions
  - Land Use
  - Transportation
- ⇒ Problem/Opportunity Statement
- ⇒ Alternative Solutions
- ⇒ Evaluation Criteria





# <u>KEY COMMENTS – STAKEHOLDER/TECHNICAL AGENCIES AND PUBLIC CONSULTATION</u>

- ⇒ Support for widening of Britannia Road
- ⇒ Provisions for pedestrians and cyclists
- ⇒ Concerns for negative property impacts
- ⇒ Concerns for prevailing traffic congestion and high collision rates
- ⇒ Some apprehension about road widening resulting in increased speeds, car and truck volumes and accidents
- ⇒ Consideration of Natural Environment, including air and water quality
- ⇒ Consideration for the community of Omagh
- ⇒ Heritage features





# TECHNICAL STUDIES (ONGOING)

Existing site conditions were previously presented at the first Public Information Centre. A number of technical studies are being conducted, including:

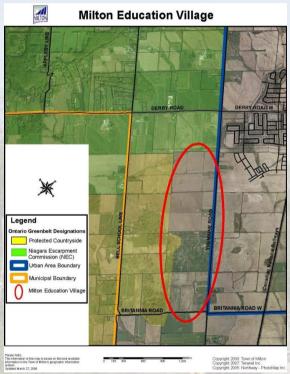
- ⇒ Natural Environment
- ⇒ Stage 1 Archaeological Assessment
- ⇒ Built Heritage Assessment
- ⇒ Structural Condition Review
- ⇒ Transportation Analysis
- *⇒* Safety Assessment
- ⇒ Noise Impact Assessment
- ⇒ Stormwater Management
- ⇒ Fluvial Geomorphology
- ⇒ Geotechnical Assessment

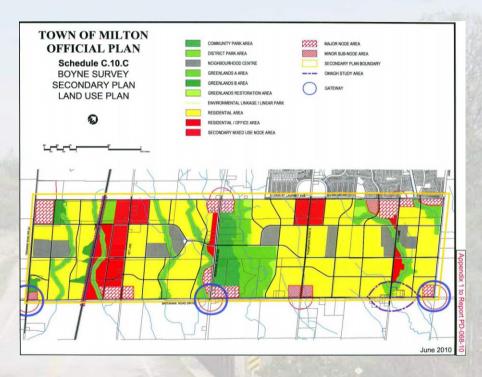




# **FUTURE CONDITIONS - LAND USE**

⇒ The Boyne Survey Secondary Plan extends from Britannia Road, north, between Tremaine Road and James Snow Parkway.





⇒ The Milton Education Village extends north of Britannia Road on the west side of Tremaine Road.





# **FUTURE (2031) CONDITIONS - TRANSPORTATION**

- ⇒ Peak hour traffic volumes on Britannia Road have increased at approximately 4 to 12% per annum since 2005.
- ⇒ Traffic volumes are expected to increase with continued development in Milton including the build-out of the Boyne Survey Secondary Plan by 2031.

2031 PM Peak Hour Volumes from Halton Transportation Planning Model (2031 Draft Recommended Transportation Network)

Road Section	Eastbound	Westbound
West of Regional Road 25	GPL: 1,000-1,160 veh/hr HOV: 250-300 veh/hr	GPL: 830-1,125 veh/hr HOV: 230-350 veh/hr
Regional Road 25 – Eighth Line	GPL: 1,060-1,610 veh/hr HOV: 300-700 veh/hr	GPL: 975-1,922 veh/hr HOV: 410-720 veh/hr
East of Eighth Line	GPL: 1,060-1,125 veh/hr HOV: 140-300 veh/hr	GPL: 820-1,250 veh/hr HOV: 180-420 veh/hr
GPL – general purpose lane		HOV – high occupancy lane

⇒ Projected 2031 travel demands justify widening Britannia Road





# **ALTERNATIVE SOLUTIONS**

Planning Alternative Solutions  Alternative 1 Do nothing		Description		
		The existing transportation system is not changed		
Alternative 2	Limit Development	Restrict development of the surrounding land now and in the future		
Alternative 3	Travel Demand Management Measures	Introduce Travel Demand Management measures (such as carpooling, etc).		
Alternative 4	Accommodate Other Travel Modes	Accommodate other modes of travel (e.g. transit, cycling, walking)		
Alternative 5	Intersection Improvements	Improve traffic signal timing and/or adding through and turn lanes at existing and proposed intersections		
Alternative 6	Improve Adjacent Roads	Widen adjacent north-south road networks (e.g. Lower Base Line Road)		
Alternative 7	Provide Additional Traffic Lanes	Provide additional capacity along Britannia Road with additional lanes		



# **EVALUATION OF ALTERNATIVE SOLUTIONS**

Alternativ	ves	Technical	Socio-Economic Environment	Natural Environment	Cost	Recommendation
1 Do Noti	thing	<ul> <li>× Traffic capacity deficiencies will continue to degrade</li> <li>× Does not address transit operations or pedestrian and cyclist requirements</li> <li>× Indirect impacts due to decreasing safety and increasing congestion from area development</li> <li>× Does not meet Regions Planning objectives</li> </ul>	<ul> <li>✓ No direct impacts to properties or business access</li> <li>✓ No impacts to archaeology and cultural heritage resources</li> <li>✓ No disruptions due to construction</li> </ul>	<ul> <li>× Poor air quality from increasing congestion</li> <li>✓ No direct impacts from construction to vegetation, wildlife and wildlife habitat</li> <li>✓ No direct impact to ground water and surface water</li> </ul>	<ul> <li>✓ No direct cost impacts from construction</li> <li>✓ No property costs</li> <li>✓ No direct increase in maintenance costs</li> </ul>	Not to be Carried Forward
2 Limit Fu Develop		× Traffic capacity deficiencies will continue to degrade due to background traffic growth × Does not address transit operations or pedestrian and cyclist requirements × Indirect impacts due to decreasing safety and increasing congestion from area development × Does not meet Regions Planning objectives	<ul> <li>✓ No direct impacts to properties or business access</li> <li>✓ No impacts to archaeology and cultural heritage resources</li> <li>✓ No disruptions due to construction</li> </ul>	<ul> <li>× Poor air quality from increasing congestion from background traffic/traffic outside the study area</li> <li>✓ No direct impacts from construction to vegetation, wildlife and wildlife habitat</li> <li>✓ No direct impact to ground water and surface water</li> </ul>	<ul> <li>✓ No direct cost impacts from construction</li> <li>✓ No property costs</li> <li>✓ No direct increase in maintenance costs</li> </ul>	Not to be Carried Forward
Trava Dema Manage Measu	and ement	<ul> <li>× Traffic capacity deficiencies will continue to degrade</li> <li>✓ Encourages increased transit use cycling and walking</li> <li>× Indirect impacts due to decreasing safety and increasing congestion from area development</li> <li>× Does not meet Regions Planning objectives</li> </ul>	<ul> <li>✓ No direct impacts to properties or business access</li> <li>✓ No impacts to archaeology and cultural heritage resources</li> <li>✓ No disruptions due to construction</li> </ul>	<ul> <li>× On its own, will not be able to eliminate decreasing air quality resulting from increasing congestion</li> <li>✓ No direct impacts from construction to vegetation, wildlife and wildlife habitat</li> <li>✓ No direct impact to ground water and surface water</li> </ul>	<ul> <li>✓ No direct cost impacts from construction</li> <li>✓ No property costs</li> <li>✓ No direct increase in maintenance costs</li> </ul>	Recommended to be Carried Forward
Accommo 4 Other Ti Mode	ravel	<ul> <li>✓ Provides minor improvements to local traffic operations</li> <li>✓ Addresses pedestrian and cyclist requirements</li> <li>× Indirect impacts due to decreasing safety and increasing congestion from area development</li> <li>× Does not meet Regions Planning objectives</li> </ul>	Potential for some impacts to properties or business access Potential for some impacts to archaeology and cultural heritage resources Some disruptions due to construction	<ul> <li>× On its own, will not be able to eliminate decreasing air quality resulting from increasing congestion</li> <li>✓ No direct impacts from construction to vegetation, wildlife and wildlife habitat</li> <li>✓ No direct impact to ground water and surface water</li> </ul>	<ul> <li>Moderate cost impacts from construction</li> <li>Moderate property costs</li> <li>Minor direct increase in maintenance costs</li> </ul>	Recommended to be Carried Forward
5 Intersed Improve		<ul> <li>✓ Provides minor improvements to local traffic operations</li> <li>× Does not address pedestrian and cyclist requirements</li> <li>× Indirect impacts due to decreasing safety and increasing congestion from area development</li> <li>× Does not meet Regions Planning objectives</li> </ul>	Potential for some impacts to properties or business access Potential for some impacts to archaeology and cultural heritage resources Some disruptions due to construction	<ul> <li>On its own, will not be able to eliminate decreasing air quality resulting from increasing congestion</li> <li>Potential for some impacts from construction to vegetation, wildlife and wildlife habitat</li> <li>Potential for some impacts to ground water and surface water</li> </ul>	<ul> <li>Moderate cost impacts from construction</li> <li>Moderate property costs</li> <li>Minor direct increase in maintenance costs</li> </ul>	Recommended to be Carried Forward
Impro 6 Adjace Road	ent	<ul> <li>✓ Provides minor improvements to local traffic operations</li> <li>× Does not address pedestrian and cyclist requirements along study route</li> <li>× Indirect impacts due to decreasing safety and increasing congestion from area development</li> <li>× Does not meet Regions Planning objectives</li> </ul>	× Direct impacts to properties or business access along adjacent roads × Direct impacts to archaeology and cultural heritage resources on adjacent roads × Construction disruptions on adjacent roads	<ul> <li>Poor air quality from increasing congestion</li> <li>Direct impacts from construction to</li> <li>vegetation, wildlife and wildlife habitat along adjacent roads on adjacent roads</li> <li>Direct impact to ground water and surface water on adjacent roads</li> </ul>	X High direct costs due to construction on adjacent roads     X High direct costs due to property requirements on adjacent roads     X High direct increase in maintenance costs on adjacent roads	Not to be Carried Forward
Provid 7 Additio Traffic L	onal	<ul> <li>✓ Positive impact on overall traffic operations</li> <li>✓ Allows for pedestrian and cyclist requirements</li> <li>✓ Positive impact on safety and</li> <li>✓ Meets Regions Planning objectives</li> </ul>	Moderate impacts to properties or business access     Moderate impacts to archaeology and cultural heritage resources     Temporary disruptions due to construction	<ul> <li>✓ Positive net effect to air quality due to reduced congestion</li> <li>✓ Direct impacts to vegetation, wildlife and wildlife habitat from construction</li> <li>✓ Direct impact to ground water and surface water</li> </ul>	× High construction cost × High property costs × Direct increase in maintenance costs	Recommended to be Carried Forward





# PRELIMINARY PREFERRED SOLUTION

The Preliminary Preferred Solution includes a combination of the following:

- Alt. 3. Travel Demand Management Measures
- Alt. 4. Accommodate other modes of travel (e.g. transit, cycling, walking)
- Alt. 5. Improve traffic signal timing and/or adding turn lanes at existing and proposed intersections
- Alt. 7. Provide additional capacity along Britannia Road with additional lanes



# HALTON REGION'S TRANSPORTATION MASTER PLAN (ONGOING)



### Transportation Master Plan (TMP)

### What is a TMP?

- A document that identifies transportation improvements for a long-range planning horizon (20 - 25 years)
- Integrates municipal transportation planning and environmental assessment objectives into a comprehensive planning
- Previous Regional TMP was developed in







A Halton The Road to Change Halton Region Transportation Master Plan 2031





### **Guiding Principles**

The TMP was developed with the following principles:

- Balanced Needs provide choice for the travel needs of residents
- Healthy Communities support a healthy and active lifestyle
- Economic Vitality transportation will be a major contributor to the region's
- Sustainability balance economic, social and environmental goals
- Well-Maintained Infrastructure keep the region's infrastructure in good state of



**Halton** The **Road** to **Change** Halton Region Transportation Master Plan 2031





### **TMP Vision**

A sustainable transportation system to 2031 that is:

Safe

- Efficient
- Convenient
- · Considerate of the environment
- Accessible Affordable
- · Energy efficient



**A Halton** The Road to Change Halton Region Transportation Master Plan 2031





### **Transportation 2031**

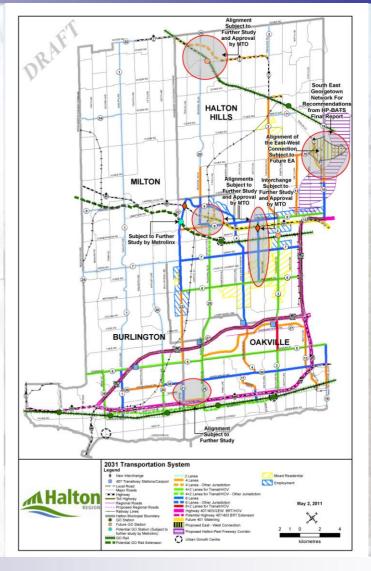
Travel demand by 2031 will be served primarily by four modes:

- Active Transportation (cycling, walking)
- Travel Demand Management (carpooling)
- Transit
- Road Network Improvements





**A Halton** The **Road** to **Change** Halton Region Transportation Master Plan 2031



Britannia Road (Regional Road 6) **Transportation Corridor Improvements** Class EA, Region of Halton





# **ALTERNATIVE DESIGN CONCEPTS**

А	Iternative Design Concepts	Description
1	Do nothing	The existing transportation system is not changed. (required to be considered for comparison purposes, as per the EA Act)
2	Symmetrical Widening	The new road alignment would follow the centreline of the existing road. For the ultimate 47.0m ROW, this new ROW would extend 23.5m on either side of the existing centreline. (eliminated from consideration due to significant impacts)
3	Widening to the North	Property line along south side would form the limit of the new ROW, with the widening occurring entirely on the north side of Britannia Road. (eliminated from consideration due to significant impacts)
4	Widening to the South  Property line along north side would form the limit of the new ROW, with the widening occurring on the south side of Britannia Road. (eliminated from consideration due to significant impacts)	
5a	Minimize Impacts, follow existing ROW	The new road alignment would deviate from the centreline of the existing road but generally follow the existing ROW, with the intent of minimizing impacts to properties/natural environment/archaeological features, etc.
5b	Minimize Impacts, Bypass(es) to the North	The new road alignment would deviate from the centreline of the existing road but generally follow the existing ROW, with the intent of minimizing impacts to properties/natural environment/archaeological features, etc. Where significant impacts are unavoidable, the road alignment would bypass the constraint areas to the north of the existing road.
5c	Minimize Impacts, Bypass(es) to the South	The new road alignment would deviate from the centreline of the existing road but generally follow the existing ROW, with the intent of minimizing impacts to properties/natural environment/archaeological features, etc. Where significant impacts are unavoidable, the road alignment would bypass the constraint areas to the south of the existing road.





# ALTERNATIVE DESIGN CONCEPT CONSIDERATIONS

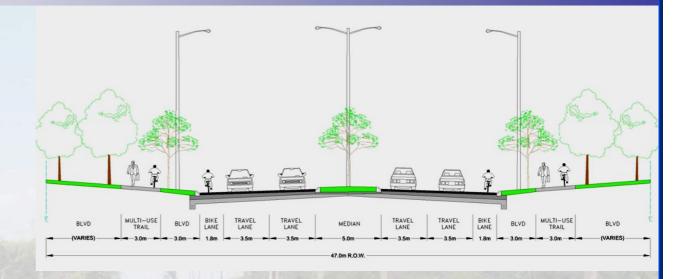
In developing the various design concepts, the following aspects were considered:

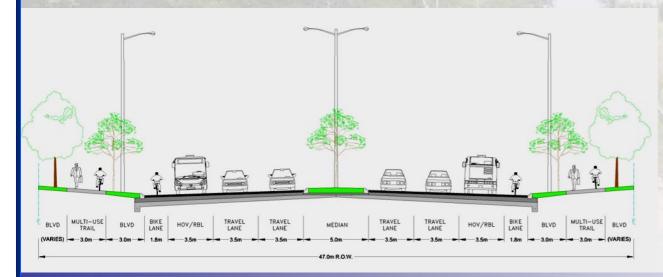
- ⇒ Recommendations from the ongoing Halton Region TMP update:
  - ⇒ Ultimate 47m ROW width
  - ⇒ Interim 4 lane urban cross-section Construction to start 2013 (estimated)
  - ⇒ Ultimate Six lane cross-section with centre median, boulevard and 3m multi-use paths
- ⇒ Minimizing impacts to:
  - ⇒ Residential Properties
  - ⇒ Natural Environment (i.e. woodlots, etc.)
  - ⇒ Built Heritage Sites
  - ⇒ Archaeologically Significant Areas
- ⇒ Minimizing construction costs
- ⇒ Maximizing traffic operations and safety



# **TYPICAL CROSS SECTIONS**

INTERIM
4-LANE CROSS SECTION
(CONSTRUCTION FROM
2013 TO 2016)





**ULTIMATE 6-LANE CROSS SECTION** 

Britannia Road (Regional Road 6) Transportation Corridor Improvements Class EA, Region of Halton





# **NEXT STEPS**

Following this Public Information Centre, the Region of Halton and its consultant, Delcan, will:

- ⇒ Review and respond to all written questions and comments.
- ⇒ Identify the net impacts of the alternative design concepts on the environment, undertake a comparative evaluation and develop a Preliminary Preferred Design.
- ⇒ Select the Preferred design concept based on evaluation criteria and consideration of comments received from the public/agencies.
- ⇒ Conduct a third Public Information Centre in Fall 2011 and present the preliminary preferred design concept.



# THANK YOU FOR ATTENDING THE SECOND PIC

Please provide you comments pertaining to the material presented here tonight by completing a comment sheet and depositing it in the provided comment drop-box. Alternatively, please mail, fax, or email your comment sheet by June 24, 2011

If you have any questions or comments after tonight's meeting, please contact:

Mr. Andrew Head, C.E.T.
Project Manager
Transportation Services

Regional Municipality of Halton 1151 Bronte Road Oakville, Ontario L6M 3L1

Telephone: 905-825-6000, Ext. 7475

Fax: 905-847-2192

Email: andrew.head@halton.ca

Mr. Manoj Dilwaria
B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS
Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com

We appreciate your time and interest in this study and thank you for attending the public information centre.





# NOTICE OF PUBLIC INFORMATION CENTRE #3 CLASS ENVIRONMENTAL ASSESSMENT STUDY

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) to Highway 407,
Town of Milton
PR-2667

### **Background**

The Halton Transportation Master Plan identified the need to address transportation capacity issues along the Britannia Road (Regional Road 6) corridor from Tremaine Road (Regional Road 22) to Highway 407. Therefore, Halton Region is undertaking a separate Class Environmental Assessment to consider a wide range of options for transportation corridor improvements in the Britannia Road corridor to the year 2031.

### **Problem Statement**

In order to best address operational deficiencies and the need for additional capacity along the Britannia Road corridor, a number of road improvement alternatives are being examined as part of the study including widening of the roadway, cross-sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

### The Process

The first Public Information Centre (PIC) was held on January 26<sup>th</sup>, 2011. Thereafter, the process began for the development of design alternatives, taking into consideration the problem being addressed, alternative solutions, environmental impacts and comments that were received from the Town of Milton, regulatory agencies and the public.

A second Public Information Centre was held to review the preliminary findings and provide additional opportunity for public comments. Following this PIC, design alternatives were evaluated in consideration of comments received.

A third and final PIC is being held to present the design alternatives and the preliminary preferred alternative.

To comply with the Environmental Assessments Act, this Study is being conducted in accordance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007), which is approved under the Ontario Environmental Assessment Act.

This PIC will provide an opportunity for you to review the study findings, provide additional comments on the design alternatives and discuss any questions or concerns with representatives from Halton Region and Delcan Corporation. This notice advises the public of the third Public Information Centre being held:

Wednesday, December 14, 2011 7:00 PM to 9:00 PM (Presentation at 7:00 PM) Boyne Community Centre, 2287 Britannia Road, Milton.

If you have any questions related to the studies or wish to be added to the mailing list, please contact:

Mr. Andrew Head C.E.T.
Project Manager
Halton Region

Phone: 905-825-6000, Ext. 7475

Fax: 905-847-2192

Email: andrew.head@halton.ca

Mr. Manoj Dilwaria, B.Eng., M.Pl. (Transp.), MCIP, RPP, AVS

Principal and Technical Director

**Delcan Corporation** 

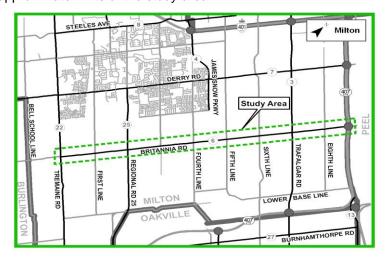
Phone: 905-631-0500 Ext. 6408

Fax: 905-631-0570

Email:m.dilwaria@delcan.com

Additional information related to the studies and consultation process may be obtained through the website:

The map below shows the approximate limits of the study area.









Delcan Ref. No: TN1390 November 30, 2011 Region Ref No: PR-2667

Re: **Status Update** 

> **Britannia Road (Regional Road 6) Transportation Corridor Improvements** From Tremaine Road (Regional Road 22) to Highway 407, Halton Region **Class Environmental Assessment Study**

As you are aware, Delcan, on behalf of the Halton Region, is conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407. This study is being conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007), which is approved under the Ontario Environmental Assessment Act. In September of 2010 a Notice of Study Commencement was advertised and forwarded to all stakeholders, technical agencies (including yourself) and affected members of the public, signalling the commencement of this study.

In order to best address operational deficiencies and the need for additional capacity along the corridor, a number of road improvement alternatives have been examined as part of the study including widening of the roadway, cross sectional requirements, intersection improvements, over-all traffic operations, as well as the impact of such improvements on the social and natural environments.

Since the study was initiated, we have compiled and reviewed various background studies and information. Two (2) Public Information Centre's (PIC's) have been conducted to date, the first on January 26, 2011 and the second on June 8, 2011. A number of meetings with the Project Team and individual stakeholders have also been conducted. Based on a detailed evaluation of the various road improvement alternatives, a preliminary preferred design has been selected.

A third PIC is scheduled to present the study findings as well as the preliminary preferred design. The third PIC is to be held as follows:

Wednesday, December 14th, 2011 Date:

7:00 p.m. to 9:00 p.m. (Presentation at 7:00 p.m.) Time:

Place: Boyne Community Centre, 2287 Britannia Road, Milton

Following the PIC, digital versions of the display boards will be posted for viewing on the Regions website. Information on the study, including the digital versions of the information displayed at the previous PIC's are also available for viewing on Halton Region's website. The website can be found at the following:

http://www.halton.ca/planning\_sustainability/environmental\_assessments\_\_eas\_/

If you have any questions or require additional information, please feel free to contact me directly at (905) 631-0500 ext. 6408 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Andrew Head, C.E.T. – Halton Region CC:





Public Information Centre No. 3 December 14, 2011

# Please return the comment sheet by: January 6, 2012.

Addre	ss:	
Ema	ail:	Phone/fax:
Britanni inutes to	a Road from Tremaine Road to Higl	ndertaking a Class Environmental Assessment (Class EA) Study for improvening and suggestions are important to us. Please take comments will be considered and included in the documentation of the Class
My pro	perty/interest is: (please check al	that apply).
[ ] Direc	et access onto Britannia Road	[ ] Residential property
[] User	of Britannia Road	[ ] Commercial/industrial property
[] Gene	eral interest	[ ] Institutional property
[]Othe	r:	
How fr	equently do you use Britannia Ro	ad between Tremaine Road and Highway 407?
		•
[ ] Daily	[ ] Weekly	[ ] Monthly [ ] Rarely
a. T		
_	he considerations made in develo	oing the Alternative Design Concepts (board 10):
		oing the Alternative Design Concepts (board 10):  oing the Alternative Design Concepts at Omagh (board 11):





Public Information Centre No. 3 December 14, 2011

### **PUBLIC COMMENT SHEET**

C.	The Alternative Design Concepts considered (board 12):
d.	The evaluation of the Alternative Design Concepts (board 13):
e.	The selection of the Preliminary Preferred Design (board 14):
f.	Are there any additional considerations that you feel should be used in the evaluation of the Alternative Design Concepts?:





Public Information Centre No. 3 December 14, 2011

### **PUBLIC COMMENT SHEET**

4. How did	you hear about th	is public meeting	?			
[] Newspa	aper Ad	[ ] Notice in the	e mail	[ ] Other:		
5. Please in	dicate your satisf	action with the fo	llowing:			
		Satisfied Yes / No	If not, please	specify your pr	eference here.	
Location of	meeting					
Time of mee	ting					
Day of week						
6. On a sca	le of 1 to 5, where	1 = "not at all" ar	nd 5 = "very", pleas	se rate the follo	wing by circling the appropriate nu	ımber:
a. How i	nformative were tl	ne display boards	?			
Not at A	I	Some	ewhat		Very	
1	2	;	3	4	5	
b. How h	nelpful were the st	aff and consultan	ts in attendance?			
Not at A	I	Some	ewhat		Very	
1	2	;	3	4	5	
7. Were all	your questions an	swered satisfacto	orily?			
[]	'es	[ ] No				

### THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by January 6, 2012 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 6408

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET Other Comments:**

	TITLE	FIRST NAME	LAST NAME	JOB TITLE	COMPANY	ADDRESS 1	ADDRESS 2	CITY	PROVINCE	POSTAL CODE
		Louise	Knox		Canadian Environmental Assessment Agency	55 St. Clair Avenue East, 9th Floor		Toronto	Ontario	M4T 1M2
	Ms.	Sheila	Allan		Environment Canada	867 Lakeshore Road	P.O. Box 5050	Burlington	Ontario	L7R 4A6
	۸r.	Rob	Dobos		Environment Canada - Environmental Assessment and Federal Programs			Burlington	Ontario	L7R 4A6
	۸r.	Steven	Woolfenden	Fish Habitat Biologist, Southern Ontario District - Burlington Office	Fisheries and Oceans Canada	3027 Harvester Road, Suite 304		Burlington	Ontario	L7R 4K3
- 1	Ms.	Karen	Ralph	Area Operations Chief for Ontario	Fisheries and Oceans Canada - OGLA Program Services	867 Lakeshore Road	Box 5050	Burlington	Ontario	L7R 4A6
- 1	۸r.	David	Cooper	Manager, Environmental & Land Use Policy	Ministry of Agriculture Food and Rural Affairs	1 Stone Road W	3rd Floor	Guelph	Ontario	N1G 4Y2
		Winston	Wong, MCIP		Ministry of Culture		4th Floor	Toronto	Ontario	M7A 2R9
- 1	۸r.	Vincent	Sferrazza	District Manager, Halton-Peel District Office	Ministry of the Environment		4145 North Service Road	Burlington	Ontario	L7L 6A3
		Alex	Phillips		Ministry of the Environment			North York	Ontario	M2M 4J1
		Sara	Paul		Ministry of the Environment, Attn: Michael Harrison		Floor 12A	Toronto	Ontario	M4V 1L5
		Bruce	Singbush	Manager	Central Municipal Services Office, Ministry of Municipal Affairs & Housing	777 Bay Street, 2nd Floor		Toronto	Ontario	M5G 2E5
		John	Pisapio		Ministry of Natural Resources	50 Bloomington Road West		Aurora	Ontario	L4G 3G8
		Bob	Edmondson		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Jennifer	Lawrence		Conservation Halton	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
		Mark	Frawley	Director	Niagara Escarpment Commission	232 Guelph Street		Georgetown,	Ontario	L7G 4B1
		John	MacKenzie		Asset Review, Ontario Realty Corporation	11th Floor, Ferguson Block, 77 Wellesley Street W.		Toronto	Ontario	M7A 1N3
		Vic	Gillman		Fisheries And Habitat Management - Ontario, Department of Fisheries and Oceans, Bayfield Institute		P.O. Box 5050	Burlington	Ontario	L7R 4A6
		Lou	Politano		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 2nd Floor		Toronto	Ontario	M3M 1J8
		Larry	Smith		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 6th Floor		Toronto	Ontario	M3M 1J8
		Brian	Ogden		Ministry of Transportation	1201 Wilson Avenue, Building 'B', 3rd Floor		Toronto	Ontario	M3M 1J8
		Jason	White		Ministry of Transportation	1201 Wilson Avenue, Building 'D', 4th Floor		Toronto	Ontario	M3M 1J8
		Pat	Stone		Ontario Provincial Police	203 Steeles Avenue West		Milton	Ontario	L7T 1Y1
		Jeremy	Craigs	Environmental Officer	Transport Canada - Ontario Region		4th Floor	North York	Ontario	M2N 6A5
		Jennifer	Hughes		Transport Canada - Ontario Region			North York	Ontario	M2N 6A5 L4K 4B9
		John	McTaggert		C.N. Rail			Concord	Ontario	
		Dennis	Pasch		C.P. Rail (St. Lawrence & Hudson)	20 Studhomme Road		Hamilton	Ontario	L8N 4B6
		Gary	Crowell		Halton Region Police Services			Oakville	Ontario	L6J 5C7
	Detective Consta		Martin		Halton Region Police Service		Box 2700	Oakville	Ontario	L6M 3L1
		Nick	Buczynsky Kina		Halton Region - Emergency Management Halton Region - Ambulance Services	1151 Bronte Road 1151 Bronte Road		Oakville Oakville	Ontario Ontario	L6M 3L1
		Jim Alana	King Fulford	Director of Land Ambulance Services		1151 Bronte Road 1151 Bronte Road		Oakville	Ontario	L6M 3L1 L6M 3L1
		Alana Stephen	Fulford Baker		Halton E.E.A.C. (Ecological & Environmental Advisory Committee) H.A.A.C. (Halton Agricultural Advisory Committee)		RR #1	Acton	Ontario	L6M 3L1
		Nathan	Stewart			1151 Bronte Road		Oakville	Ontario	L/J 2L/
		June	Barnes	President	Halton Regional Cycling Advisory Committee Halton Region Federation of Agriculture		RR #1	Milton	Ontario	19T 2X5
		Linda	Tichell		Halton Region Federation of Agriculture Halton Region Museum	RR #3		Milton	Ontario	L9T 2X5
		Hassaan	Basit		Conservation Halton	2596 Britannia Rd W		Burlington	Ontario	L7P 0G3
		Susan	Lathan	Regional Clerk and Director of Council Services	Regional Clerks Office	1151 Bronte Road		Oakville	Ontario	L/F 003
		Craig	White	Director, Highway Operations	407 ETR Concession Co. Ltd.	6300 Steeles Avenue West		Milton	Ontario	L4H 1J1
		Paul			The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	19T 675
		Bill	Cripps Mann	Director, Engineering Services Director, Planning and Development Services	The Corporation of the Town of Milton	150 Mary Street		Milton	Ontario	L9T 6Z5
		Brian	Ellsworth	Fire Chief, Milton Fire Department	Town Fire Department	Fire Station #1	405 Steeles Avenue	Milton	Ontario	L9T 3G6
		Bev	McCarthy		Milton Community Services	150 Mary Street	400 Steeles Avenue	Milton	Ontario	L9T 6Z5
		Ann	Fisher		Heritage Milton	43 Brown Street		Milton	Ontario	L9T 5H2
		Troy	McHarg		Town of Milton's Clerks Office	150 Mary Street		Milton	Ontario	L9T 6Z5
		Tony	D'Alessandro		Milton Transit	150 Mary Street		Milton	Ontario	L9T 6Z5
		Domenico	Renzella	Administrator of Planning, Assessment and Transportation	Halton Catholic District School Board		P.O. Box 5308	Burlington	Ontario	L7R 4L3
		Sandra	Morgan		Halton Catholic District School Board			Burlington	Ontario	17R 4L3
		Elaine	Westerhof	Manager of Planning	Halton District School Board		P.O. Box 5005	Burlington	Ontario	L7R 3Z2
		Karen	Lacroix	Manager of Transportation	Halton District School Board	2050 Guelph Line		Burlington	Ontario	L7R 3Z2
		Lindsey	Ross		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
		Janice	Young		Bell Canada			Scarborough	Ontario	M1P 4W2
		Carol	Goossens		Bell Canada		6th Floor	Hamilton	Ontario	L8N 3H2
	Λs.	L	Cane	Planning Coordinator	COGECO	695 Lawrence Road		Hamilton	Ontario	L8K 6P1
		Brian	McCormick		Hydro One Networks Inc.	483 Bay Street	14th Floor	Toronto	Ontario	M5G 2P5
i	۸r.	Tony	lerullo	Manager	Hydro One Inc.		14th Floor	Toronto	Ontario	M5G 2P5
		Russ	Mcl ean		Enbridge Gas Distribution Inc.	500 Consumers Road		North York	Ontario	M2.I 1P8
	****	Paul	Whelan	Pipeline Technician	Trans Canada Pipelines	1020 Rymal Road East		Hamilton	Ontario	L8W 3N6
		Bob	Quick		Telus	82 Locust Street		Kitchener	Ontario	N2H 1W9
	۸r.	Bob	Wellington	District Engineer	Union Gas Ltd.	360 Strathearne Avenue N.	P.O. Box 10	Hamilton	Ontario	L8H 5L1
		Ann	Newman		Enbridge Pipelines Inc.		P.O. Box 128	Sarnia	Ontario	N7T 7H8
i	Иs.	Marion	Wright	OPE Co-ordinator - GTA West	Rogers Cable Communications Inc.	3573 Wolfedale Road		Mississauga	Ontario	L5C 3T6
		Satish	Kumar Korpal				Suite 310		Ontario	L4B 3P6
i	۸r.	Greg	Johnston	<del>.</del>	Allstream	50 Worcester Road		Etobicoke	Ontario	M9W 5X2
		George	Goulah		AT&T Canada	50 Worcester Road		Toronto	Ontario	M9W 5X2
	Ms.	Angela	Burley		Microcell	20 Bay Street	Suite 1601	Toronto	Ontario	M5J 2N8
- 1	۸r.	Frank	Lasowski	President & CEO	Milton Hydro Distribution Inc	8069 Lawson Rd		Milton	Ontario	L9T 5C4
	Chief	James	Marsden		Alderville First Nation	PO Box 46		Roseneath	Ontario	K0K 2X0
- 1	۸r.	Alan	Dokis		Anishinabek Nation	P.O. Box 711		North Bay	Ontario	
- 1	۸r.	Rolanda	Elijah	Director of Intergovernmental Affairs	Association of Iroquois & Allied Indians	387 Princess Avenue		London	Ontario	N6B 2A7
	۸r.	David	Donnelly	Gilbert's LLP Lawyers   Patent & Trademark Agents	Founding First Nation Circle	49 Wellington St. East, The Flatiron Building		Toronto	Ontario	M5E 1C9
		Laurie	Carr		Hiawatha First Nation	R.R. 2		Keene	Ontario	K0L 2G0
		William	K. Montour		Six Nations of the Grand River Territory	1953 Fourth Line, P.O.Box 5000		Ohsweken	Ontario	N0A 1H0
		Keith	Knott		Curve Lake First Nation	22 Winookeeda Road		Curve Lake	Ontario	K0L 1R0
	Grand Chief	Max	Gross Loil		Huronne-Wendat Nation	255 Place Chef-Michel Laveau		Wendake	Quebec	G0A 4V0
		Kris	Nahrgang		Kawartha-Nishnawbe First Nation of Burleigh Falls		General Delivery		Ontario	K0L 2H0
- 1		Leroy	Hill		Iroquois Confederacy	RR#2		Ohsweken	Ontario	N0A 1M0
		Bryan	LaForme		Mississaugas of the New Credit First Nation	2789 Mississauga Road, R.R.#6		Hagersville	Ontario	N0A 1H0
		Angie	Johnson		Mississaugas of Scugog Island	22521 Island Road		Port Perry	Ontario	L9L 1B6
		Tony	Belcourt	President	Metis Nation of Ontario	#3-500 Old St. Patrick St.		Ottawa	Ontario	K1N 9G4
- 1		Grant	Wedge		Ministry of the Attorney General - Aboriginal Legal Issues Office	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		Environment Unit			Indian and Northern Affairs Canada	25 St. Clair Avenue East, 8th Floor		Toronto	Ontario	M4T 1M2
		Pam	Wheaton		Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
-		Richard	Saunders	Director, Aboriginal Policy and Management Branch	Ontario Secretariat of Aboriginal Affairs:	720 Bay Street, 8th Floor		Toronto	Ontario	M5G 2K1
		E.	Ria Tzimas	Councel, Ministry of the Attorney General	Ministry of Aboriginal Affairs	Policy and Relationships Branch 720 Bay Street, 4th		Toronto	Ontario	M5G 2K1

# WELCOME

# **Class Environmental Assessment Study**

**Britannia Road (Regional Road 6) Transportation Corridor Improvements** 

Public Information Centre No. 3
December 14, 2011
7:00 p.m. to 9:00 p.m.
(Presentation at 7:00 p.m.)

Please sign in so we can keep you updated on this study.

Please provide your comments by January 6, 2012.





# **PURPOSE OF THE PUBLIC INFORMATION CENTRE**

The Purpose for holding this Public Information Centre is to:

- ⇒ Provide an opportunity for the public to review the display boards
- ⇒ Provide a summary of the first and second *Public Information Centers*
- ⇒ Present Alternative Design Concepts
- ⇒ Present evaluation of Alternative Design Concepts
- ⇒ Present Preliminary Preferred Design
- ⇒ Identify the next steps in the process



### STUDY AREA

⇒ Britannia Road is a major east-west 2-lane arterial roadway under the jurisdiction of the Region of Halton.

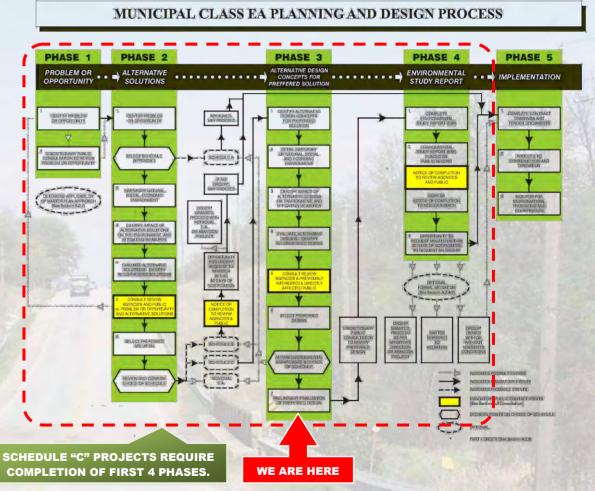


⇒ The project limits for this study extend from Tremaine Road (Regional Road 22) in the west to Highway 407 in the east, a length of approximately 12.5 kilometres.



### THE EA PROCESS

- ⇒ The "Class Environmental Assessment (EA)" process is a formal planning process approved under the Ontario Environmental Assessment Act that must be undertaken in advance of road, water and wastewater construction projects.
- ⇒ The process ensures that all reasonable alternatives are considered and that a selected alternative would have minimal impact on the surrounding environment.

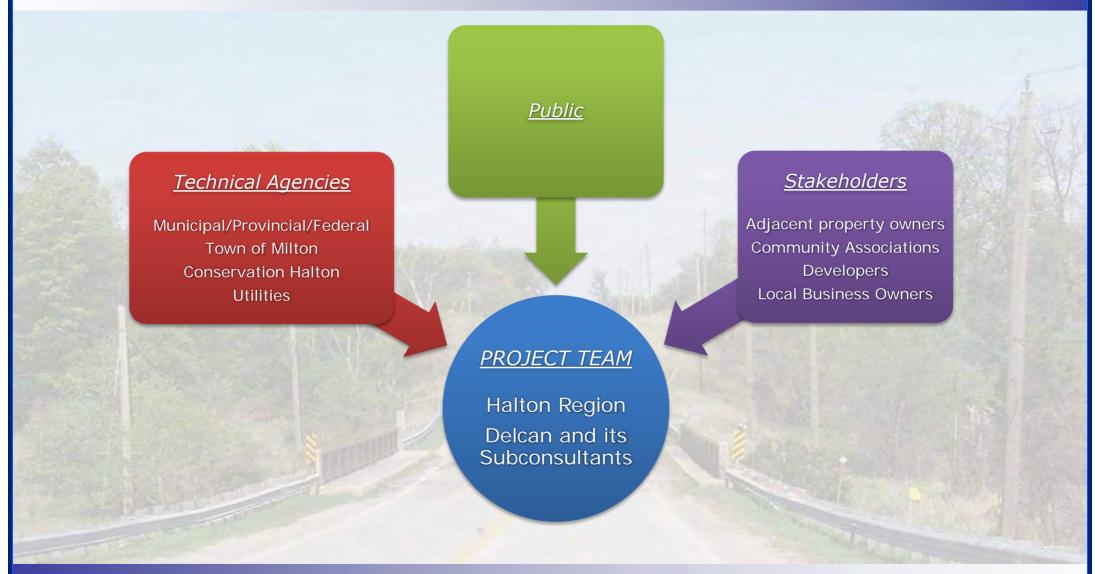


⇒ This project is being carried out as a "Schedule C" Class EA project.





### **STUDY ORGANIZATION**



Britannia Road (Regional Road 6) Transportation Corridor Improvements Class EA, Region of Halton





### **PURPOSE OF THE EA STUDY**

The Purpose of the EA Study is to conduct a Schedule C Class Environmental Assessment to:

- ⇒ address existing/future capacity deficiencies:
  - ⇒ confirmed by the Halton Transportation Master Plan Update.
  - ⇒ resulting from proposed Boyne Survey Secondary Plan/Milton Education Village and other area developments.
- ⇒ consider the effects of all aspects of environment and systematic evaluation of alternatives.
- ⇒ develop preliminary preferred design(s) of recommended alternative.

### Review opportunities for:

- ⇒ improved transit services.
- ⇒ improved pedestrian and bicycle facilities.
- ⇒ improved intersection operations.
- ⇒ streetscaping/landscaping.





### INFORMATION PRESENTED AT PREVIOUS PICS

The following information was presented at previous Public Information Centres:

	PIC #1		PIC #2
$\Rightarrow$	Study Background and Purpose	⇧	Study Background and Purpose
$\Rightarrow$	<ul><li>Existing Conditions</li><li>Transportation/Safety</li></ul>	$\Rightarrow$	Key Comments from Stakeholders, Technical Agencies and the Public
	<ul> <li>Natural Environment</li> </ul>	$\Rightarrow$	List of Ongoing Technical Studies
	<ul> <li>Socio-Economic Environment</li> </ul>	$\Rightarrow$	Future Conditions
	<ul> <li>Cultural Heritage Environment</li> </ul>	$\Rightarrow$	Alternative Solutions
	<ul> <li>Archaeological Assessment</li> </ul>	$\Rightarrow$	Evaluation of Alternative Solutions
$\Rightarrow$	Future Conditions	$\Rightarrow$	Preliminary Preferred Solution
	Land Use     Transportation	⇧	Halton Region's Transportation Master Plan Exhibits
	Transportation  Drable 12 (One and white State 12 and 12)	$\Rightarrow$	Alternative Design Concepts
$\Rightarrow \Rightarrow \Rightarrow$	Problem/Opportunity Statement Alternative Solutions	仓	Alternative Design Concept Considerations
$\Rightarrow$	Evaluation Criteria	$\Rightarrow$	Typical Cross Sections





# <u>KEY COMMENTS – STAKEHOLDER/TECHNICAL AGENCIES AND PUBLIC CONSULTATION</u>

- ⇒ Support for widening of Britannia Road
- ⇒ Provisions for pedestrians and cyclists
- ⇒ Concerns for property impacts
- ⇒ Concerns for existing and future traffic congestion
- ⇒ Concerns for traffic operations and safety
- ⇒ Timing of Construction
- ⇒ Consideration of Natural Environment
- ⇒ Consideration for the community of Omagh
- ⇒ Consideration of Heritage features



### TECHNICAL STUDIES (COMPLETED)

A number of technical studies have been completed and their findings have been utilized in the study process:

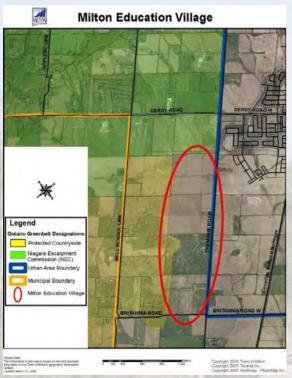
- ⇒ Natural Environment
- ⇒ Stage 1 Archaeological Assessment
- ⇒ Built Heritage Assessment
- ⇒ Structural Condition Review
- ⇒ Transportation Analysis
- ⇒ Safety Assessment
- ⇒ Noise Impact Assessment
- ⇒ Stormwater Management
- ⇒ Fluvial Geomorphology
- ⇒ Geotechnical Assessment (ongoing)

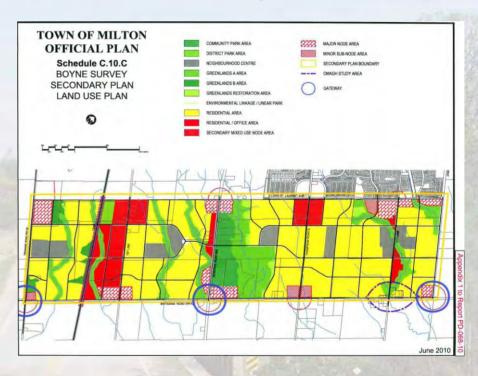




### **FUTURE CONDITIONS - LAND USE**

⇒ The Boyne Survey Secondary Plan extends from Britannia Road, north, between Tremaine Road and James Snow Parkway.





⇒ The Milton Education Village extends north of Britannia Road on the west side of Tremaine Road.



### ALTERNATIVE DESIGN CONCEPT CONSIDERATIONS

In developing the various design concepts, the following aspects were considered:

- ⇒ Recommendations from the Halton Region TMP update:
  - ⇒ Ultimate 47m ROW width
  - ⇒ Ultimate Six lane cross-section with centre median, boulevard and 3m multi-use paths
- ⇒ Minimizing impacts to:
  - ⇒ Residential Properties
  - ⇒ Natural Environment (i.e. woodlots, etc.)
  - ⇒ Built Heritage Sites
  - ⇒ Archaeologically Significant Areas
- ⇒ Minimizing construction costs
- ⇒ Maximizing traffic operations and safety



### ALTERNATIVE DESIGN CONCEPT CONSIDERATIONS - OMAGH

In developing the various design concepts, the following constraints were identified within Omagh:

- ⇒ Existing ROW 20m
- ⇒ Built-up properties close to existing ROW
- ⇒ Several Built and Cultural Heritage Features adjacent to existing ROW
- ⇒ Church and Cemetery adjacent to existing ROW

Due to these constraints, the ultimate 47m ROW width with six lane cross-section cannot be accommodated along the existing Britannia Road corridor through Omagh.

Bypasses to the north and south of Omagh will need to be considered in order to address the problem statement.



### **ALTERNATIVE DESIGN CONCEPTS**

А	Iternative Design Concepts	Description		
1	Do nothing	The existing transportation system is not changed. (required to be considered for comparison purposes, as per the EA Act)		
2	Symmetrical Widening	The new road alignment would follow the centreline of the existing road. For the ultimate 47.0m ROW, this new ROW would extend 23.5m on either side of the existing centreline. (eliminated from consideration due to significant impacts)		
3	Widening to the North	Property line along south side would form the limit of the new ROW, with the widening occurring entirely on the north side of Britannia Road. (eliminated from consideration due to significant impacts)		
4	Widening to the South	Property line along north side would form the limit of the new ROW, with the widening occurring entirely on the south side of Britannia Road. (eliminated from consideration due to significant impacts)		
5a	Minimize Impacts, follow existing ROW	The new road alignment would deviate from the centreline of the existing road but generally follow the existing ROW, with the intent of minimizing impacts to properties/natural environment/archaeological features, etc.		
5b	Minimize Impacts, Bypass(es) to the North	The new road alignment would deviate from the centreline of the existing road but generally follow the existing ROW, with the intent of minimizing impacts to properties/natural environment/archaeological features, etc. Where significant impacts are unavoidable, the road alignment would bypass the constraint areas to the north of the existing road.		
<b>5</b> c	Minimize Impacts, Bypass(es) to the South	The new road alignment would deviate from the centreline of the existing road but generally follow the existing ROW, with the intent of minimizing impacts to properties/natural environment/archaeological features, etc. Where significant impacts are unavoidable, the road alignment would bypass the constraint areas to the south of the existing road.		





### PRELIMINARY EVALUATION OF ALTERNATIVE DESIGNS

			ALTERNATIVE 1		ALTERNATIVE 5A		ALTERNATIVE 5B		ALTERNATIVE 5C
CATEGORY	CRITERIA	(DO NOTHING FOR COMPARISON PURPOSES ONLY)		(WIDEN ABOUT THE CENTRELINE)		(NORTH BYPASS)		(SOUTH BYPASS)	
Transportation/ Technical	<ul> <li>Capacity &amp; Level of Service</li> <li>Safety</li> <li>Access</li> <li>Active Transportation</li> <li>Geometric Standards</li> <li>Construction Staging</li> <li>Complies with Regional and Town Official Plans (OP) and Regional Transportation Master Plan (TMP)</li> <li>Construction and Property Costs</li> </ul>	0	<ul> <li>No improvements to existing roadway.</li> <li>Does not support the goals of the Region and Town OP and Region TMP.</li> <li>No cost.</li> </ul>	•	<ul> <li>Meets technical objectives through the Omagh community.</li> <li>Does not support the goals of the Region and Town OP and Region TMP.</li> <li>Significant capital and property costs.</li> </ul>	•	<ul> <li>Meets technical objectives.</li> <li>North alignment has significant impacts on existing farm operation.</li> <li>Supports the goals of the Region and Town OP and Region TMP.</li> <li>Significant capital and property costs.</li> </ul>	•	<ul> <li>Meets technical objectives.</li> <li>South alignment has moderate impacts on existing rural properties.</li> <li>Supports the goals of the Region and Town OP and Region TMP.</li> <li>Significant capital costs and moderate property costs.</li> </ul>
Cultural Environment	Effects on Archaeological Resources	•	No impacts.	•	Unknown potential impacts because improvements would occur within previously undisturbed areas.     Stage II archaeological assessment to confirm.	•	<ul> <li>Unknown potential impacts because improvements would occur within previously undisturbed areas.</li> <li>Stage II archaeological assessment to confirm.</li> </ul>	•	<ul> <li>Unknown potential impacts because improvements would occur within previously undisturbed areas.</li> <li>Stage II archaeological assessment to confirm.</li> </ul>
	Effects on Cultural and/or Built Heritage Features	•	No impacts.	0	Significant impacts to known Cultural and/or Built Heritage resources through the Omagh Community.	•	No impacts.	•	No impacts.
Natural Environment	Terrestrial Resources (Wildlife and Vegetation)	•	No Impacts.	•	No Impacts.	•	Minor impact on wildlife habitat due to vegetation clearing.	•	Minor impact on wildlife habitated due to vegetation clearing.
	Aquatic Species/ Watercourses     Stormwater Management     Natural Hazards	•	No impacts.	•	Minimal impacts to watercourses which can be mitigated.     No impacts to natural hazards.	•	<ul> <li>Minor increase in stormwater runoff due to additional pavement area.</li> <li>Some impacts to watercourses which can be mitigated.</li> <li>No impacts to natural hazards.</li> </ul>	•	<ul> <li>Minor increase in stormwater runoff due to additional pavement area.</li> <li>Some impacts to watercourses which can be mitigated.</li> <li>No impacts to natural hazards.</li> </ul>
Socio- Economic Environment	Effects On Rural & Residential Land Uses	0	Significant impacts including air and noise quality due to increasing congestion over time	0	<ul> <li>Temporary disruption (noise, access, dust) to existing businesses and residents on Britannia Road.</li> <li>Significant impacts to Omagh community.</li> </ul>	0	<ul> <li>Temporary disruption (noise, access, dust) to existing businesses and residents on Britannia Road.</li> <li>Significant impacts to existing farm operation.</li> </ul>	•	<ul> <li>Temporary disruption (noise, access, dust) to existing businesses and residents on Britannia Road.</li> <li>Moderate impacts to existing rural property.</li> </ul>
	Least Most Desirable Desirable	(	Not Recommended (carried forward for comparison purposes)		Not Recommended		Not Recommended		Recommended

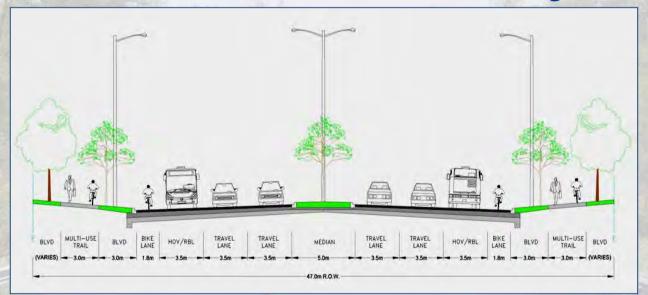




### PRELIMINARY PREFERRED DESIGN

The Preliminary Preferred alternative design is **Alternative 5c**:

The new road alignment would deviate from the centreline of the existing road but generally follow the existing ROW, with the intent of minimizing impacts to properties/natural environment/archaeological features, etc. Where significant impacts are unavoidable, the road alignment would bypass the constraint areas to the south of the existing road.



TYPICAL 6-LANE CROSS SECTION

Britannia Road (Regional Road 6) Transportation Corridor Improvements Class EA, Region of Halton





### **ROADWAY CONSTRUCTION STAGING**

- The construction of this roadway will start in 2013 from the west end (Tremaine Road) of the study limits
- This roadway has been included under the Region's accelerated infrastructure program (Council Report PW 63-11)
- The accelerated infrastructure program recommends constructing this roadway to the future ultimate widening from Tremaine Road to Regional Road 25, including the grade separation



### **NEXT STEPS**

Following this Public Information Centre, the Region of Halton and its consultant, Delcan, will:

- ⇒ Review and consider all written questions and comments.
- ⇒ Finalize the Preferred design based on the comments received from the public/agencies.
- ⇒ Prepare an Environmental Study Report
- ⇒ 30-Day public review of the Environmental Study Report (February/March 2012)
- ⇒ Detailed Design to be commenced in 2012
- ⇒ Construction starts in 2013



### THANK YOU FOR ATTENDING THE THIRD PIC

Please provide you comments pertaining to the material presented here tonight by completing a comment sheet and depositing it in the provided comment drop-box. Alternatively, please mail, fax, or email your comment sheet by January 6, 2012.

If you have any questions or comments after tonight's meeting, please contact:

Mr. Andrew Head, C.E.T.
Project Manager
Transportation Services

Regional Municipality of Halton 1151 Bronte Road Oakville, Ontario L6M 3L1

Telephone: 905-825-6000, Ext. 7475

Fax: 905-847-2192

Email: andrew.head@halton.ca

Mr. Manoj Dilwaria
B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS
Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

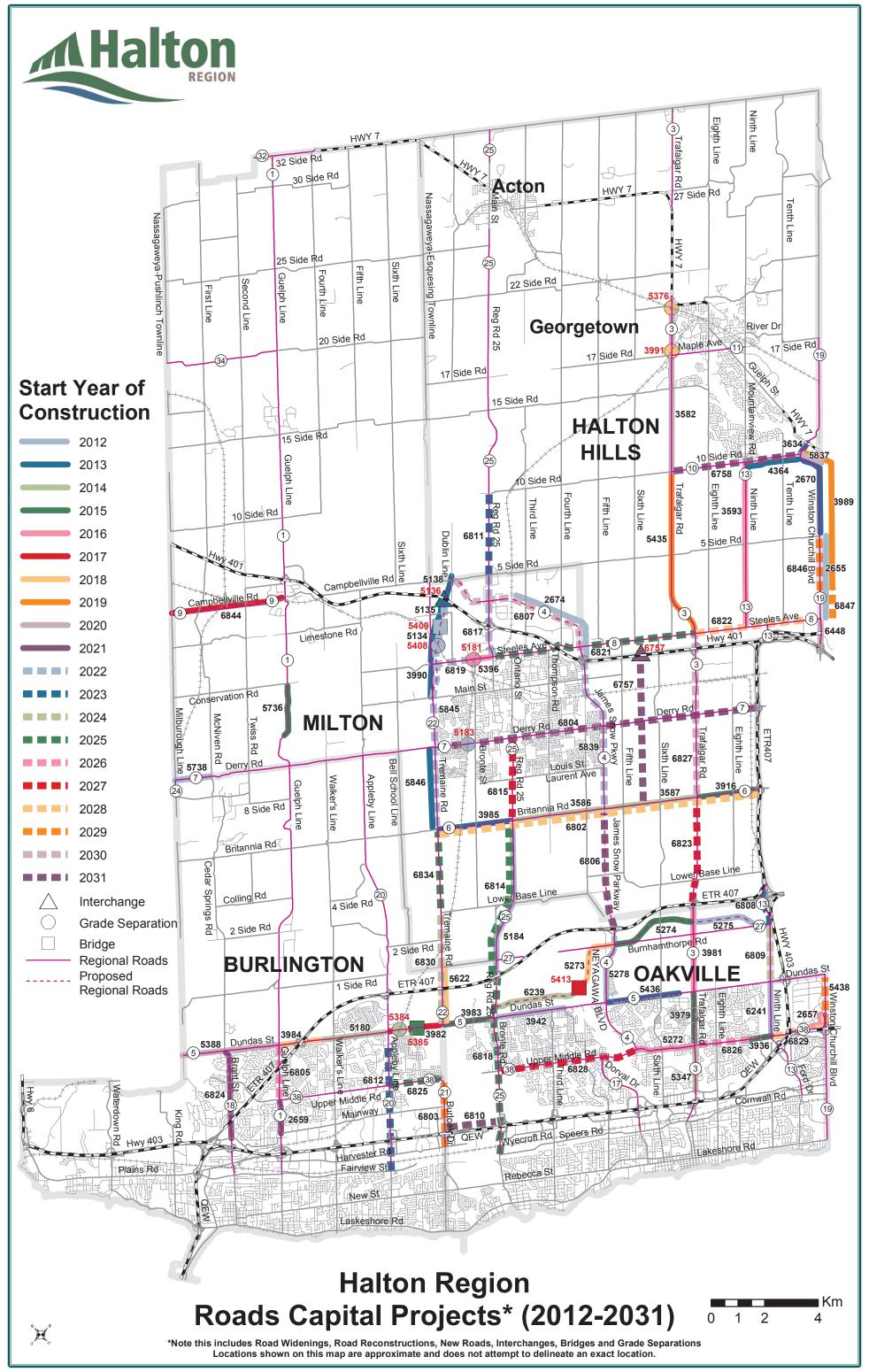
Telephone: 905-651-0500, Ext. 6408

Fax: 905-651-0570

Email: m.dilwaria@delcan.com

We appreciate your time and interest in this study and thank you for attending the public information centre.







3115 Harvester Road, Suite 102, Burlington, ON L7N 3N8
Tel: 905.631.0500 • Fax: 905.631.0570

www.delcan.com

September 22, 2011

Mr. Clarence McCann

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Re: Invitation to Meet with the Project Team

Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region Class Environmental Assessment Study

Delcan, on behalf of the Halton Region, has been conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407 (see study area figure below). In order to best address capacity deficiencies along Britannia Road, a number of road improvement alternatives are being examined as part of the study. In addition to possible widening of Britannia Road through the Omagh community, two additional alternatives are being considered. These include the consideration of new roadways bypassing the community either on the north or the south side. These alternatives were presented at the previous Public Information Centre (PIC) and are available for review on the Region of Halton's website.

Since the last PIC, we have received a considerable amount of feedback regarding these bypasses. We have noted all concerns raised for the various alternatives and based on this feedback, we are in the process of developing a preferred design solution for the Britannia Road corridor.

As part of our evaluation of the alternatives, we would like to meet with the property owners that could be directly impacted by these alternatives. As your property could be impacted, we would like to set up a meeting with you sometime in October. We will follow up with you to arrange for a suitable meeting time and date.

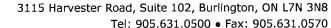
If you have any questions or require additional information, please feel free to contact me directly at (905) 631-0500 ext. 6408 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS

Principal and Technical Director

cc: Andrew Head, C.E.T. - Halton Region



www.delcan.com



September 29, 2011

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Ivano Manias
Trinison Management Corp.
c/o Orianna Glen Homes Corp.
8600 Dufferin Street
Concord,Ontario
L4K 5P5

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Delcan, on behalf of the Halton Region, has been conducting a Class Environmental Assessment Study for improvements to Britannia Road (Regional Road 6) from Tremaine Road (Regional Road 22) to Highway 407 (see study area figure below). In order to best address capacity deficiencies along Britannia Road, a number of road improvement alternatives are being examined as part of the study. In addition to possible widening of Britannia Road through the Omagh community, two additional alternatives are being considered. These include the consideration of new roadways bypassing the community either on the north or the south side. These alternatives were presented at the previous Public Information Centre (PIC) and are available for review on the Region of Halton's website.

Since the last PIC, we have received a considerable amount of feedback regarding these bypasses. We have noted all concerns raised for the various alternatives and based on this feedback, we are in the process of developing a preferred design solution for the Britannia Road corridor.

As part of our evaluation of the alternatives, we would like to meet with the property owners that could be directly impacted by these alternatives. As your property could be impacted, we would like to set up a meeting with you sometime during the week of October 24. We will follow up with you to arrange for a suitable meeting time and date.

If you have any questions or require additional information, please feel free to contact me directly at (905) 631-0500 ext. 6408 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

cc: Andrew Head, C.E.T. – Halton Region Tim Dennis, P. Eng. – Halton Region Regional Councillor Colin Best Regional Councillor Tony Lambert

Clarence McCann	Chris Matson Sundial Homes Limited 2906 Bloor Street West, Suite A Toronto, Ontario M8X 1B6  (416) 348-0077 ext. 221
Mil Con Four Britannia Developments 5400 Yonge Street, Suite 501 North York, Ontario M2N 5R5	Ivano Manias Trinison Management Corp. c/o Orianna Glen Homes Corp. 8600 Dufferin Street Concord, Ontario L4K 5P5  (905) 798-1127
Regional Councillor Colin Best Town of Milton 150 Mary Street Milton, ON L9T 6Z5	Regional Councillor Tony Lambert Town of Milton 150 Mary Street Milton, ON L9T 6Z5
Mr. Andrew Head, C.E.T. Project Manager Transportation Services Halton Region 1151 Bronte Road Oakville, Ontario L6M 3L1	Tim Dennis Director, Transportation Services Halton Region 1151 Bronte Road Oakville, Ontario L6M 3L1



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 13875 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

- Tuesday May 14, 2013 between 9:00am to 7:00pm
- Thursday May 23, 2013 between 1:00pm to 7:00pm
- Wednesday May 29, 2013 between 1:00pm to 7:00pm

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services - Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



April 25, 2013

Halton District School Board 2050 Guelph Line Burlington, ON L7P 5A8 Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 12705 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

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- Wednesday May 29, 2013 between 1:00pm to 7:00pm

#### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

HELD ON:

Thursday, May 29, 2013 at 1:00 p.m.

LOCATION:

Sheridan Room, Halton Region

PRESENT:

Melissa Green-Battiston

Alicia Jakaitas

Halton Region Delcan Corporation

Nick Palomba Andrew McGregor

Domenico Renzella

Delcan Corporation (Minutes) Halton District School Board

PURPOSE:

Meeting with property owner of 12705 Britannia Road (Saint Nicholas

Halton Region

School) to review proposed improvements on Britannia Road and

potential impacts to the private property.

#### **MINUTES:**

#### ITEM 1 - INTRODUCTIONS

1.1 Those at the meeting were introduced.

Information

Information

**ACTION BY:** 

## ITEM 2 - BRITANNIA ROAD CLASS EA STUDY - OVERVIEW AND STUDY STATUS

The study limits of the current Class EA Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to proposed road widening. This is in addition to the public process undertaken as part of the Environmental Assessment (EA) Study, which included stakeholder meetings and three public information centres.

### ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

3.1 Britannia Road is proposed to be widened from 2 to 4 lanes in the interim and to 6 lanes (with the exception of the portion of the roadway between Eighth Line and Highway 407) for the ultimate configuration. The project will move forward in three stages:

Information

- 6 lanes Tremaine Road to Regional Road 25 (2015)
- 4 lanes Regional Road 25 to James Snow Parkway (2016-2017)
- 4 lanes James Snow Parkway to Highway 407 (2018-2019)
- 6 lanes Regional Road 25 to Eighth Line (2031)
- 3.2 The nominal right-of-way on Britannia Road is 47 m, including a raised median to separate eastbound and westbound traffic.

Information



Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

**ACTION BY:** 

The ultimate roadway cross section will consist of:

- 4 general purpose travel lanes and two special purpose lanes. The special purpose lanes will be the outside travel lanes and will be used as High Occupancy Vehicle (HOV) / transit lanes.
- On road dedicated bicycle lanes in each direction.
- Urban cross-section with storm sewers.

Provision for a 3.0 m multi-use path will be provided on both sides of the roadway.

3.3 The new alignment for Britannia Road generally follows the existing ROW but deviates from the centreline of the existing road to minimize impacts to adjacent properties, natural environment, archaeological features, etc. Where significant impacts are unavoidable (e.g. Community of Omagh), the road alignment would bypass the constraint areas to the south of the existing road.

Information

### ITEM 4 - REVIEW OF PRELIMINARY PLAN

4.1 There will be some property required along the Britannia Road frontage of the property from the existing property line (approximately 9.8m at the west end, 11.2 m at the east end and 17.3 m for the proposed entrance). In total, approximately 2,610m² of property would be required to accommodate the proposed roadway widening, multi-use path, new intersection access, etc.

Information

4.2 The existing property currently has three full movement access points to Britannia Road (one for the parking area and two related to a front circulatory access roadway).

Information

- 4.3 Under the widened roadway the circulatory roadway will require modification and the access points would be converted to a right-in right-out as a result of the introduction of a raised median island.
- 4.4 Two access modification options were presented as there is some uncertainty at this time as to the ownership of the parcel of land immediately to the west of the school property. The Town of Milton has provided information that it is owned by the school board and Domenico Renzella stated that it is not.
- 4.5 Option 1 (preferred) The full movement parking lot access is proposed to be relocated to the west onto the adjacent

Information



Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MINU	DTES:	ACTION BY:
772100	property parcel and aligned with the Terra Greenhouse main access. This new intersection is proposed for signalization with left turn lanes on both Britannia Road and the access legs of the intersection. The north leg of this access will also provide a connection to Drumquin Park.	
4.6	Option 2 (alternate) – Depending on the ownership of the parcel of land between the park and the school property, Option 1 may not be possible. As such, a second option has been developed which includes a new signalized intersection to be located at the Drumquin Park access to Britannia Road. The main Terra Greenhouse driveway would also be relocated to this location. This new signalized intersection is proposed to have left turn lanes on both Britannia Road and the access legs of the intersection.	
	The school's full movement parking lot access would be restricted to a right-in/right-out via a median island. An access roadway from the north leg of this intersection to the school property could be discussed with the Town under this option.	
4.7	Landscaping will be provided in the median and also in the boulevard where possible. A landscaping plan will be developed during detailed design.	Information
4.8	A partial preliminary plan (hardcopy) in the proximity of the property was provided to Domineco under both the 4 lane and 6 lane roadway configurations.	Information
ITEM	5 - GENERAL DISCUSSION	Design
5.1	Typically with property acquisition, the Region's Realty Services section would approach the affected property owners well in advance of construction, and proceed with negotiating the acquisition of property requirements related to the project. An independent appraisal will be prepared and the affected property owners will be compensated at fair market value.	Region
5.2	The property owners may contact the Region's Realty Services at any time if they have any acquisition questions.	Information
5.3	The facility on the property is not currently being used as a school, as it is not permitted under the current zoning bylaw. The facility is currently being used for storage, with no plans for further use.	Information
5.4	Any issues with respect to future access impacts would need to	Delcan



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

**ACTION BY:** 

be addressed. Delcan will prepare a preliminary plan to show how the site can adequately accommodate the circulation of 5-6 school buses.

5.5 The property owner advised that the parcel of land immediately west of the school is not owned by the school board. The Region staff stated that the Town of Milton indicated that they do not own it either. The property owner and Region to look into this further.

Region/ Property Owner

- Property owner advised that there is a set process for the sale of school board property. This starts with the land having to be deemed surplus. Region stated that their reality department would deal with this in the subsequent stages of the project.
- 5.7 An ESR will be prepared documenting the decision making process of the Class EA Study. The public will have an opportunity to review the ESR and provide comments. The ESR is anticipated to be available to the public in 2013. At this time it is proposed that both access location options will be carried forward unless the property issue is resolved prior to filing the ESR.

Delcan

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.



#### **Andrew McGregor**

From:

Jakaitis, Alicia < Alicia. Jakaitis@halton.ca>

Sent:

Thursday, July 25, 2013 2:45 PM

To:

Domenico Renzella (renzellad@hdsb.ca)

Cc:

n.palomba@delcan.com; Green-Battiston, Melissa; Andrew McGregor

Subject:

Britannia Road Class Environmental Assessment - meeting minutes

Attachments:

geowarehouse - HDSB.pdf; HDSB.pdf

Hi Dom,

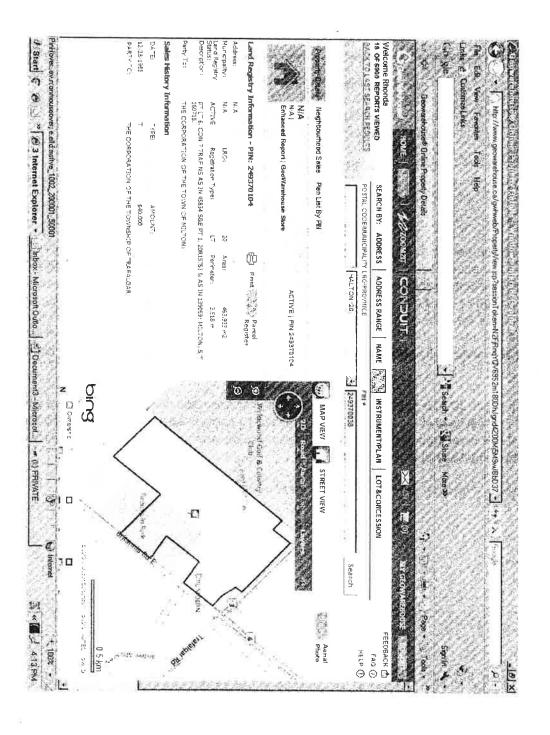
I apologise for the delay in getting the minutes out to you, but I wanted to confirm the ownership of the vacant land between Percy Merry and Drumquin Park. Our Legal Services group did confirm today that the vacant parcel is owned by HDSB. The geowarehouse online property details are attached. As such, the project team would like to move forward with Option 1, as outlined in the minutes, which include relocating HDSB's full movement parking lot access further west aligning with the Terra Greenhouse main access. This new access will be signalized with left turn lanes on both Britannia Road and the entrances. It is the Region's intent to facilitate shared access from the north leg to Drumquin Park and the school site. All necessary joint easement arrangements will be done during the detailed design phase of the project.

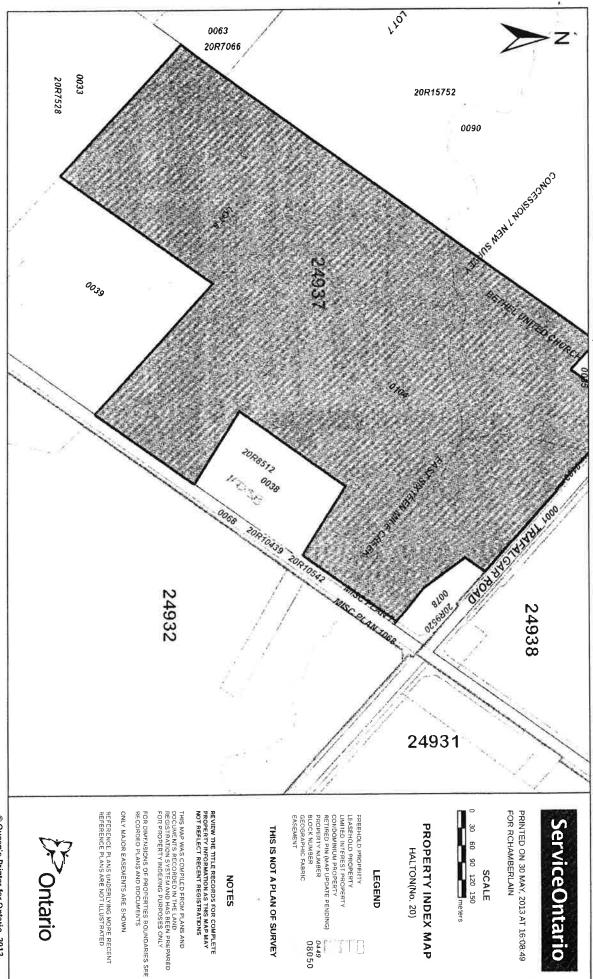
An Environmental Study Report (ESR) is currently being prepared to document the Class EA study process and recommendations. The ESR will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment. At this time, Option 1 will be carried forward as the preferred access option to consolidate access between HDSB, Terra Greenhouses and Drumquin Park.

I trust this to be satisfactory. Please let me know if you have any questions or concerns.

#### Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca



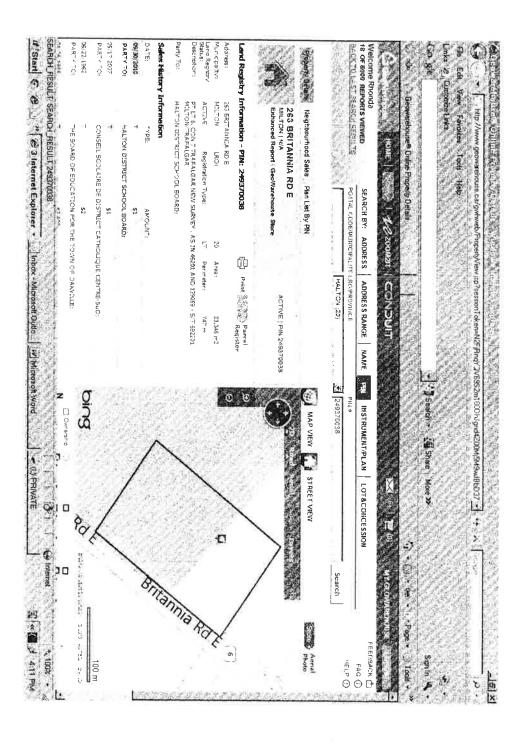


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July 9, 2013

9470 Britannia Road Milton, Ontario L9T 7E8 Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

To Whom It May Concern:

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 9470 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, drawings are attached for your information.

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. If you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

c. Nick Palomba, Delcan Corporation
Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



FIGURE 1 - Property Impacts to #9470 Britannia Road - Interim 4 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013



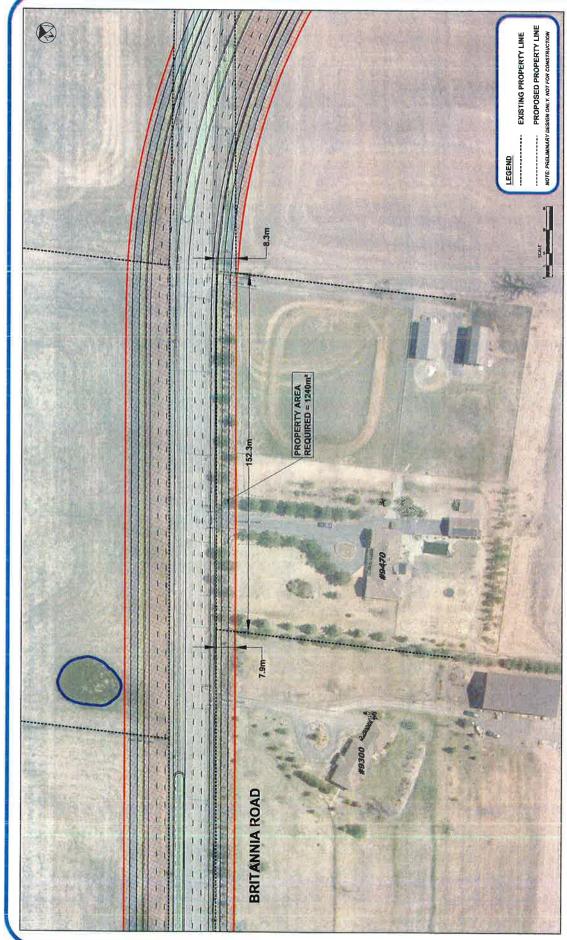


FIGURE 2 - Property Impacts to #9470 Britannia Road - Ultimate 6 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013



# Minutes of Meeting

# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** 

Wednesday September 18, 2013 at 2:00 p.m.

LOCATION:

Sheridan Room - Halton Regional Centre

PRESENT:

Melissa Green-Battiston

Halton Region

Alicia Jakaitis

Halton Region Property Owner

**PURPOSE:** Meeting with property owner of 9470 Britannia Road to review proposed improvements on Britannia Road and potential impacts to the private property.

#### MINUTES:

#### **ACTION BY:**

# ITEM 1 - INTRODUCTIONS

1.1 Those at the meeting were introduced.

Information

# ITEM 2 - BRITANNIA ROAD CLASS ENVIRONMENTAL ASSESSESSMENT (EA) STUDY - OVERVIEW AND STUDY STATUS

2.1 The study limits of the current Class Environmental Assessment (EA) Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to the proposed road widening. This is in addition to the public process undertaken as part of the Class EA Study, which included stakeholder meetings and three Public Information Centres (PIC).

Information

# ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

3.1 The preferred alternative for Britannia Road includes a widening to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407, with protection for 6 lanes, as required, prior to 2031. The preferred alternative also includes a south by-pass around Omagh and a grade separation at the CNR tracks.

Information

3.2 The right-of-way on Britannia Road is 47m and the ultimate cross-section will consist of the following:

Information

- 6 lanes at 3.5m (including 2 future High Occupancy Vehicle curb lanes)
- 1.8m on road cycling lanes
- 3.0m multi-use pathways on both sides of the roadway

# **Minutes of Meeting**

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MINU ITEM	ACTION BY:	
4.1	There will be an approximate 7.9m wide section of property required along the entire Britannia Road frontage of the property. In total, approximately 1240m <sup>2</sup> of property would be required to accommodate the proposed roadway widening.	Information
4.2	The existing property currently has a single driveway to Britannia Road, which will remain.	Information
4.3	Under the widened roadway an opening in the centre raised median will be provided to maintain a full movement access and provide a refuge area for cars making left turns.	
4.4	Landscaping will be provided in the median and also in the boulevard where possible. A landscaping plan will be developed during detailed design in consultation with the property owner.	Information
4.5	A partial preliminary plan (hardcopy) in the proximity of their property was provided to the land owner.	
ITEM	5 - GENERAL DISCUSSION	
5.1	Any property requirements from individual landowners to accommodate the future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. Property requirements for improvements are normally acquired 1 to 2 years prior to construction. If you have any questions regarding the property acquisition process please contact Adam Millington – Realty Services at (905)825-6000 ext 7242.	Information
5.3	The property owners may contact the Region's Realty Services at any time if they have any acquisition questions.	Information
5.4	Connection to Regional services was discussed and Regional staff confirmed that the Halton Regional Official Plan (2006) contains policies that prescribe where municipal water and wastewater services will be provided. Section 89(1) of the Official Plan states that urban services (municipal water and wastewater services) will only be provided within the Urban Area, except where these services are permitted by other policies in the Plan.	Information
5.5	An Environmental Study Report (ESR) will be prepared documenting the Class EA study process and	Information



# **Minutes of Meeting**

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

**ACTION BY:** 

recommendations. The ESR will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment.

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.





RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

9470 Britannia Road

Thank you for taking the time to meet with the Britannia Road Class Environmental Assessment (EA) Study project team on Wednesday September 18, 2013 at the Halton Regional Centre. Attached you will find minutes from that meeting.

As discussed, the Environmental Study Report will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment. If you have any questions or concerns, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

**Transportation Coordinator** 

Nick Palomba, Delcan Corporation Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 13670 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

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This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

- Tuesday May 14, 2013 between 9:00am to 7:00pm
- Thursday May 23, 2013 between 1:00pm to 7:00pm
- Wednesday May 29, 2013 between 1:00pm to 7:00pm

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

c. Nick Palomba, Delcan Corporation
Maureen Van Ravens, Manager Transportation Services - Halton Region
Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



To Whom It May Concern:

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 13670 Britannia Road

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This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. After several unsuccessful attempts to contact you, please find attached drawings to help provide you with a better understanding of the property impacts associated with the widening.

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

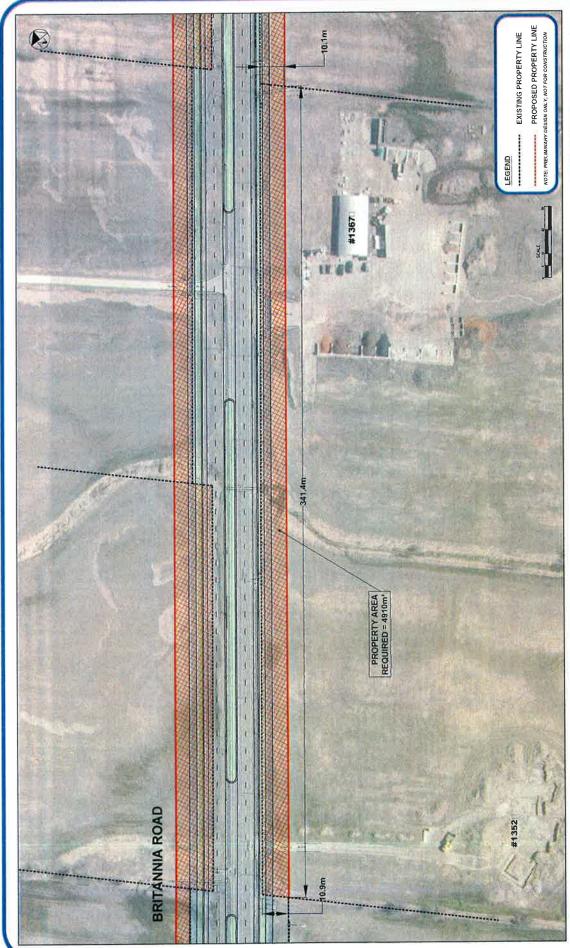


FIGURE 1 - Property Impacts to #13670 Britannia Road - Interim 4 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013



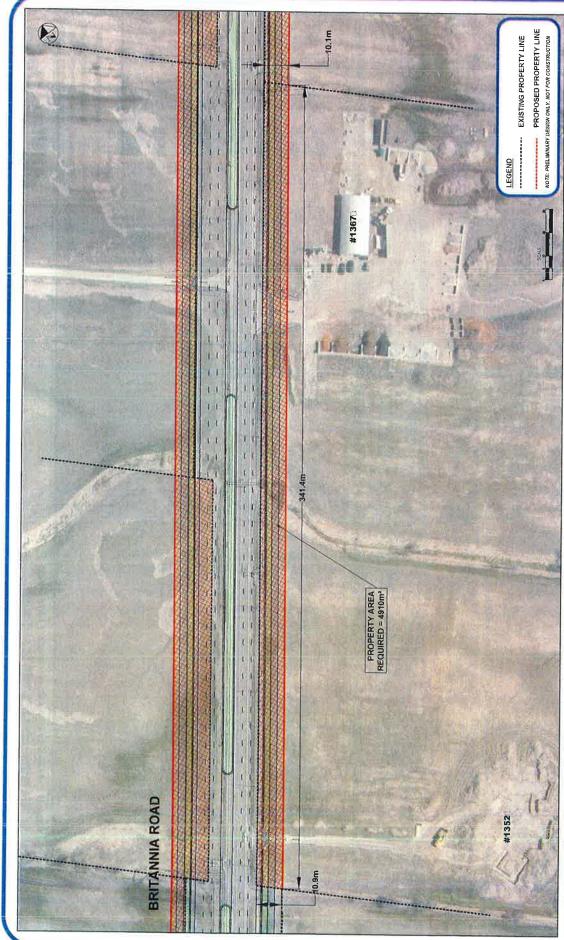


FIGURE 2 - Property Impacts to #13670 Britannia Road - Ultimate 6 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013





Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 13182 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

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The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services - Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



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Sincerely

Alicia Jakaitis

Transportation Coordinator

c. Nick Palomba, Delcan Corporation Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

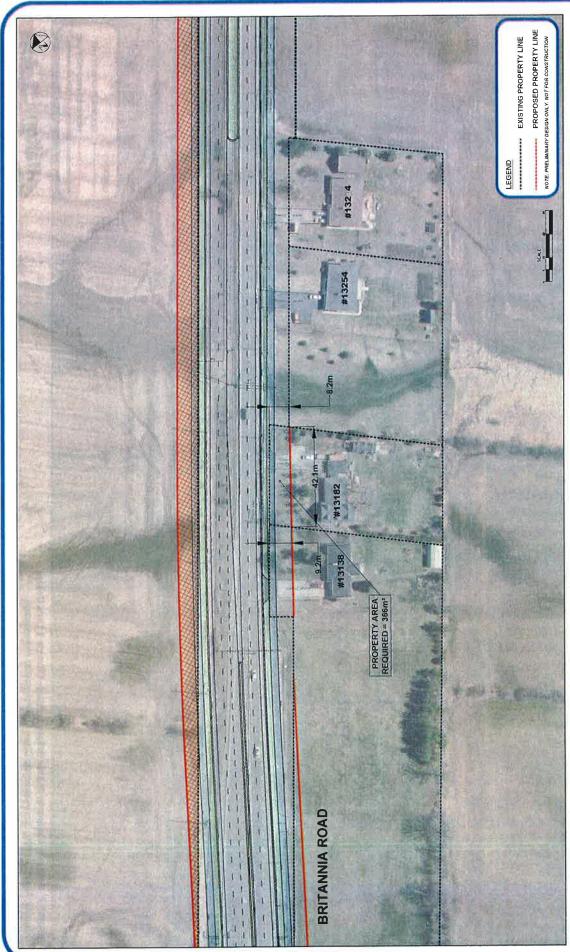


FIGURE 1 - Property Impacts to #13182 Britannia Road - Interim 4 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013



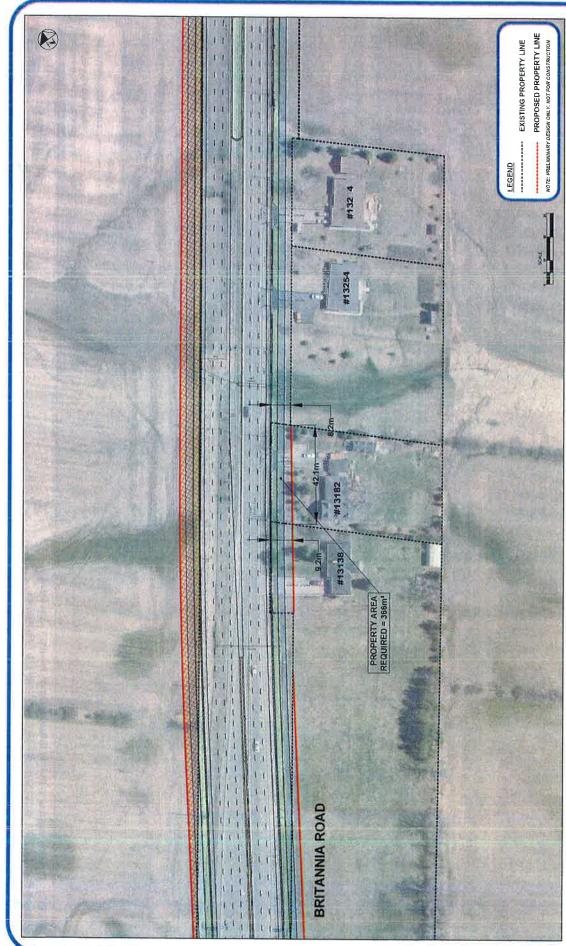


FIGURE 2 - Property Impacts to #13182 Britannia Road - Ultimate 6 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013







Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 12478 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

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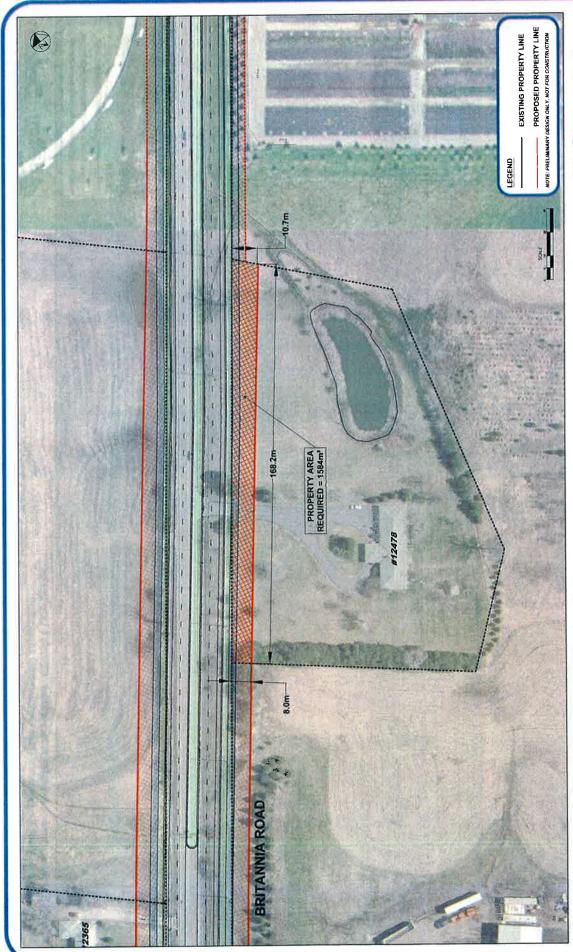


FIGURE 1 - Property Impacts to #12478 Britannia Road - Interim 4 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013





FIGURE 2 - Property Impacts to #12478 Britannia Road - Ultimate 6 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013





Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 12365 Britannia Road

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 Maureen Van Ravens, Manager Transportation Services - Halton Region
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-1.

Alicia Jakaitis

Transportation Coordinator

c. Nick Palomba, Delcan Corporation Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

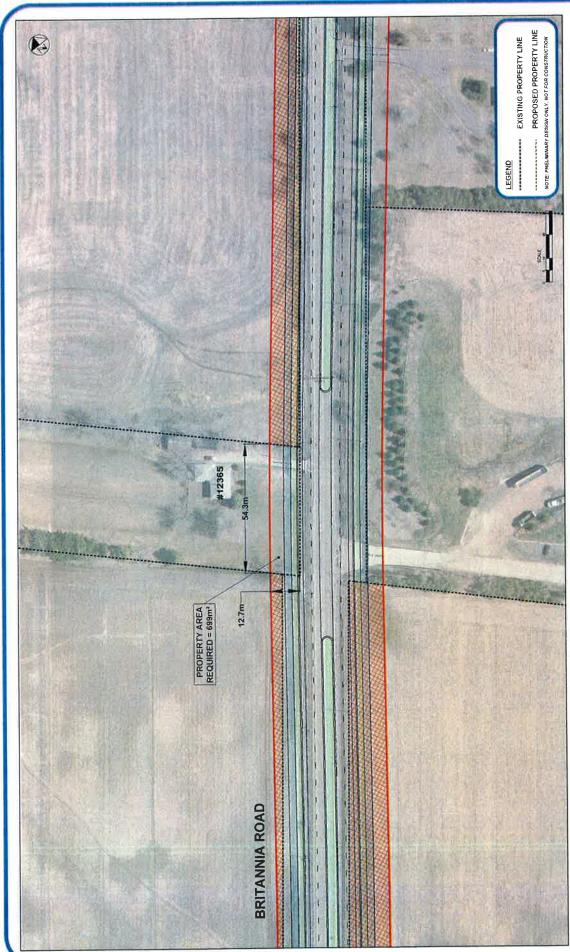


FIGURE 1 - Property Impacts to #12365 Britannia Road - Interim 4 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013



Halton

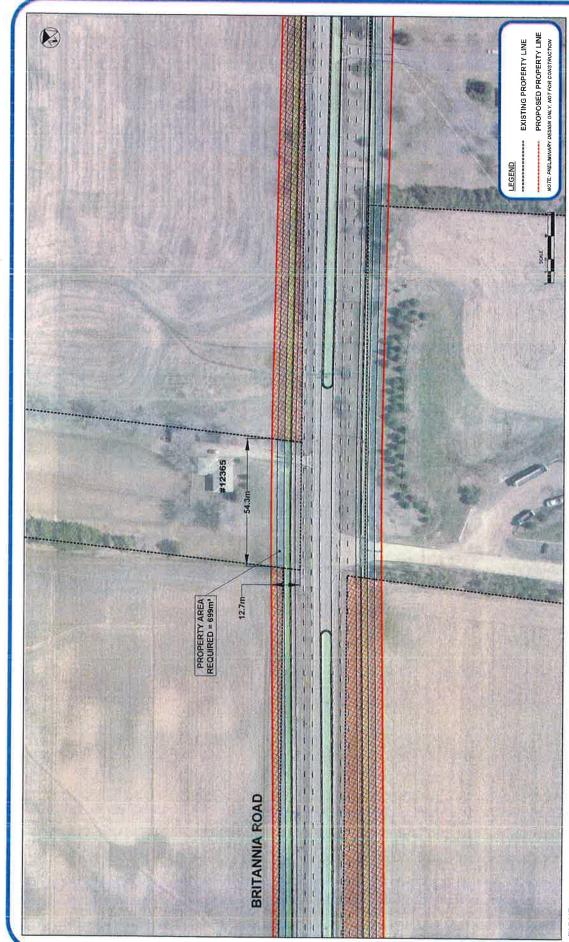


FIGURE 2 - Property Impacts to #12365 Britannia Road - Ultimate 6 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013

Delcar

Halton

#### **Andrew McGregor**

To: Jakaitis, Alicia; Andrew McGregor (Andrew.Mcgregor@parsons.com)

Subject: RE: 12365 Britannia Road

From: Jakaitis, Alicia

**Sent:** Thursday, April 24, 2014 3:10 PM

To:

Subject: 12365 Britannia Road

Hi

As you are aware, the Region is finalizing the Class Environmental Assessment for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Highway 407 to Tremaine Road. The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

We are looking to file or put the final Environmental Study Report (ESR) on the public record by the end of May 2014. Please be advised that you are included in our mailing list and will be sent a letter once the ESR is available for public review and comment. Once the ESR is completed, the project will proceed to detailed design and then construction. At this time, it is proposed that construction will be staged from west to east. The first section is proposed to extend from Tremaine Road to Regional Road 25 and construction is anticipated to commence by the end of 2015. The remaining sections of Britannia Road would then be staged accordingly through 2016 and beyond. As part of the detailed design process, additional public consultation will be undertaken and as part of this process residents and other stakeholders will be advised of the detailed construction timing and staging.

Attached for your information are preliminary property plans for 12365 Britannia Road. Please note that property requirements will be further refined during the detailed design process and property acquisitions typically occur 1-2 years prior to construction commencing.

Please let me know if you require anything further,

Alicia

#### Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca

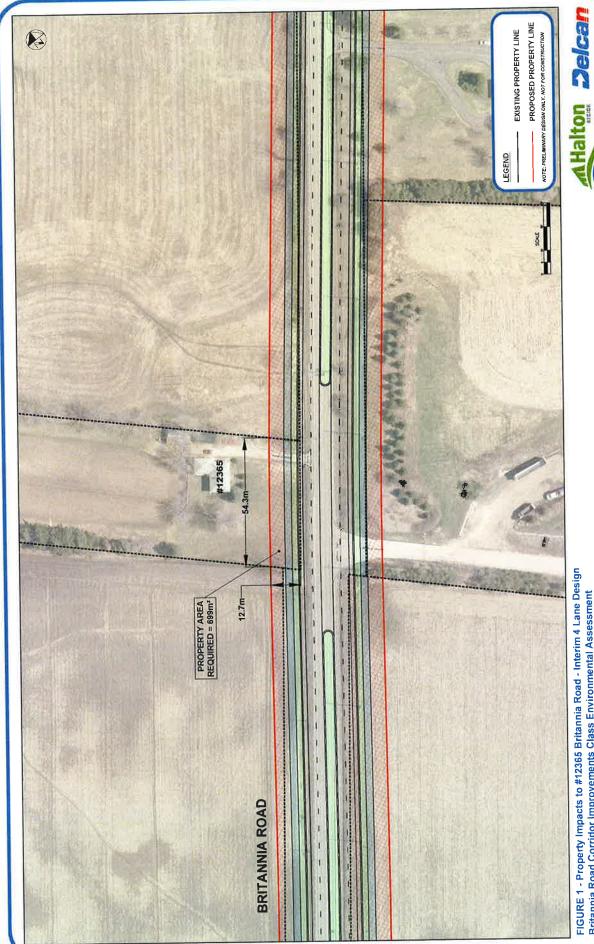


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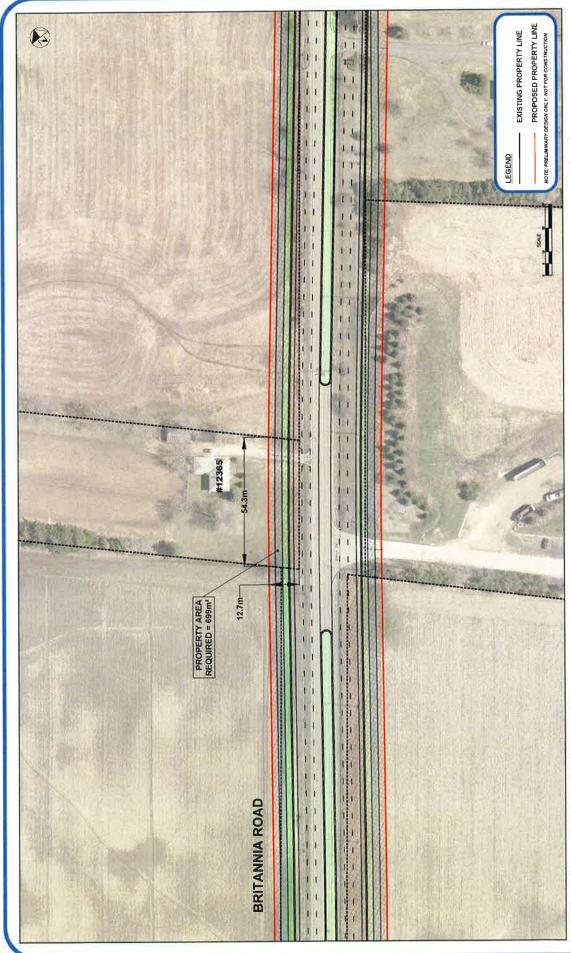


FIGURE 2 - Property Impacts to #12365 Britannia Road - Ultimate 6 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013







April 25, 2013

Terra Greenhouses Scott Arthur 12800 Britannia Road LOP 1E0 Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) Terra Greenhouses

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

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Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** 

Thursday, May 14, 2013 at 2:00 p.m.

LOCATION:

Milton Sports Centre, RM 3, Halton Region

PRESENT:

Melissa Green-Battiston

Halton Region Halton Region

Alicia Jakaitas Nick Palomba

Delcan Corporation

Terra Terra

Property Owner

**PURPOSE:** 

Meeting with property owner of 12800 Britannia Road (Terra

Greenhouses) to review proposed improvements on Britannia Road and

potential impacts to the private property.

#### **MINUTES:**

#### **ACTION BY:**

#### ITEM 1 - INTRODUCTIONS

1.1 Those at the meeting were introduced.

Information

# ITEM 2 - BRITANNIA ROAD CLASS EA STUDY - OVERVIEW AND STUDY STATUS

The study limits of the current Class EA Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to proposed road widening. This is in addition to the public process undertaken as part of the Environmental assessment study, which included stakeholder meetings and three public information centres.

Information

## ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

3.1 Britannia Road is proposed to be widened from 2 to 4 lanes in the interim and to 6 lanes (with the exception of the portion of the roadway between Eighth Line and Highway 407) for the ultimate configuration. The project will move forward in three stages:

Information

- 6 lanes Tremaine Road to Regional Road 25 (2015)
- 4 lanes Regional Road 25 to James Snow Parkway (2016-2017)
- 4 lanes James Snow Parkway to Highway 407 (2018-2019)
- 6 lanes Regional Road 25 to Eighth Line (2031)
- 3.2 The nominal right-of-way on Britannia Road is 47 m, including a raised median to separate eastbound and westbound traffic.

Information



Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

**ACTION BY:** 

The ultimate roadway cross section will consist of:

- 4 general purpose travel lanes and two special purpose lanes. The special purpose lanes will be the outside travel lanes and will be used as High Occupancy Vehicle (HOV) / transit lanes.
- On road dedicated bicycle lanes in each direction.
- Urban cross-section with storm sewers.

Provision for a 3.0 m multi-use path will be provided on both sides of the roadway.

3.3 The new alignment for Britannia Road generally follows the existing ROW but deviates from the centreline of the existing road to minimize impacts to adjacent properties, natural environment, archaeological features, etc. Where significant impacts are unavoidable (e.g. Community of Omagh), the road alignment would bypass the constraint areas to the south of the existing road.

Information

## ITEM 4 - REVIEW OF PRELIMINARY PLAN

4.1 There will be some property required along the Britannia Road frontage of the property from the existing property line (approximately 5.5m at the west end, 2.7 m at the east end and 7.6 m for the proposed entrance). In total, approximately 1,900m² of property would be required to accommodate the proposed roadway widening, multi-use path, new intersection access, etc.

Information

4.2 The existing property currently has three full movement access points to Britannia Road (two for the parking area and one for a residential property to the east of the parking area.

Information

4.3 Under the widened roadway an opening in the centre raised median will be provided for the residential property to maintain a full movement access. The easterly parking access is proposed to be converted to a right-in right-out as a result of the introduction of a raised median island.

Information

4.4 Two main access modification options were presented as there is some uncertainty at this time as to the ownership of the parcel of land located immediately to the west of the school property on the north side of the roadway.

Information

4.5 Option 1 (preferred) - The full movement parking lot access for the school board property on the north side of the road is to be

Information



## Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MINU	TES:	<b>ACTION BY:</b>
	relocated to the east and aligned with the main access to Terra Greenhouses. This new intersection is proposed for signalization with left turn lanes on both Britannia Road and the access legs of the intersection. The north leg of this access will also provide a connection to Drumquin Park.	
4.6	Option 2 (alternate) – Depending on the ownership of the parcel of land between the park and the school property on the north side of the road, Option 1 may not be possible. As such, a second option has been developed. It includes a new signalized intersection to be located at the Drumquin Park access to Britannia Road. The main Terra Greenhouse driveway would also be relocated to this location. This new signalized intersection is proposed to have left turn lanes on both Britannia Road and the access legs of the intersection. The school's full movement parking lot access would be restricted to a right-in/right-out via a median island. An access roadway from the north leg of this intersection to the school property could be discussed with the Town under this option.	Information
4.7	Landscaping will be provided in the median and also in the boulevard where possible. A landscaping plan will be developed during detailed design.	Information
4.8	A partial preliminary plan (hardcopy) in the proximity of the property was provided to the land owner under both the 4 lane and 6 lane roadway configurations.	Information
ITEM	5 - GENERAL DISCUSSION	
5.1	Typically with property acquisition, the Region's Realty Services Section would approach the affected property owners well in advance of construction, and proceed with negotiating the acquisition of property requirements related to the project. An independent appraisal will be prepared and the affected property owners will be compensated at fair market value.	Region
5.2	The property owners may contact the Region's Realty Services at any time if they have any acquisition questions.	Information
5.3	With Option 2, there would be considerable reconfiguration required on the Terra property to accommodate the new access location. These modifications would be prepared in cooperation the Region during the detailed design phase of the project and cost of the improvements would be borne by the region. Terra stated that the second option could work, but	Information



# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MIN	UTES:	4.077.011.01
	required more internal works. Terra preference was Option 1.	ACTION BY:
5.4	Property owner advised that they are planning to install new signage. Regional staff recommended that the revised property lines presented in the meeting be considered.	Information
5.5	would have to be removed to accommodate the roadway widening. Property owner advised that this was not an issue	Information
5.6	The project team will be holding discussions with the School Board and Town of Milton in hopes of reaching consensus on the location of the driveway.	Delcan / Region
5.7	Delcan to provide the property owner an overall property plan showing property requirements as well as a similar plan for his mother's home.	Delcan
5.8	An ESR will be prepared documenting the decision making process of the Class EA Study. The public will have an opportunity to review the ESR and provide comments. The ESR is anticipated to be available to the public in 2013. At this time it is proposed that both access location options will be carried forward unless the property issue is resolved prior to filing the ESR.	Deican

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.



#### **Andrew McGregor**

From:

Jakaitis, Alicia < Alicia. Jakaitis@halton.ca>

Sent:

Friday, August 09, 2013 11:49 AM

To:

Cc:

n.palomba@delcan.com

Subject:

RE: Britannia Class Environmental Assessment - Meeting Minutes

Importance:

High

#### Good Morning,

This email is to advise that further to our last meeting, the preliminary preferred alternative for the Britannia Road corridor will include Option 1 for the consolidated access arrangement for Terra Greenhouses, HDSB and Drumquin Park. Option 1 includes the relocation of HDSB's full movement parking lot access further west aligning with the Terra Greenhouse main access. This new access will be signalized with left turn lanes on both Britannia Road and the entrances. It is the Region's intent to facilitate shared access from the north leg to Drumquin Park and the school site. All necessary joint easement arrangements and any changes to on site infrastructure will be done during the detailed design phase of the project.

The Environmental Study Report (ESR) is currently being prepared to document the Class EA study process and recommendations. The ESR will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment. At this time, Option 1 will be carried forward as the preferred access option to consolidate access between HDSB, Terra Greenhouses and Drumquin Park.

I trust this to be satisfactory. Please let me know if you have any questions or concerns.

#### Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca

From: Jakaitis, Alicia

Sent: Wednesdav. July 03, 2013 3:37 PM

To:

Cc: n.palomba@delcan.com

Subject: Britannia Class Environmental Assessment - Meeting Minutes

Please find attached the meeting minutes from our meeting on May 14<sup>th</sup>. If you have any questions or concerns, please give me a call.

Alicia

## WILLIS FAMILY FRUIT FARM

6063 Fifth Line Milton, Ontario L9T 2X8

Tel: 905-876-2606

December 6, 2010

Dear Mr. Pijl:

Re: Britannia Road Class EA-Stakeholder Advisory Group Meeting # 1

Thank you for sending the notice of the Stakeholder Advisory Group Meeting for 2:00 p.m. on Monday, December 6, 2010.

We are unable to attend this meeting because it is being held during business hours.

We have two points to make by way of input at this time.

- 1. Would you be kind enough to arrange to have these meetings in the evening in order that we can attend?
- 2. As you may know, we operate a farm market on Britannia Road and we own the north east corner farm at Fifth Line. As you may know, the policy of the Region of Halton is that the Region is in favour of farm families operating farm markets in the region where they sell the produce from their farms.

It is very important to us that there not be construction on Britannia Road, during September and October of each year. Our market is fruit that is grown in the fall and we only have 9 weekends to market this fruit. In the event that there is a blockage or slow down of Britannia Road during September and October of any year, this will close down our market.

Rollie Willis



Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) Willis Family Fruit Farm

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

- Tuesday May 14, 2013 between 9:00am to 7:00pm
- Thursday May 23, 2013 between 1:00pm to 7:00pm
- Wednesday May 29, 2013 between 1:00pm to 7:00pm

WILLIS FAMILY FRUIT FARM

6063 Fifth Line Milton, Ontario L9T 2X8

THIS LETTER TO BE DELIVERED ON MAY 29, 2013

May 28, 2013

Mr. Tim Dennis Ms. Alicia Jakaitis Region of Halton

Dear Tim and Alicia

RE:

BRITANNIA ROAD REGION ROAD 6

CLASS ENVIRONMENTAL ASSESSMENT STUDY

Thank you for inviting us to a meeting, to discuss the proposed widening of Britannia Road.

Roland Willis and Marilyn Willis own 6063 Fifth Line, Milton, which is Lot 6, Concession 6, Township of Trafalgar. Our farm has approximately 2200 feet frontage on the North side of Britannia Road. In 1986, the Region purchased a strip of land from us, for the proposed widening of Britannia Road, to four lanes.

I have attended the Open Houses held by the Region, with respect to this project on January 26, 2011, June 8, 2011 and December 6, 2011. I have met with both of you, at these meetings.

At these Open Houses, I have communicated the strong concerns we have with respect to the impact, this project may have on our property and our farm business. A photo of our farm road sign appears on page 9 of the brochure, available at the January 26, 2011 meeting.

I enclose a copy of my letter dated December 6, 2010 addressed to the consultant for the Region, Stanley Pijl.

The purpose of the within letter is to communicate some of these strong concerns, we have about this project, and to make inquiries.

## 1. REQUEST FOR A COPY OF ALL ENVIRONMENTAL MATERIAL WITH RESPECT TO THE PROJECT

We request a copy of all the environmental material, with respect to this project.

#### 2. THE TIMING OF CONSTRUCTION OF THE ROADWAY

As set out in my letter to Mr. Pijl, it is extremely important that construction work in the area of the farm not take place in September and October, when our business is open.

## 3. WILL THERE BE LAND EXPROPRIATED FROM THE FARM ON THE SOUTH SIDE OF BRITANNIA ROAD OPPOSITE OUR FARM

What are the plans to expropriate land on the South side of Britannia Road opposite our farm?

#### 4. STORM WATER RETENTION PONDS

We require information and material with respect to storm retention ponds, near our farm.

In a recent legal decision with respect to land near St. Catharines, water spilling from a roadway, damaged orchard trees. The road authority was held liable for the damage. Our orchard trees are planted on M-26 rootstock, and are very sensitive to excess water. Our field crops next to Britannia Road may be damaged by excess water.

#### 5. THE GRADES OF THE ROADWAY

We require information and material as to the grades of the planned roadway. How high will the road be, in relation to the lands on our farm?. This may result in a problem of noise.

## 6. PRESERVING OUR ROAD SIGN, PARKING LOT, GATE, AND GRAVEL WALKWAYS.

Will these business structures be impacted by the roadway? What are the plans to preserve our road sign, entrance lane, parking lots, and gravel walkway, if they are impacted by the roadway?

#### 7. **LEFT HAND TURN LANES**

Left hand turn lanes will be needed on the roadway, to permit our customers to enter, and exit, from our parking lot, onto the roadway, safely?.

#### 8. **POSTED SPEED LIMIT**

Will there be a posted speed limit on the roadway, in order that our customers can enter and exit the farm, without danger?

In approximately the last four years, three people have been killed in motor vehicle accidents on Britannia Road, in front of our farm.

#### 9. UNDERGROUND TILE DRAINS

There are underground tile drains under the Southerly 50 acres of the farm, adjoining Britannia Road (including the area of the orchard).

What is the plan to preserve and protect these drains.? The drains provide very important drainage, needed for the farm crops and orchard. It may be necessary for the Region to consult a qualified drainage contractor, to assist with this project.

#### 10. **DIVIDED HIGHWAY**

The letter from the Region indicates that there will be a divided highway. What is the composition of the lanes, that will be in the roadway?

#### 11. HYDRO POLES, AND HYDRO LINES

Recently a hydro line was installed on Region Land, along Britannia Road, south of our farm. This was done at public expense, and took several months to complete. What is the plan for this hydro line? Will this plan impact our farm.?

# 12. THE LACK OF MAINTENANCE BY THE REGION, OF VACANT LAND SOUTH OF OUR ORCHARD, OWNED BY THE REGION (AND IN ANY OTHER VACANT LAND, CREATED BY THE PLANNED ROADWAY, NEAR OUR FARM)

When the stoplight was installed at Fifth Line and Britannia in 2012, the Region contractor built a fence, which created a boulevard of vacant land, south of our orchard (about 700 feet long on the northerly edge of Britannia Road). The Region has not maintained the boulevard. It contains the perennial weeds, prevalent in our area, and the Region does not cut or remove these weeds. The appearance of this area is poor, and injures our business. If the Region creates more vacant land boulevards near our farm, how will the Region maintain these lands, and stop the weeds from spreading to farms in the area.?

#### 13. THE COST OF A REAL ESTATE APPRAISAL

Will the Region pay for the cost of an appraisal of the value of the land taken by the Region.?

I will bring photos of the vacant boulevard to the meeting.

Thank you for your help.

I am sending a copy of this letter to Councillor Colin Best, for his information.

Yours truly,

Rollie Willis

Rollie Willis

:ah

#### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services - Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

## Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

HELD ON:

Thursday, May 29, 2013 at 4:00 p.m.

LOCATION:

Appleby Room, Halton Region

PRESENT:

Mellssa Green-Battiston

Alicia Jakaitis

Nick Palomba Andrew McGregor Halton Region Halton Region

Delcan Corporation Delcan Corporation

Willis Family Fruit Farm Willis Family Fruit Farm

PURPOSE:

Meeting with property owner of 6063 Fifth Line (Willis Family Fruit Farm), located at the corner of Fifth Line and Britannia Road, to review proposed improvements on Britannia Road and potential Impacts to the private property.

MINUTES:

ITEM 1 - INTRODUCTIONS

1.1 Those at the meeting were introduced.

**ACTION BY:** 

Information

## ITEM 2 - BRITANNIA ROAD CLASS ENVIRONMENTAL ASSESSMENT (EA) STUDY - OVERVIEW AND STUDY STATUS

2.1 The study limits of the current Class Environmental Assessment (EA) Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to the proposed road widening. This is in addition to the public process undertaken as part of the Class EA Study, which included stakeholder meetings and three Public Information Centres (PIC).

Information

#### ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

3.1 The preferred alternative for Britannia Road includes a widening to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407, with protection for 6 lanes, as required, prior to 2031. The preferred alternative also includes a south by-pass around Omagh and a grade separation at the CNR tracks.

Information

3.2 The right-of-way on Britannia Road is 47m and the ultimate

Information



#### Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

**ACTION BY:** 

cross-section will consist of the following:

- 3 travel lanes in each direction.
- 1.8m on road cycling lanes
- 3.0m multi-use pathways on both sides of the roadway
- 5m raised centre median to enhance gateway and corridor features.

#### ITEM 4 - REVIEW OF PRELIMINARY PLAN

4.1 A 6m wide section of property has been identified along the frontage of Britannia Road to accommodate the ultimate 47m right-of-way. In total, approximately 4,178m<sup>2</sup> of property would be required.

Information

4.2 The existing full movement access will be maintained. In both the interim 4 lane widening and ultimate 6 lane widening, a centre left turn lane will be constructed to provide a refuge area for cars while making left turns into and out of the property.

Information

4.3 Landscaping will be provided in the median and in the boulevard where possible. Where existing residential landscaping is impacted, a landscape plan will be developed during detailed design in consultation with the property owner.

Information

4.4 A preliminary plan (hardcopy) in the proximity of their property was provided to the property owner. The plan presented both the 4 lane and 6 lane widening and the ultimate property requirements.

Information

#### ITEM 5 - GENERAL DISCUSSION

The property owner provided the project team a letter addressed to Tim Dennis and Alicia Jakaitis dated May 28, 2013. The questions and comments in the letter are addressed below and for convenience, follow the numbering from the letter.

5.1 An Environmental Study Report (ESR) will be prepared documenting the Class EA study process and recommendations. The ESR will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment.

Information

5.2 During the detail design phase of the project, Regional Staff will coordinate with the property owner to discuss staging

Information



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

		ACITON BIT
	issues and to attempt to avoid conflicts during the critical business periods. In addition, a commitment will be included in the ESR to work in consultation with the property owner to establish a construction schedule adjacent to the property.	
5.3	The final ESR will recommend widening along both the north and south sides of Britannia Road adjacent to the Willis Farm.	Information
5.4	The proposed improvements to Britannia Road include replacing the existing ditches with a concrete curb and gutter drainage system, in which storm water would be drained via catchbasins and piped through a storm sewer. There are no culverts or storm water outlets in the vicinity of the subject property.	Information
5.5	The proposed roadway centerline grade generally stays very close to existing. However, there are some sections which are being raised. A preliminary grading plan will be provided in the final ESR and further refined through the detail design process. It is not expected that grading will change significantly adjacent to the subject property.  A noise assessment was completed as part of the Class EA Study and noise mitigation is not required at this location. A	Information
5.6	copy of the noise assessment will be included in the final ESR. Any property requirements, including sign relocations, parking and landscaping impacts from individual landowners to accommodate the future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. Property requirements for improvements are normally acquired 1 to 2 years prior to construction. If you have any questions regarding the property acquisition process please contact Adam Millington – Realty Services at (905)825-6000 ext 7242.	Information
5.7	A centre left turn lane will be provided at the entrance to the property.	Information
5.8	The final posted speed limit for the section of Britannia Road adjacent to the property will be confirmed by the Region's Traffic Operations' staff during the detail design phase of the project.	Information
5.9	During the detail design phase of the study, the Regional protect team will meet with the property owner to locate/evaluate the impact of the road widening on the underground tile drainage system and develop appropriate	Information



MINUTES:

**ACTION BY:** 

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

#### ACTION BY:

mitigation measures at that time.

5.10 The roadway composition adjacent to the property will consist of 4 vehicle lanes interim/6 lanes ultimate, 2 on-road bicycle lanes, concrete curb and gutter, grassed boulevards and multi-use pathways for pedestrians and cyclists.

Information

5.11 The relocation of utilities is dealt with at detail design and will be accommodated within the Region's 47m right-of-way for Britannia Road. There are no expected direct impacts to the subject property.

Information

5.12 Issues related to the maintenance of Regional lands adjacent to the Fifth Line intersection will be directed to Regional Traffic Operations' staff.

Information

"Vacant" lands (boulevards) created between the roadway corridor and the subject property as part of the future Britannia Road cross-section will be maintained by Halton Region. These areas will be subject to a detailed landscape plan that will be completed during the detail design phase of the study. A commitment will be added to the ESR that the development of the landscape will be done in consultation with the property owner to ensure that the landscape plan will be compatible with the adjacent fruit farm.

Information

5.13 An independent appraisal will be prepared and the affected property owners will be compensated at fair market value.

Information

- 5.14 Subsequent to the owner's request, existing and future 24 hour traffic volumes along Britannia Road in the vicinity of the subject property have been provided as follows:
  - Existing 15500
  - Future (2031) 39,000

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.





Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) Willis Fruit Farm

Thank you for taking time to meet with the Britannia Road Class Environmental Assessment (EA) Study project team on Thursday May 29, 2013 at the Halton Regional Centre. Attached you will find minutes from that meeting which include a response to your letter which you hand delivered.

As discussed, the Environmental Study Report will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. If you have any questions or concerns, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region



Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study

Highway 407 to Tremaine Road (Regional Road 22)

11901 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

- Tuesday May 14, 2013 between 9:00am to 7:00pm
- Thursday May 23, 2013 between 1:00pm to 7:00pm
- Wednesday May 29, 2013 between 1:00pm to 7:00pm

#### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia, jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

c. Nick Palomba, Delcan Corporation
Maureen Van Ravens, Manager Transportation Services - Halton Region
Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study

Highway 407 to Tremaine Road (Regional Road 22)

11855 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

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- Tuesday May 14, 2013 between 9:00am to 7:00pm
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#### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

#### Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

HELD ON:

Thursday, May 14, 2013 at 10:30 a.m.

LOCATION:

Milton Sports Centre, RM 3, Halton Region

PRESENT:

Melissa Green-Battiston

Halton Region

Alicia Jakaitas Nick Palomba Halton Region
Delcan Corporation

Property Owner

PURPOSE:

Meeting with property owner of 11855 & 11901 Britannia Road to

review proposed improvements on Britannia Road and potential impacts

to the private property.

#### MINUTES:

#### ITEM 1 - INTRODUCTIONS

1.1 Those at the meeting were introduced.

Information

**ACTION BY:** 

# ITEM 2 - BRITANNIA ROAD CLASS ENVIRONMENTAL ASSESSMENT (EA) STUDY - OVERVIEW AND STUDY STATUS

The study limits of the current Class EA Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to the proposed road widening. This is in addition to the public process undertaken as part of the Class Environmental Assessment (EA) Study, which included stakeholder meetings and three Public Information Centres (PIC).

Information

## ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

3.1 The preferred alternative for Britannia Road includes a widening to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407, with protection for 6 lanes, as required, prior to 2031. The preferred alternative also includes a south by-pass around Omagh and a grade separation at the CNR tracks.

Information

3.2 The right-of-way on Britannia Road is 47m and the ultimate cross-section will consist of the following:

Information

- 6 lanes at 3.5m (including 2 future high occupancy vehicle curb lanes)
- 1.8m on road cycling lanes
- 3.0m multi-use pathways on both sides of the roadway
- 5m raised centre median to enhance gateway and



# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MINUTES:

ACTION BY:

corridor features.

## ITEM 4 - REVIEW OF PRELIMINARY PLAN - 11855 & 11901

4.1 An 8.2m wide section of property has been identified along the frontage of Britannia Road to accommodate the ultimate 47m right-of-way. In total, approximately 752m² of property would be required.

Information

4.2 The existing full movement accesses to the properties will be maintained during and after construction.

Information

- 4.3 In both the interim 4 lane widening and ultimate 6 lane widening, a centre left turn lane will be constructed to provide a refuge area for cars while making left turns into and out of the properties.
- 4.4 Landscaping will be provided in the median and in the boulevard where possible. Where existing residential landscaping is impacted, a landscape plan will be developed during detailed design in consultation with the property owner.

Information

4.5 A partial preliminary plan (hardcopy) in the proximity of the properties was provided to the property owner under both the 4 lane and 6 lane roadway configurations.

#### ITEM 5 - GENERAL DISCUSSION

- 5.1 Property owner did not express any concern with the planned property requirement.
- Any property requirements from individual landowners to accommodate the future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. Property requirements for improvements are normally acquired 1 to 2 years prior to construction. If you have any questions regarding the property acquisition process please contact Adam Millington, Realty Services at (905)825-6000 ext 7242.

Information

5.3 The property owners may contact the Region's Realty Services at any time if they have any acquisition questions.

Information

5.4 Property Owner expressed concern that an existing culvert is backing water up on the property. This concern will be passed onto regional operations staff and looked into.

Region



Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

**ACTION BY:** 

Region

5.5 The Environmental Study Report will be finalized and made available for public review in late 2013. A Notice of Study Completion will be sent to the property owner.

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.





Public Works Transportation Services 1151 Bronte Road Oakville ON LBM 3L1 Fax: 905-847-2192

Britannia Road (Regional Road 6) Class Environmental Assessment Study RE; Highway 407 to Tremaine Road (Regional Road 22) 11855 & 11901 Britannia Road

Thank you for taking time to meet with the Britannia Road Class Environmental Assessment (EA) Study project team on Thursday May 14, 2013 at the Milton Sports Centre. Attached you will find minutes from that meeting.

As discussed, the Environmental Study Report will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. If you have any questions or concerns, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation C. Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 14400 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

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This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

- Tuesday May 14, 2013 between 9:00am to 7:00pm
- Thursday May 23, 2013 between 1:00pm to 7:00pm
- Wednesday May 29, 2013 between 1:00pm to 7:00pm

#### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services - Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

HELD ON:

Thursday, May 14, 2013 at 3:00 p.m.

LOCATION:

Milton Sports Centre, RM 3, Halton Region

PRESENT:

Melissa Green-Battiston

Halton Region Halton Region

Alicia Jakaitis

Delcan Corporation

Nick Palomba Property Owner

PURPOSE: Meeting with property owner of 14400 Britannia Road to review proposed improvements on Britannia Road and potential impacts to the private property.

#### MINUTES:

### ITEM 1 - INTRODUCTIONS

Those at the meeting were introduced.

**ACTION BY:** 

Information

### ITEM 2 - BRITANNIA ROAD CLASS ENVIRONMENTAL ASSESSESSMENT (EA) STUDY - OVERVIEW AND STUDY STATUS

The study limits of the current Class Environmental 2.1 Assessment (EA) Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to the proposed road widening. This is in addition to the public process undertaken as part of the Class EA Study, which included stakeholder meetings and three Public Information Centres (PIC).

Information

## ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

3.1 The preferred alternative for Britannia Road includes a widening to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407, with protection for 6 lanes, as required, prior to 2031. The preferred alternative also includes a south by-pass around Omagh and a grade separation at the CNR tracks.

**Information** 

3.2 The right-of-way on Britannia Road is 47m and the ultimate cross-section will consist of the following:

Information

- 6 lanes at 3.5m (including 2 future High Occupancy Vehicle curb lanes)
- 1.8m on road cycling lanes



#### Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

ACTION BY:

3.0m multi-use pathways on both sides of the roadway

#### ITEM 4 - REVIEW OF PRELIMINARY PLAN

4.1 There will be a 1m wide section of property required along the . Information entire Britannia Road frontage of the property. In total, approximately 61m<sup>2</sup> of property would be required to accommodate the proposed roadway widening.

4.2 The existing property currently has one residential driveway to Britannia Road, which will remain.

Information

- 4.3 Under the widened roadway an opening in the centre raised median will be provided for the residential property to maintain a full movement access and provide a refuge area for cars making left turns.
- 4.4 With the planned roadway improvements the current stone gateway features at the driveway (currently on Regional rightof-way) would have to be relocated. Also, the trees along the front of the property would also be removed or transplanted if possible.

Information

- 4.5 Landscaping will be provided in the median and also in the boulevard where possible. A landscaping plan will be developed during detailed design in consultation with the property owner.
- A partial preliminary plan (hardcopy) in the proximity of their 4.6 property was provided to the land owners.

#### ITEM 5 - GENERAL DISCUSSION

5.1 The Region would be responsible for the costs associated with the relocation of the stone gates and landscaping impacts.

Region

5.2 Any property requirements from individual landowners to accommodate the future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. Property requirements for improvements are normally acquired 1 to 2 years prior to construction. If you have any questions regarding the property acquisition process please contact Adam Millington - Realty Services at (905)825-6000 ext 7242.

Information

5.3 The property owners may contact the Region's Realty Services at any time if they have any acquisition questions.

Information



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

**ACTION BY:** 

5.4 Connection to Regional services was discussed and Regional staff confirmed that the Halton Regional Official Plan (2006) contains policies that prescribe where municipal water and wastewater services will be provided. Section 89(1) of the Official Plan states that urban services (municipal water and wastewater services) will only be provided within the Urban Area, except where these services are permitted by other policies in the Plan.

At this time, the Urban Area south limit runs along the centreline of Britannia Road and the east limit is James Snow Parkway. Regional services will be available to properties within the Urban Area only and properties on the south side of Britannia Road and east of James Snow Parkway remain in the Rural Area and will not eligible for servicing.

5.5 An Environmental Study Report (ESR) will be prepared documenting the Class EA study process and recommendations. The ESR will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment.

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.





Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 1440 Britannia Road

Thank you for taking time to meet with the Britannia Road Class Environmental Assessment (EA) Study project team on Thursday May 14, 2013 at the Milton Sports Centre. Attached you will find minutes from that meeting.

As discussed, the Environmental Study Report will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. If you have any questions or concerns, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 1008 Trafalgar Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

- Tuesday May 14, 2013 between 9:00am to 7:00pm
- Thursday May 23, 2013 between 1:00pm to 7:00pm
- Wednesday May 29, 2013 between 1:00pm to 7:00pm

### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

c. Nick Palomba, Delcan Corporation Maureen Van Ravens, Manager Transportation Services – Halton Region Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 1008 Trafalgar Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

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This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, drawings are attached for your information.

#### Page 2

The ESR will be finalized in summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

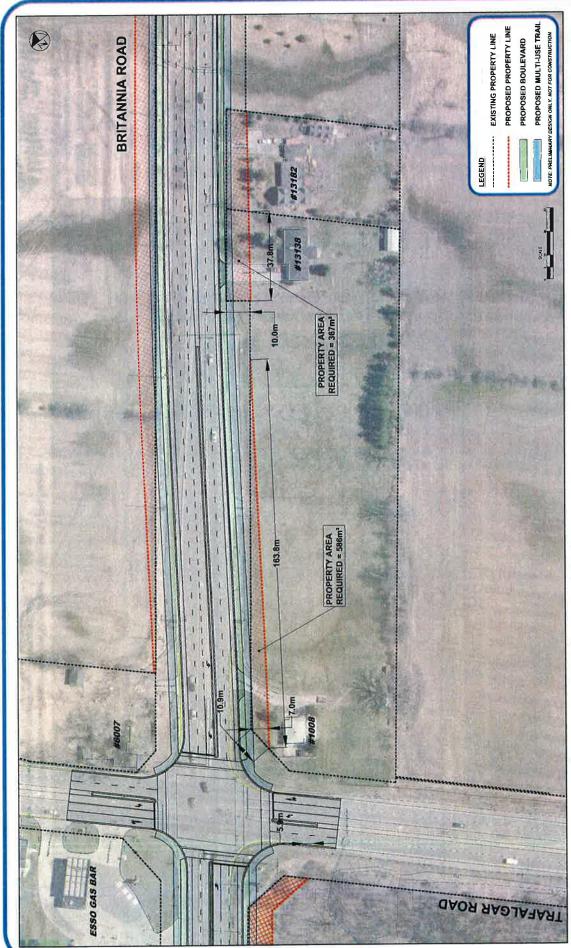


FIGURE 1 - Property Impacts to #13138 Britannia Road/#1008 Trafalgar Road - Interim 4 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment
May, 2013





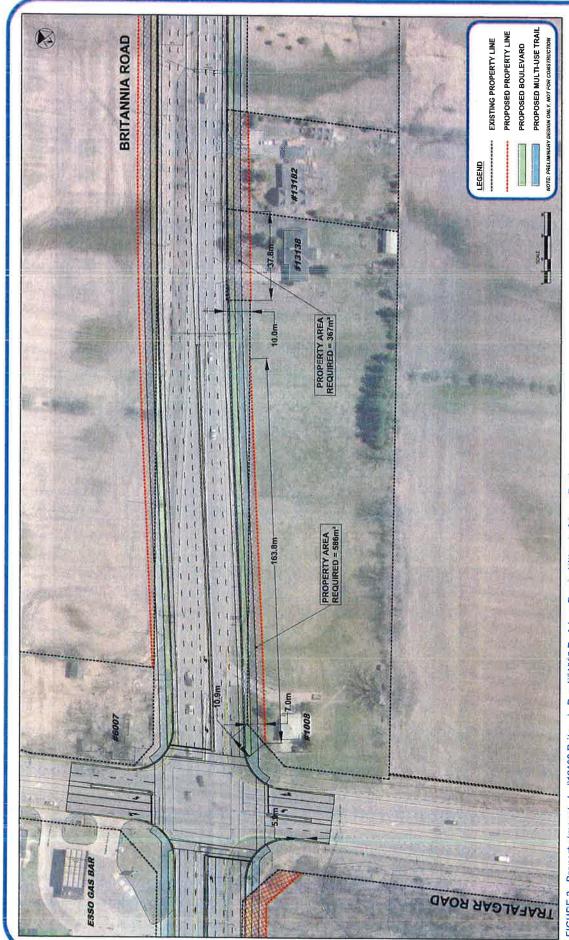


FIGURE 2 - Property impacts to #13138 Britannia Road/#1008 Trafalgar Road - Ultimate 6 Lane Design Britannia Road Corridor improvements Class Environmental Assessment May, 2013







Public Works
Transportation Services
1151 Bronte Road
Oakville\_ON\_L6M 3L1
Fax: 905-847-2192

Dear Madam/Sir

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 8760 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, we are proposing to arrange a meeting with you to discuss the planned road improvements and new right-of-way requirements across your land. The Project Team would be able to meet with you on one of the following dates:

- Thursday May 23, 2013 between 1:00pm to 7:00pm
- Wednesday May 29, 2013 between 1:00pm to 7:00pm

### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen Van Ravens, Manager Transportation Services - Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 8760 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. After several unsuccessful attempts to contact you, please find attached drawings to help provide you with a better understanding of the property impacts associated with the widening.

#### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. To arrange a meeting and if you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

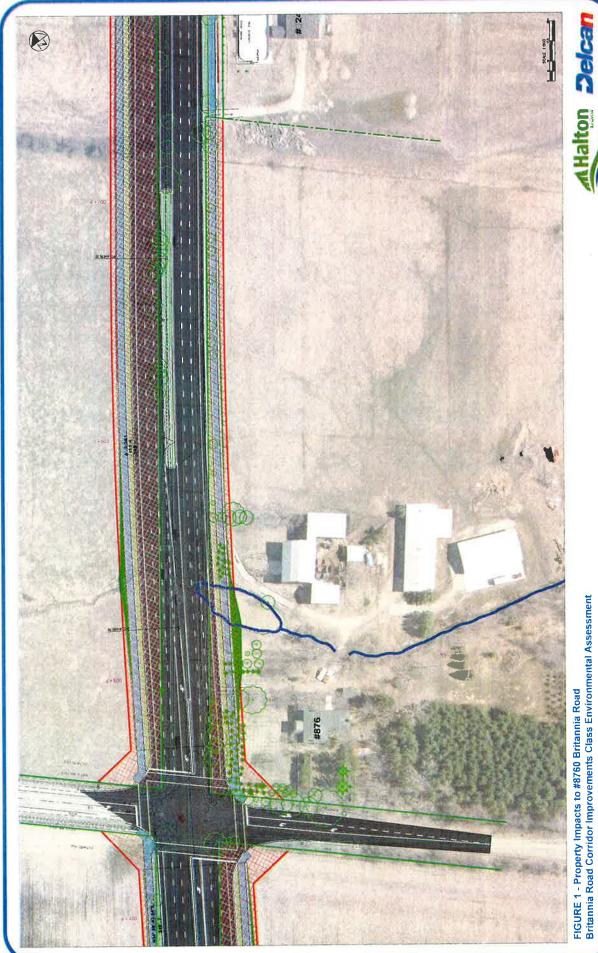


FIGURE 1 - Property Impacts to #8760 Britannia Road Britannia Road Corridor Improvements Class Environmental Assessment March, 2013



1. RECEIVED

MAY I A ZOIZ HALTON REGION PUBLIC WORKS & ENG.

May 9, 2012

Halton Region 1151 Bronte Road Oakville, Ontario L6M 3L1

Attention: Mr. Andrew Head C.E.T.

Project Manager, Transportation Services

RE: Orianna Glen Homes Corp. (Lots 4 and 5 Conc. 5, Milton)

Britannia Road Class Environmental Assessment -

Tremaine Road to Highway 407 - PR-2667

Dear Mr. Head.

We are pleased to inform you that Orianna Glen Homes Corp. (Orianna) has reached an agreement with Milton Boyne Survey landowners in regard to the southerly alignment of the proposed Britannia Road by-pass at Omagh, which we understand is the Region's "preliminary preferred alignment". As such, notwithstanding, letters filed by MTE Consultants Inc. on June 16, 2011, and January 6, 2012; and the BA Group on June 16, 2011. Orianna herein withdraws its objection to the southerly alignment of Britannia Road and offers its support for the "preliminary preferred alignment" (as shown as Alternative 5C on the attached Figure 1), being confirmed as the "Preferred Alignment" through the Britannia Road Class Environmental Assessment process.

We understand that the Environmental Study Report will be filed shortly and upon the expiry of its statutory review period, we look forward to working with the Region to facilitate the transfer of the required road allowance at the earliest possible date. Please feel free to contact the undersigned, should you require additional information.

Yours truly.

ORIANNA GLEN HOMES INC.

by its Development Manager, Trinison Management Corp.

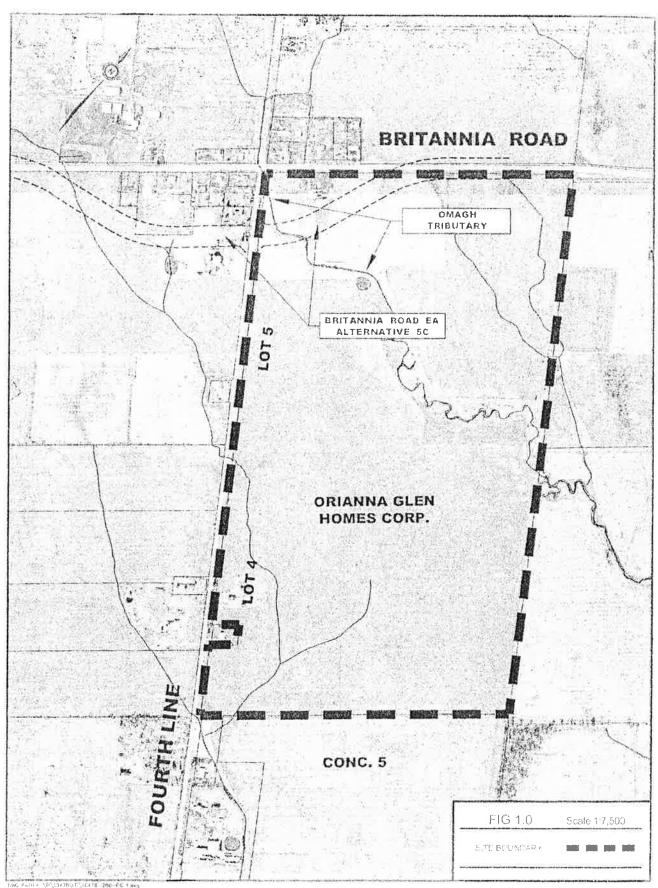
vano Manias.

Development Director, GTA Central

cc: Frank Doracin

101: 416 /36 8850 10- 90: 660 /650 TRINISON

tel 416 728 1427 (a.c. 416 228 2157 TRINISTAT





June 17, 2013

Michael Telawski
Trinison Management Corp.
c/o Orianna Glen Homes Corp.
8600 Dufferin Street
Concord,Ontario
L4K 5P5

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

Dear Mr. Telawski:

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment (EA) Study. The Project Team appreciates your participation in the study process and your comments submitted as part of the study consultation.

Please be advised that the Class EA for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR.

The 5C Alternative includes Britannia Road being realigned to the south of the Omagh Community. Subsequent to our meeting on December 5, 2011 and the December 2011 Public Meeting, the Project Team has had to adjust the proposed alignment of Britannia Road, including the alignment at the proposed bypass in the Omagh area. A southerly shift in the proposed alignment was required to eliminate impacts to the baseball field just west of Fourth Line as per further discussions with the Town of Milton. The proposed and revised right-of-way alignments are illustrated in Figure 1 attached. As per the figure, the total road right-of-way property requirement has increased by 411m<sup>2</sup>.

The ESR will be finalized and made available for public review in late 2013 and you will be notified of the filing at that time. If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or at alicia.jakaitis@halton.ca.

Sincerely,

Alicia Jakaitis

Transportation Coordinator

c.c. Nick Palomba, Delcan Corporation
 Maureen van Ravens, Manager Transportation Services - Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

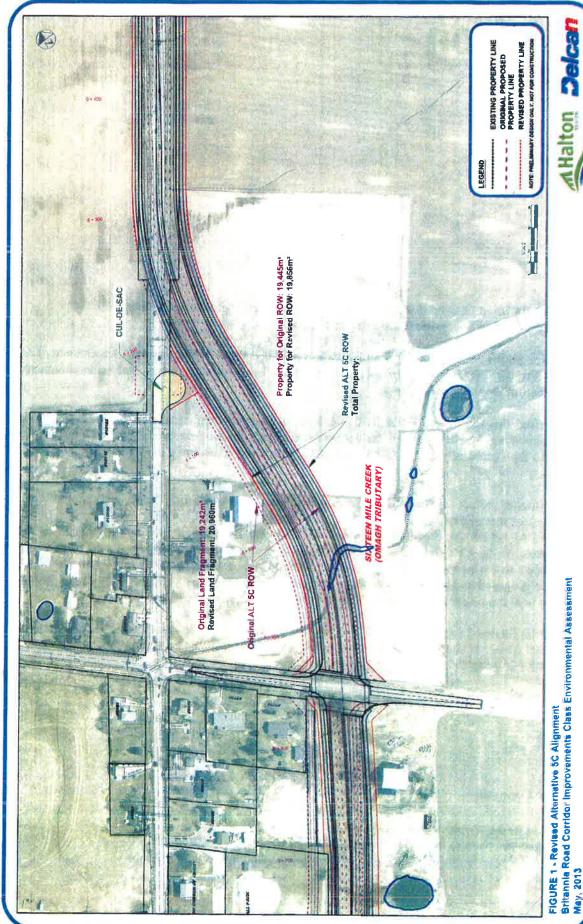


FIGURE 1 - Revised Alternative 5C Alignment
Britannia Road Corridor Improvements Class Environmental Assessment
May, 2013

Delcan

## Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

HELD ON:

Tuesday June 11, 2013 at 3:00 p.m.

LOCATION:

Nelson Room, Halton Region

PRESENT:

Melissa Green-Battiston

Halton Region

Alicia Jakaitas

Halton Region

Nick Palomba Michael Vernooy Delcan Corporation (Minutes) Mattamy Developments

Frank Ron

Mattamy Developments

PURPOSE:

Meeting with property owner to review proposed improvements on

Britannia Road and potential impacts to the various properties they own

within the corridor.

#### MINUTES:

#### **ACTION BY:**

### ITEM 1 - INTRODUCTIONS

Those at the meeting were introduced. 1.1

Information

## ITEM 2 - BRITANNIA ROAD CLASS EA STUDY - OVERVIEW AND STUDY STATUS

The study limits of the current Class EA Study is between 2.1 Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to proposed road widening. This is in addition to the public process undertaken as part of the Environmental Assessment (EA) Study, which included stakeholder meetings and three public information centres.

Information

# ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

Britannia Road is proposed to be widened from 2 to 4 lanes in 3.1 the interim and to 6 lanes (with the exception of the portion of the roadway between Eighth Line and Highway 407) for the ultimate configuration. The project will move forward in three stages:

Information

- 6 lanes Tremaine Road to Regional Road 25 (2015)
- 4 lanes Regional Road 25 to James Snow Parkway (2016-2017)
- 4 lanes James Snow Parkway to Highway 407 (2018-2019)
- 6 lanes Regional Road 25 to Eighth Line (2031)



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

#### MINUTES:

#### **ACTION BY:**

3.2 The nominal right-of-way on Britannia Road is 47 m, including a raised median to separate eastbound and westbound traffic. The ultimate roadway cross section will consist of:

Information

- 4 general purpose travel lanes and two special purpose lanes. The special purpose lanes will be the outside travel lanes and will be used as High Occupancy Vehicle (HOV) / transit lanes.
- On road dedicated bicycle lanes in each direction.
- Urban cross-section with storm sewers.

Provision for a  $3.0\ m$  multi-use path will be provided on both sides of the roadway.

3.3 The new alignment for Britannia Road generally follows the existing ROW but deviates from the centreline of the existing road to minimize impacts to adjacent properties, natural environment, archaeological features, etc. Where significant impacts are unavoidable (e.g. Community of Omagh), the road alignment would bypass the constraint areas to the south of the existing road.

Information

## ITEM 4 - REVIEW OF PRELIMINARY PLAN

- 4.1 Two main property areas were discussed. The first was the property in the northwest quadrant of the Regional Road 25 and Britannia Road intersection
- 4.2 There will be some property required along the Britannia Road frontage of the property from the existing property line, ranging from 4.7m to 27.5m. In total, approximately 11,527m² of property would be required to accommodate the proposed roadway cross-section. If the roadway works advance ahead of the proposed development works, specifically the water course realignments, then the Region would require an easement of approximately 1,399m² for the purpose of temporary ditching.

Information

4.2 There will be a continuous centre median along the frontage of the property.

Information

- 4.3 The second property discussed is located in the south east quadrant of the Fourth line and Britannia Road Intersection.
- 4.4 This property will have a continuous centre median along the frontage and the roadway alignment in this location has been slightly adjusted subsequent to the final public information



Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MINU	<b>ACTION BY:</b>									
	centre.									
4.5	The 47m corridor alignment has been shifted slightly to the south to accommodate a similar corridor shift on the west side of Fourth Line. The corridor shift was required to accommodate the Town of Milton's request to avoid all property impacts to the Omagh Baseball diamond.	ā.								
4.6	The southerly shift results in a property requirement of $20,553$ $m^2$ .	Information								
4.8	Partial preliminary plans (hardcopy) in the proximity of the properties were provided to the property owners.	IMOTHLACION								
ITEM 5 - GENERAL DISCUSSION										
5.1	The property owners were agreeable to the property requirements as presented and inquired as to the timing of the acquisition.									
5.2	Typically with property acquisition, the Region's Realty Services section would approach the affected property owners about two years in advance of construction, and proceed with negotiating the acquisition of property requirements related to the project. An independent appraisal will be prepared and the affected property owners will be compensated at fair market value.	Region								
5.3	The property owners may contact the Region's Realty Services at any time if they have any acquisition questions.	Information								
5.4	The property owners stated that the easement may not be required as they felt their development and the associated watercourse realignments would be in place prior to roadway construction. Easement will still be shown within the Environmental Study Report (ESR) drawings.									
5.4	The property owner offered to provide the Region contact information for the property ownership at 8760 Britannia Road.									
5.5	The property owner requested a digital proposed roadway plan showing the new property limits within the Omagh Bypass area adjacent to their property. The Region agreed.	Region/ Delcan								
5.7	An ESR will be prepared documenting the decision making process of the Class EA Study. The public will have an opportunity to review the ESR and provide comments. The ESR is anticipated to be available to the public in 2013. At this time	Region/ Delcan								



Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

### MINUTES:

**ACTION BY:** 

it is proposed that both access location options will be carried forward unless the property issue is resolved prior to filing the ESR.

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.



#### **Andrew McGregor**

To:

Jakaitis, Alicia

Subject:

RE: Britannia Road Class Environmental Assessment - Meeting Minutes

From: Jakaitis, Alicia

Sent: Wednesday, August 28, 2013 10:34 AM

To: Mike.Vernooy@mattamycorp.com; frank.bon@mattamycorp.com

Cc: n.palomba@delcan.com

Subject: Britannia Road Class Environmental Assessment - Meeting Minutes

Hi Mike and Frank,

Attached are the meeting minutes from our meeting on June 11<sup>th</sup> to discuss the property impacts associated with the Britannia road widening to Mattamy properties within the Boyne Secondary Plan and to discuss the refinements made to the south by-pass around the Omagh community.

If you have any further questions, please let me know.

Alicia

This message, including any attachments, is privileged and intended only for the person(s) named above. This material may contain confidential or personal information which may be subject to the provisions of the Municipal Freedom of Information & Protection of Privacy Act. Any other distribution, copying or disclosure is strictly prohibited. If you are not the intended recipient or have received this message in error, please notify us immediately by telephone, fax or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

Thank you

*	ā	w es		
	š			



June 17, 2013

Carlo Stefanutti
Fieldgate Developments
5400 Yonge Street, Suite 501
Toronto, Ontario
M2N 5R5

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

Dear Mr. Stefanutti:

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study

Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment (EA) Study. The Project Team appreciates your participation in the study process and your comments submitted as part of the study consultation.

Please be advised that the Class EA for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR.

The 5C Alternative includes Britannia Road being realigned to the south of the Omagh Community. Subsequent to our meeting on December 5, 2011 and the December 2011 Public Meeting, the Project Team has had to adjust the proposed alignment of Britannia Road, including the alignment at the proposed bypass in the Omagh area. A southerly shift in the proposed alignment was required to eliminate impacts to the baseball field just west of Fourth Line as per further discussions with the Town of Milton. The proposed and revised right-of-way alignments are illustrated in Figure 1 attached. As shown in the figure, the total roadway right-of-way property requirement has increased by 5,785m<sup>2</sup>.

The ESR will be finalized and made available for public review in late 2013 and you will be notified of the filing at that time. If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or at alicia.jakaitis@halton.ca.

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Attach.

Nick Palomba, Delcan Corporation
 Maureen van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

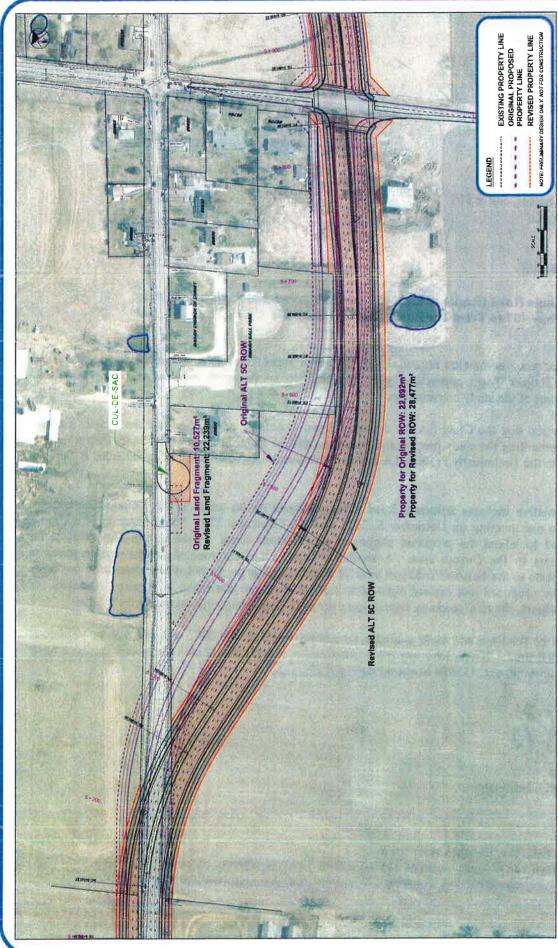


FIGURE 1 - Revised Alternative 5C Alignment Britannia Road Corridor Improvements Class Environmental Assessment May, 2013



### Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

Wednesday August 7, 2013 at 10:00 a.m. **HELD ON:** Appleby Room, Halton Region LOCATION:

PRESENT:

Fieldgate Carlo Stefanutti BA Group Robert McBride **TMIG** David Scott

Halton Region Melissa Green-Battiston Halton Region Alicia Jakaitas Halton Region

Maureen Van Ravens Halton Region Brian Hudson

Delcan Corporation (Minutes) Nick Palomba

Meeting with property owner to review proposed improvements on **PURPOSE:** 

Britannia Road and the impacts to the various properties they own

within the corridor.

**ACTION BY: MINUTES:** 

ITEM 1 - INTRODUCTIONS

Information Those at the meeting were introduced. 1.1

BRITANNIA ROAD CLASS ENVIRONMENTAL ITEM ASSESSMENT (EA) STUDY - OVERVIEW AND STUDY STATUS

The study limits of the current Class Environmental Information 2.1 Assessment (EA) Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to the proposed road widening. This is in addition to the public process undertaken as part of the Class EA Study, which included stakeholder meetings and three Public Information Centres (PIC).

### ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

The preferred alternative for Britannia Road includes a Information 3.1 widening to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407, with protection for 6 lanes, as required, prior to 2031. The preferred alternative also includes a south by-pass around Omagh and a grade separation at the CNR tracks.

The right-of-way on Britannia Road is 47m and the ultimate Information 3.2



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

MINUTES: ACTION BY:

cross-section will consist of the following:

- 6 lanes at 3.5m (including 2 future High Occupancy Vehicle curb lanes)
- 1.8m on road cycling lanes
- 3.0m multi-use pathways on both sides of the roadway

#### ITEM 4 - REVIEW OF PRELIMINARY PLAN

part of the Boyne Secondary Plan.

- 4.1 The primary property discussed is located in the southwest quadrant of Britannia Road at Fourth Line.
- 4.2 Subsequent to a property meeting held with Fieldgate on December 5, 2011 and the December 2011 Public Meeting, the Project Team has had to adjust the proposed alignment of Britannia Road, including the alignment at the proposed bypass in the Omagh area. A southerly shift in the proposed alignment was required to eliminate impacts to the baseball field just west of Fourth Line based on further discussions with the Town of Milton. A southerly shift in alignment also minimizes impacts to 5776 4<sup>th</sup> Line. As discussed, the roadway right-of-way requirement has increased by 5,785m² to an approximate total of 22,239m² There will be a continuous centre median throughout the bypass with consideration for future development intersections as
- 4.3 A partial preliminary plan (hardcopy) of the south by-pass around the Omagh community was presented at the meeting for discussion and illustration of the shift.
- 4.4 Any property requirements from landowners to accommodate future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. Property requirements for roadway improvements are normally acquired 1 to 2 years prior to construction commencing. All property acquisition questions and concerns can be directed to Adam Millington Realty Services at (905)825-6000 ext. 7242.

#### ITEM 5 - GENERAL DISCUSSION

5.1 The property owner expressed concern over the location and property requirements for the south by-pass around the Omagh community. The Project Team discussed how the

Information



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

#### **MINUTES:**

#### **ACTION BY:**

Technically Preferred Alternative for the by-pass was developed through careful consideration of existing and future conditions, overall traffic operations as well as the impact of the by-pass on the social and natural environments within the study area. A full description of the evaluation matrix for the by-pass will be included in the final ESR.

- 5.2 All supporting background technical reports will be included in the final ESR and made available for public review and comment at the time of the ESR filing. A Stormwater Management Report and Noise Study will be included.
- 5.3 The property owner requested digital plans of the Omagh bypass and at additional Fieldgate owned properties within the Boyne Secondary Plan Area. Subsequent to the meeting, plans were forwarded to Fieldgate.

Region/ Delcan

5.4 Further to the letter dated December 22, 2011 from BA Group on behalf of Fieldgate Properties the questions and comments are addressed below and for convenience, follow the order from the letter.

Region/ Delcan

- BA Group has been added to the mailing list
- A full description of the evaluation matrix for the by-pass will be included in the final ESR. Please note that as part of the evaluation process, a reduced right-of-way through the Omagh Community was considered, however due to existing cultural heritage structures within the existing right-of-way, necessary intersection geometry for existing and future intersections, the requirement to support all modes of transportation, a widening through Omagh was not carried forward as the preferred alternative.
- A north by-pass option would render an existing and working farm inoperable. A south by-pass will impact the rural farm lands south of Britannia Road, however the current farming of the lands can continue.
- The existing owner of the farm north of Britannia has made it explicitly clear in writing to the Region, Town of Milton and both Town and Regional Council and through a Community petition that farming will continue on the property indefinitely.
- As part of the development of the Boyne Secondary Plan, two proposed north-south local collector roadways



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

#### **MINUTES:**

**ACTION BY:** 

are proposed at the east and west limits of the south bypass providing addition connections to the Regional Road network. It is expected that the traffic demand on Fourth Line will be alleviated as additional capacity becomes available within both Regional and Local road networks. It has been confirmed by the Town of Milton that Fourth Line will remain a minor Local roadway serving local traffic.

- There is no current specific land use information available for the lands south of Britannia Road, in the vicinity of the by-pass at this time.
- As part of the Boyne Secondary Plan, a policy has been included for the Town of Milton to conduct a Cultural Heritage Study of the Omagh community.
- As discussed above, any property requirements from landowners to accommodate future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. Property requirements for roadway improvements are normally acquired 1 to 2 years prior to construction commencing. All property acquisition questions and concerns can be directed to Adam Millington – Realty Services at (905)825-6000 ext. 7242.
- 5.5 An Environmental Study Report (ESR) will be prepared documenting the Class EA study process and recommendations. The ESR will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment.

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.





June 28, 2011

Delcan Corporation 3115 Harvester Road Suite 102 Burlington, ON L7N 3N8

Attention:

Mr. Manoji Dilwaria, B.Eng., M.Pl. (Transp.), MCIP, RPP, AVS

Principal and Technical Director

Dear Mr. Dilwaria,

# Re: Britannia Road Class Environmental Assessment Study <u>Tremaine Road to Highway 407</u>

We represent Sundial Homes (3<sup>rd</sup> Line) Limited and Sundial Homes (4<sup>th</sup> Line) Limited, owners of approximately 200 acres of land in the Boyne Survey Secondary Plan Area. The Sundial Homes (4<sup>th</sup> Line) Limited site is located at the northwest corner of Britannia Road and James Snow Parkway.

We have attended two Stakeholder Advisory Group meetings regarding the Class Environmental Assessment Study for Improvements to Britannia Road. Our attendance at these meetings is a direct result of the adjacency of Britannia Road to our lands, and the potential affects any proposed improvements may have on our lands.

We understand there are three possible routes for Britannia Road in the vicinity of James Snow Parkway and the Village of Omagh.

1. Re-alignment south of the Village of Omagh

Maintaining the existing alignment of Britannia Road

Re-alignment north of the Village of Omagh

The Boyne Secondary Plan is moving through the planning approval process, and is currently before the Region of Halton for approval. As active members of the Boyne Landowners Group, we are working with the Town of Milton to finalize the policies and land uses for the Sundial lands in this area.

We are concerned that a re-alignment of Britannia Road to the north of the Village of Omagh will be detrimental to the configuration of land uses immediately north of the Village Omagh. Specially, the area immediately north of the Village must accommodate a channel, stormwater

management pond, major node, and the associated transition of land uses emanating from the major node to the lower residential densities beyond the node. A re-aligned Britannia Road north of the Village will no doubt create a number of undesirable and inefficient pockets of land between the Village, Britannia Road, and the new urban developments of Boyne.

The Region should also consider that a re-aligned Britannia Road north of the Village of Omagh will necessitate a very complicated crossing of a re-aligned drainage channel and intersection of the existing Fourth Line Road in this area.

In discussion with Semas Transtech, the transportation consultant for Boyne, we understand there may be further technical questions to consider regarding ROW width, design speed, and the location of future collector roads within Boyne. We understand Semas Transtech will be providing a commenting letter on these more technical matters, therefore we will not repeat them here.

We continue to be very interested in the findings of the Britannia EA, and will provide further comments, as necessary, as the options become more refined.

Yours very truly,

MATSON, McCONNELL LTD.

Christopher S. Maison, B.E.S., MCIP

(chris/2011/sundial.milton/27jona.dolean)

cc: Robert Yanowski – Sundial Homes
Stephen Goldhar – Sundial Homes
Andrew Head – Halton Region
Diarmuid Horgan – Candevcon Limited



BA Consulting Group Ltd. 45 St. Clair Avenue West, Suite 300 Toronto, Ontario M4V 1K9 416.961.7110(phone) 416.961.9807(fax) www.bagroup.com bagroup@bagroup.com

December 22, 2011

Mr. Andrew Head, C.E.T., Project Manager Regional Municipality of Halton Transportation Services 1151 Bronte Road Oakville, Ontario L6M 3L1

Mr. Manoj Dilwaria, B.Eng., Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director Delcan Corporation 3115 Harvester Road, Suite 102 Burlington, ON L7N 3N8

Dear Sirs:

Re: Request for Comments

Class Environmental Assessment Study Britannia Road Corridor Improvements, Stakeholders Advisory Group Meeting & Public Information Centre #3

BA Consulting Group Ltd. represents Fieldgate Developments --- landowners with extensive land holdings south of Britannia Road in the ROPA 38 Urban Expansion Area. In that capacity, I recently attended the Stakeholders Advisory Group meeting held on December 6, 2011 and Public Information Centre #3 for the Britannia Road Class EA Study held on December 14, 2011. I appreciate the opportunity to offer the following comments on behalf of my client.

Previously, I attended Public Information Centre #1 held on January 26, 2011, the Stakeholders Advisory Group meeting held on June 6, 2011, and the PIC #2 held on June 8, 2011. I have previously corresponded providing comments for the EA Study concerning the information presented at PIC#1 in a letter dated February 23, 2011, and concerning the information presented at PIC#2 in a letter dated June 16, 2011.

In spite of theprevious correspondence and specific request that I be included on the appropriate mailing lists for contact in connection with the Britannia Road Class EA Study, I did not receive notification of the most recent Stakeholder Advisory Group meeting or Public Information Centre. I attended both meeting only after having been advised by my client. I would therefore repeat my request that I be added to the appropriate distribution lists and receive notification of any future events related to the Britannia Road Class EA Study.

At PIC#3, the text on Board #11 was ---

## "ALTERNATIVE DESGIN CONCEPT CONSIDERATIONS – OMAGH

In developing the various design concepts, the following constraints were identified within Omagh:

Existing ROW 20m

- Built-up properties close to existing ROW
- Several Built and Cultural Heritage Features adjacent to existing ROW
- Church and Cemetery adjacent to existing ROW

Due to these constraints, the ultimate 47m ROW width with six lane cross-section cannot be accommodated along the existing Britannia Road corridor through Omagh.

Bypasses to the north and south of Omagh will need to be considered in order to address the problem statement.

I did note that elsewhere along Britannia Road within the EA Study Area, the preliminary recommended solution involved a reduction in the width of the right-of-way in order to maintain the alignment on the "existing Britannia Road corridor". Surprisingly, I did not see any indication in the information presented at PIC#3 that the option of reducing the right-of-way width through Omagh was given consideration. The only illustration of alternatives on the existing corridor through Omagh was that showing the preferred 47m right-of-way. There was no explanation given as to why a reduction in the right-of-way width could be recommended elsewhere in the study area --- but not even evaluated as an alternative in the vicinity of Omagh. Given the creative solutions applied in other jurisdictions facing similar challenges, it strikes me as a failing of the Britannia Road EA Study not to have assessed and documented in a thorough way the real issues and impacts associated with providing for an adequate regional arterial road along the "existing Britannia Road corridor" through the hamlet of Omagh.

## Board #13 presented the "PRELIMINARY EVALUATION OF ALTERNATIVES".

Referring specifically to Alternative 5B (North Bypass) and Alternative 5C (South Bypass): I would draw your attention to the differences between the two options identified in the preliminary evaluation table:

Under the category Transportation/Technical":

- the north alignment has significant impacts on existing farm operation.
- the south alignment has moderate impacts on existing rural properties.
- the north alignment has significant property costs.
- the south alignment has moderate property costs.

Under the category "Socio-Economic Environment":

- the north alignment has significant impacts to existing farm operation.
- the south alignment has moderate impacts to existing rural property.

In all other respects, the preliminary evaluation table indicates that the two bypass options are without noteworthy distinction. .

The "existing farm operation" referred to in the preliminary evaluation exists within an area of the Town of Milton which has been designated in the Regional Official Plan and the Boyne Secondary Plan Area as an "Urban Area for Development Prior to 2021". I am not aware that the principals of the farm operation in question objected to the Urban Development Area OP designation or requested that the subject lands be excluded from the urban development area designation.

One might reasonably expect that the continuation of farming operations in a designated urban development area of the Town of Milton would tend to frustrate rather than support the objectives of the Regional Official Plan. Accordingly, I do not understand why the EA Study preliminary evaluation would consider impact on a farm operation located in a currently designated urban development area to be a negative factor. Indeed, one might reasonably conclude that any impact on existing farm operations within a currently designated urban development area would be less significant than comparable impact on an existing farm operation located in an area not yet available for urban development.

My client advises that its "existing rural property" south of Britannia Road has been in farm production for many years and will continue to be in farm production for many more years to come. The EA Study has provided no explanation as to why these lands south of Britannia Road should not also be assessed in the evaluation as an "existing farm operation". Therefore, I am disturbed by the apparently arbitrary distinction drawn in the preliminary evaluation between "existing farm operation" north of Britannia Road and "existing rural property" located south of Britannia Road. This seemingly arbitrary distinction appears to be a decisive factor in the EA Study's preliminary recommendation of the south bypass alignment.

On the basis of this readily available information one would reasonably expect that an objective preliminary evaluation would have concluded that the impact of the taking of a road allowance from an "existing farm operation" within the currently designated urban development area would have lesser (not greater) "Transportation/Technical" and "Socio-Economic Environment" impacts as compared to the impacts of the taking of a road allowance from an "existing farm operation" which is not located within the currently designated urban development area.

With respect to the matter of property acquisition costs identified under the "Transportation/Technical" category of the EA Study preliminary evaluation, I am unable to know what is meant by the distinction between "significant" and "moderate" property acquisition costs. Nor has there been any reference made to what actual assessment may have been undertaken to ascertain and/or quantify these distinctions.

In our prior correspondence dated June 16, 2011 following PIC#2, I offered the following comment for consideration in the Britannia Road EA Study:

• In reference to the alternative alignments of Britannia Road illustrated in the vicinity of Omagh, we would comment that 4<sup>th</sup> Line intersects with Britannia Road in Omagh and connects north to the currently built up portions of Milton. In the Boyne Secondary Plan, 4<sup>th</sup> Line is identified as a collector road with possible transit service. 4<sup>th</sup> Line may require a widening of the right-of-way north of Britannia Road -- not shown in the drawings presented at the SAG and the PIC. The two by-pass alternatives (north and south) each would require a creation of a new intersection of 4<sup>th</sup> Line with Britannia Road. The southern alignment of the by-pass would require the predominant forecast traffic volumes from Milton to the north to pass further through the hamlet of Omagh in order to connect with Britannia Road. This may require a greater widening of 4<sup>th</sup> Line that that required of the north alignment option and the additional traffic would generate a greater impact upon the hamlet. The north alignment would provide for the connection more conveniently and without the same level of potential road widening and traffic impact on the hamlet. If the objective of the by-pass is to reduce road widening and traffic impacts upon the hamlet of Omagh then the north alignment option is evidently better able to achieve the objective. We would suggest that this be given considerable weight in the evaluation of alternatives.

I note that no reference has been made in the preliminary evaluation to indicate that any consideration has been given to the impact of the fact the south bypass (the recommended alternative) requires traffic

origined and destined to/from the developing portions of Milton north of Britannia Road to pass through Omagh along 4<sup>th</sup> Line to connect with Britannia Road. This would not be the case in connection with the north alignment. Similarly with the recommended south alignment; should there be a need for the Town of Milton to widen 4<sup>th</sup> Line to a suitable standard and cross-section at the approach to the intersection with Britannia Road, the widening would occur within the hamlet of Omagh. This would not be the case in connection with the north alignment. I have seen no evidence that this significant distinction between the two options referred to in our June 16, 2011 letter received any consideration. This difference between the two alternatives was not presented to the public as a factor in the EA Study preliminary evaluation. Nor has this factor been acknowledged in the evaluation table in the "Transportation/Technical" category.

In prior correspondence dated June 16, 2011, I also offered the following comment for consideration in the Britannia Road EA Study:

• We would also suggest that it is essential to the evaluation of the by-pass alignment options to identify and deal conclusively with the numerous and important land use implications of the by-pass alternatives. To our knowledge this issue has not been addressed to date. One such issue would be the need to identify the potential future permitted use of the lands which in the by-pass options would be separated from developable areas and not used for road allowance. These lands would then be located between the future by-pass alignment and the existing hamlet of Omagh. Would these lands be developable? If so, with what uses and under what conditions?

I continue to assert that the creation of a bypass around Omagh quite clearly directly creates significant land use impacts and implications. I see no evidence that the matter has been given any consideration as part of the Britannia Road EA Study. There may be some very significant differences between the north alignment and the south alignment in regard to the land use implications. For example and simply: the south bypass alignment would closely associate the hamlet of Omagh with the development of the Boyne Secondary Plan Area. In contrast, the north alignment of the bypass would physically separate the hamlet of Omagh from development in the Boyne Secondary Plan Area. The land use implications of the two alignment options do not appear to have received any consideration in the preliminary evaluation, and the significant differences and potential impacts have not been identified nor reported to the public.

In prior correspondence dated June 16, 2011, I also offered the following comment for consideration in the Britannia Road EA Study:

With respect to the south by-pass alignment alternative, which would require the taking of portions of my clients' lands; please be advised that my clients have no interest whatsoever in accommodating the by-pass. The alignment shown could have significantly negative financial and other implications for my clients. The taking of the road right-of-way from my clients lands which are not currently under development in order to support the road infrastructure requirements of lands which are currently under development could be highly inequitable.

Please be advised that my client continues to have no interest whatsoever in accommodating the south alignment of the Omagh bypass on its lands.

\*\*\* \*\*\* \*\*\* \*\*\*

In conclusion, I request that the Britannia Road Class EA Study respond directly to the issues which have been raised in this and prior correspondence on my client's behalf. These issues include:

- the need to thoroughly and creatively evaluate the alternative of maintaining Britannia Road on its existing corridor through Omagh while reducing the right-of-way width and implementing selected mitigating measures.
- the need to thoroughly and objectively assess, in the context of Regional Official Plan designations, the impacts of the north and south Omagh bypass alignment alternatives on the existing farm operations that would be impacted.
- the need to identify and address the differences between the north and south Omagh bypass alignment alternatives with respect to the significantly different traffic patterns and the related implications of the evident need to upgrade the 4<sup>th</sup> Line connection.
- the need to identify and address the significantly different land use implications of the north and south bypass alignment options.
- the need to present more comprehensive information supporting any distinction regarding right-ofway property acquisition costs before using those property acquisition cost distinctions as a decisive factor in selecting the recommended alternative.

Finally, my client wishes to advise that unless the aforementioned issues of significance are addressed in a substantive and equitable fashion in the Britannia Road Class EA Study, it will very likely file a bump-up request with the Minister of the Environment.

Sincerely,

**BA Consulting Group Ltd.** 

Robert W. McBride, P. Eng., MCIP, RPP

President

cc. Carlos Stefanutti, Fieldgate Developments David Scott, TMIG

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www.delcan.com

March 8, 2011

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Mr. Robert W. McBride, P.Eng., RPP BA Consuffing Group Ltd. 45 St. Clair Avenue West, Suite 300 Toronto, Ontario M4V 1K9

**Comments Received** Re:

**Class Environmental Assessment Study** 

Britannia Road Corridor Improvements, PIC #1

Mr. McBride:

Thank you for taking the time to provide your comments on the Britannia Road Corridor Improvements Class EA, PIC #1. Please note that we have decided to hold an additional PIC, which is tentatively scheduled for June 8th. Further notice will be provided when the date is finalized. We will also hold the next Stakeholder Advisory Group meeting near the end of March/beginning of April. Again, your client will receive notice of this meeting as soon as the date is finalized.

Thank you again for providing your comments. We will ensure any concerns or issues you have will be considered within the scope of this study as per the Class EA process.

If you have any questions or require additional information, please feel free to contact me directly at (905) 356-7003 or email m.dilwaria@delcan.com.

Yours truly,

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS

Principal and Technical Director

Andrew Head, C.E.T. - Halton Region CC:



MAR U7 2011

PUBLIC WORK OF BOOK

BA Consulting Group Ltd. 45 St. Clair Avenue West, Suite 300 Toronto, Ontario M4V 1K9 416.961.7110(phone) 416.961.9807(fax) www.bagroup.com bagroup@bagroup.com

February 23, 2011

Mr. Andrew Head, C.E.T., Project Manager Regional Municipality of Halton Transportation Services 1151 Bronte Road Oakville, Ontario L6M 3L1

Dear Sir:

Re:

**Request for Comments** 

Class Environmental Assessment Study

Britannia Road Corridor Improvements, PIC #1

BA Consulting Group Ltd. attended PIC #1 for the Britannia Road Class EA held on January 26, 2011 on behalf of Fieldgate Developments and Trinison Management Corporation, landowners with extensive land holdings south of Britannia Road in the ROPA 38 Urban Expansion Area.

We appreciate the opportunity to offer the following comments.

#### **Problem Statement**

- Slide #6 indicates that there is "severe traffic congestion along Britannia Road".
- Slide #7 indicates that there are safety problems along Britannia Road and that "nine Britannia road sections and/or intersections are identified in the Region's 2010 Comprehensive Road Safety Action Plan (CROSAP) as needing improvement".
- Slide #14 indicates that "traffic volumes are expected to increase with continued development in Milton including the Boyne Survey Secondary Plan" and that "projected 2031 travel demands indicate the need to widen Britannia Road."
- Slide #15 indicates that "the Region of Halton/Town of Milton is experiencing high population and employment growth" and that "roadway capacity and intersection operations will continue to deteriorate without transportation improvements." The slide specifically indicates in bold that "as presently configured, Britannia Road will not be able to accommodate the travel demand growth anticipated by 2031."

Our comment is: that the reported analysis and problem statement may not adequately describe the actual problem on Britannia Road. We note that the travel demand forecast cited is for 2031... a horizon year 20 years hence. Based upon 1) the existing condition of severe traffic congestion along Britannia Road, 2) the reported safety problem sections and/or intersections, and 3) the traffic volume growth which could reasonable be anticipated arising from the continuing development of Milton generally and the Boyne Survey Secondary Plan area in particular; we must question whether the need for improvement to Britannia Road would be clearly evident well in advance of 2031. We wonder whether travel demand forecasts for interim periods (2016 or 2021) have been, or will be, undertaken to determine the need for improvements to Britannia Road earlier than 2031.

Slide #16 presents a range of generic alternative planning solutions. Slide #17 presents a range of generic evaluation criteria. There is no indication as to how the planning alternative solutions will actually be evaluated to develop a preliminary preferred alternative planning solution. There is no indication as to whether the preliminary preferred planning alternative solution may consist of a combination of several of the generic alternative planning solutions. There is no indication as to whether or not the preliminary preferred alternative planning solution will represent a single final plan or whether it might reflect a set of phased improvements at different times and in different sections of the corridor based upon a careful assessment of needs as developing over time.

Although no alternative design concepts were presented at the PIC #1; we note that there have been discussions concerning the possibility of a bypass of the hamlet of Omagh. To the extent that there may be possible alternative design concepts which align to the south of the existing alignment of Britannia Road, my clients' lands could be directly and materially effected. Accordingly, we must enquire as to: 1) when such alternative design concepts will be developed, 2) how the impacts of such concepts will be measured, 3) how the impacts will be assessed relative to the impacts of other options, and 4) when the impacted landowners (such as my clients) will be able to become fully informed as to the nature of the alternative concepts and their impacts. To the extent that there are impacts on my clients' lands, what opportunities will exist for consideration of the full range of possible mitigating measures? We would ask to become informed about these matters and have the opportunity to consider and comment on them well in advance of PIC #2 scheduled in the Fall of 2011.

We note that the next PIC is scheduled to be conducted in the Fall of 2011. The slide indicates that at that PIC #2 the study team will present the preliminary preferred planning solution as well as the alternative design concepts to implement the preliminary preferred solution and the preliminary preferred design concepts. This suggests a very considerable amount of progress and tentative decision making to occur between PIC #1 and PIC #2. We question whether this process alone provides sufficient opportunity for stakeholder input. There appears to be much to be considered at each step along the way.

We thank you for the opportunity to submit these comments and request a meeting with the project team in the near future to discuss our comments in more detail and advance a satisfactory solution for PIC #2.

Sincerely,

BA Consulting Group Ltd.

Robert W. McBride, P. Eng., RPP

President

Colin McGregor, Trinison Management cc. Carlos Stefanutti, Fieldgate Developments

Colin Chung, Glen Schnarr Associates



BA Consulting Group Ltd. 45 St Clair Avenue West, Suite 300 Toronto, Ontario MAV 1K9 416.961.7110(phone) 416.961 9807(fax) www.bagroup.com bagroup@bagroup.com

December 22, 2011

Mr. Andrew Head, C.E.T., Project Manager Regional Municipality of Halton Transportation Services 1151 Bronte Road Oakville, Ontario L6M 3L1

Mr. Manoj Dilwaria, B.Eng., Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director Delcan Corporation 3115 Harvester Road, Suite 102 Burlington, ON L7N 3N8

Dear Sirs:

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At PIC#3, the text on Board #11 was ---

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Due to these constraints, the ultimate 47m ROW width with six lane cross-section cannot be accommodated along the existing Britannia Road corridor through Omagh.

Bypasses to the north and south of Omagh will need to be considered in order to address the problem statement.

I did note that elsewhere along Britannia Road within the EA Study Area, the preliminary recommended solution involved a reduction in the width of the right-of-way in order to maintain the alignment on the "existing Britannia Road corridor". Surprisingly, I did not see any indication in the information presented at PIC#3 that the option of reducing the right-of-way width through Omagh was given consideration. The only illustration of alternatives on the existing corridor through Omagh was that showing the preferred 47m right-of-way. There was no explanation given as to why a reduction in the right-of-way width could be recommended elsewhere in the study area --- but not even evaluated as an alternative in the vicinity of Omagh. Given the creative solutions applied in other jurisdictions facing similar challenges, it strikes me as a failing of the Britannia Road EA Study not to have assessed and documented in a thorough way the real issues and impacts associated with providing for an adequate regional arterial road along the "existing Britannia Road corridor" through the hamlet of Omagh.

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With respect to the matter of property acquisition costs identified under the "Transportation/Technical" category of the EA Study preliminary evaluation, I am unable to know what is meant by the distinction between "significant" and "moderate" property acquisition costs. Nor has there been any reference made to what actual assessment may have been undertaken to ascertain and/or quantify these distinctions.

In our prior correspondence dated June 16, 2011 following PIC#2, I offered the following comment for consideration in the Britannia Road EA Study:

• In reference to the alternative alignments of Britannia Road illustrated in the vicinity of Omagh, we would comment that 4th Line intersects with Britannia Road in Omagh and connects north to the currently built up portions of Milton. In the Boyne Secondary Plan, 4th Line is identified as a collector road with possible transit service. 4th Line may require a widening of the right-of-way north of Britannia Road -- not shown in the drawings presented at the SAG and the PIC. The two by-pass alternatives (north and south) each would require a creation of a new intersection of 4th Line with Britannia Road. The southern alignment of the by-pass would require the predominant forecast traffic volumes from Milton to the north to pass further through the hamlet of Omagh in order to connect with Britannia Road. This may require a greater widening of 4th Line that that required of the north alignment option and the additional traffic would generate a greater impact upon the hamlet. The north alignment would provide for the connection more conveniently and without the same level of potential road widening and traffic impact on the hamlet. If the objective of the by-pass is to reduce road widening and traffic impacts upon the hamlet of Omagh then the north alignment option is evidently better able to achieve the objective. We would suggest that this be given considerable weight in the evaluation of alternatives.

I note that no reference has been made in the preliminary evaluation to indicate that any consideration has been given to the impact of the fact the south bypass (the recommended alternative) requires traffic

origined and destined to/from the developing portions of Milton north of Britannia Road to pass through Omagh along 4<sup>th</sup> Line to connect with Britannia Road. This would not be the case in connection with the north alignment. Similarly with the recommended south alignment; should there be a need for the Town of Milton to widen 4<sup>th</sup> Line to a suitable standard and cross-section at the approach to the intersection with Britannia Road, the widening would occur within the hamlet of Omagh. This would not be the case in connection with the north alignment. I have seen no evidence that this significant distinction between the two options referred to in our June 16, 2011 letter received any consideration. This difference between the two alternatives was not presented to the public as a factor in the EA Study preliminary evaluation. Nor has this factor been acknowledged in the evaluation table in the "Transportation/Technical" category.

In prior correspondence dated June 16, 2011, I also offered the following comment for consideration in the Britannia Road EA Study:

• We would also suggest that it is essential to the evaluation of the by-pass alignment options to identify and deal conclusively with the numerous and important land use implications of the by-pass alternatives. To our knowledge this issue has not been addressed to date. One such issue would be the need to identify the potential future permitted use of the lands which in the by-pass options would be separated from developable areas and not used for road allowance. These lands would then be located between the future by-pass alignment and the existing hamlet of Omagh, Would these lands be developable? If so, with what uses and under what conditions?

I continue to assert that the creation of a bypass around Omagh quite clearly directly creates significant land use impacts and implications. I see no evidence that the matter has been given any consideration as part of the Britannia Road EA Study. There may be some very significant differences between the north alignment and the south alignment in regard to the land use implications. For example and simply: the south bypass alignment would closely associate the hamlet of Omagh with the development of the Boyne Secondary Plan Area. In contrast, the north alignment of the bypass would physically separate the hamlet of Omagh from development in the Boyne Secondary Plan Area. The land use implications of the two alignment options do not appear to have received any consideration in the preliminary evaluation, and the significant differences and potential impacts have not been identified nor reported to the public.

In prior correspondence dated June 16, 2011, I also offered the following comment for consideration in the Britannia Road EA Study:

• With respect to the south by-pass alignment alternative, which would require the taking of portions of my clients' lands; please be advised that my clients have no interest whatsoever in accommodating the by-pass. The alignment shown could have significantly negative financial and other implications for my clients. The taking of the road right-of-way from my clients lands which are not currently under development in order to support the road infrastructure requirements of lands which are currently under development could be highly inequitable.

Please be advised that my client continues to have no interest whatsoever in accommodating the south alignment of the Omagh bypass on its lands.

\*\*\* \*\*\* \*\*\* \*\*\*

In conclusion, I request that the Britannia Road Class EA Study respond directly to the issues which have been raised in this and prior correspondence on my client's behalf. These issues include:

- the need to thoroughly and creatively evaluate the alternative of maintaining Britannia Road on its existing corridor through Omagh while reducing the right-of-way width and implementing selected mitigating measures.
- the need to thoroughly and objectively assess, in the context of Regional Official Plan designations, the impacts of the north and south Omagh bypass alignment alternatives on the existing farm operations that would be impacted.
- the need to identify and address the differences between the north and south Omagh bypass alignment alternatives with respect to the significantly different traffic patterns and the related implications of the evident need to upgrade the 4th Line connection.
- the need to identify and address the significantly different land use implications of the north and south bypass alignment options.
- the need to present more comprehensive information supporting any distinction regarding right-ofway property acquisition costs before using those property acquisition cost distinctions as a decisive factor in selecting the recommended alternative.

Finally, my client wishes to advise that unless the aforementioned issues of significance are addressed in a substantive and equitable fashion in the Britannia Road Class EA Study, it will very likely file a bump-up request with the Minister of the Environment.

Sincerely,

**BA** Consulting Group Ltd.

Robert W. McBride, P. Eng., MCIP, RPP

President

Carlos Stefanutti, Fieldgate Developments cc.

David Scott, TMIG

#### 141 Brunel Road Mississauga, Ontario L4Z 1X3

T: 416.213.7121 F: 905.890.8499





July 8, 2011

Delcan Corporation 3115 Harvester Road Suite 102 Burlington, Ontario L7N 3N8

Attention:

Mr. Manoj Dilwaria, B.Eng., M. Pl. (Transp.), MCIP, RPP, AVS

Principal and Technical Director

Dear Mr. Dilwaria:

RE:

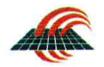
Public Information Centre No. 2 Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407

Class Environmental Assessment Study

Our file No. 08132.800

Transtech attended both the PIC No. 2 for the Britannia Road corridor on June 8, 2011 and the Stakeholders Meeting on behalf of the Boyne Landowners Group (LOG). While we recognize that this is a "progress report" we think there are issues that are important to the Boyne Survey Secondary Plan Area that need to be addressed prior to completion of this EA and we appreciate the opportunity to provide the following comments.

- The premise of the Region's design for Britannia Road is based on the Halton Transportation Master Plan and at this time, despite our requests for technical information, the need for and justification has not been fully explained to justify the HOV lanes in the future.
- 2. We also question the need and justification for a 47 metre right-of-way (ROW) along Britannia Road. This ROW is grossly excessive and we feel that a 36-metre ROW is appropriate for 6 lanes.
- 3. The particular alignment option presented at the PIC No. 2 identified the property impacts both north and south of Britannia Road to avoid certain existing constraints. This alignment needs to be reviewed in terms of the posted speed of 50 km/hr (as opposed to 70 km/hr) at appropriate segments of Britannia Road to minimize development and existing community impacts.
- 4. The drawing presented at the PIC shows a greater impact to the lands on the north side of Britannia Road between Regional Road 25 and Sixteen Mile Creek from the proposed alignment. Further information is required to understand why additional land is being taken from the north side (including the existing Soccer field).



- 5. Particular attention needs to be paid to the proposed By-pass at Omagh. Going forward, the By-pass options presented need to be more thoroughly investigated with respect to the impacts on developing lands within Boyne as well as the area in Omagh within the By-pass with respect to future development.
- 6. As part of the Omagh By-pass assessment, the reduction of the design speed and corresponding design standards including the right-of-way needs to be evaluated.
- 7. The location of future collector roads within Boyne and adjacent land uses need to be addressed going forward before the final alignment is chosen.
- 8. It is the LOG's position that the Region will be fully responsible for all costs associated with the implementation/construction/maintenance, etc. of SWM pond or drainage facilities along Britannia Road whether or not the SWM pond is owned by the Region or shared with lands subject to future development.

We only recently received the preliminary design drawings and at this time we have not had sufficient time to review the alignment drawings and Omagh By-pass options and examine the impacts specific to Boyne, we reserve the right to provide further comments once we have obtained additional information from the Master Plan and completed a more detailed review of the detailed design.

Yours truly,

**TRANSTECH** 

F.E. (Torn) Rae, P.Eng.

Principal

c.c. Andrew Head, Region of Halton Carmela Liggio, Delta Urban Inc.



Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

8240 Britannia Road

Halton Region has initiated a Class Environmental Assessment (EA) Study for Britannia Road which considered a wide range of options for transportation improvements to satisfy future travel demands on Britannia Road from Tremaine Road to Highway 407. The Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternatives are also being made based on input received from Stakeholders and Public Information Meetings. Please note that the Technically Preferred Alternative for Britannia Road has been developed through careful consideration of existing and future conditions, overall traffic operations, as well as the impact of such improvements on the social and natural environments within the study area.

The Preliminary Preferred Alternative identified for Britannia Road includes a 6 lane widening from Tremaine Road to Regional Road 25 and 4 lane widening from Regional Road 25 to Highway 407, with protection for a future 6 lanes. The preliminary design also includes a south bypass around the Omagh Community and a grade separation at the CN tracks. The widening of Britannia Road will generally be along the centreline of the existing roadway and will include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

This letter is to advise you that your property fronts onto Britannia Road at a location where proposed improvements to the Britannia Road corridor will have impacts to your property. To provide a better understanding of the property impacts associated with the widening, drawings are attached for your information.

#### Page 2

The ESR will be finalized in Summer 2013 and you will be notified when the ESR is available for public review and comment. If you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

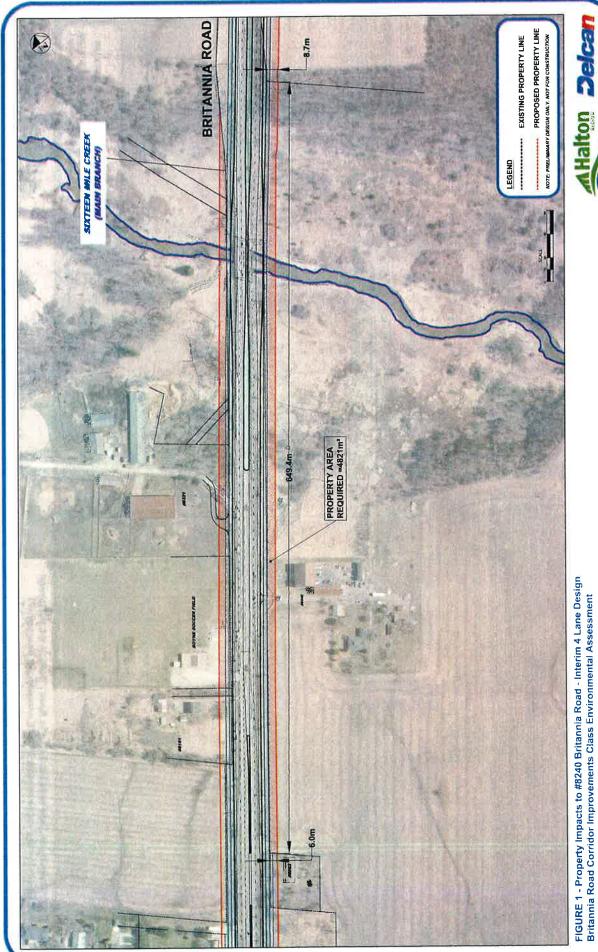


FIGURE 1 - Property Impacts to #8240 Britannia Road - Interim 4 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013



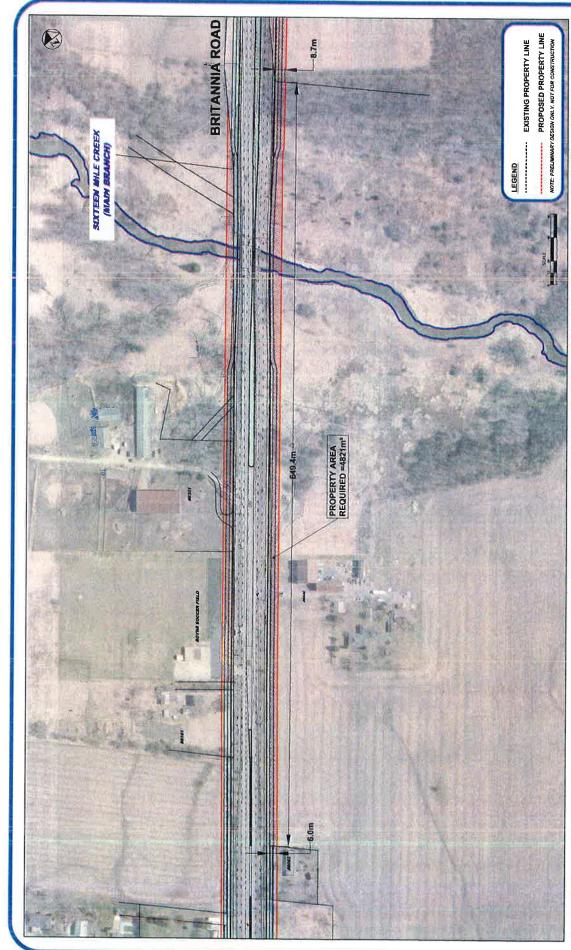


FIGURE 2 - Property Impacts to #8240 Britannia Road - Ultimate 6 Lane Design Britannia Road Corridor Improvements Class Environmental Assessment May, 2013

Selcan

Halton



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) 5776 Fourth Line

Thank you for taking the time to meet with the Britannia Road Class Environmental Assessment (EA) Study project team on Wednesday September 18, 2013 at the Halton Regional Centre. Attached you will find minutes from that meeting.

As discussed, the Environmental Study Report will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment. If you have any questions or concerns, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

**Transportation Coordinator** 

Nick Palomba, Delcan Corporation
 Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

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## **Minutes of Meeting**

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

HELD ON:

Wednesday July 10, 2013 at 4:30 p.m.

LOCATION:

5776 Fourth Line

PRESENT:

Nick Palomba

Alicia Jakaitis

Delcan

Halton Region

Property Owner Property Owner

**PURPOSE:** Meeting with property owners of 5774 Fourth Line to review proposed improvements on Britannia Road and potential impacts to the private property.

MINUTES:

**ACTION BY:** 

ITEM 1 - INTRODUCTIONS

1.1 Those at the meeting were introduced.

Information

ITEM 2 - BRITANNIA ROAD CLASS ENVIRONMENTAL ASSESSESSMENT (EA) STUDY - OVERVIEW AND STUDY STATUS

2.1 The study limits of the current Class Environmental Assessment (EA) Study is between Tremaine Road (Regional Road 22) and Highway 407. At this time, the Project Team is meeting with property owners who will experience significant impacts due to the proposed road widening. This is in addition to the public process undertaken as part of the Class EA Study, which included stakeholder meetings and three Public Information Centres (PIC).

Information

## ITEM 3 - PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

3.1 The preferred alternative for Britannia Road includes a widening to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407, with protection for 6 lanes, as required, prior to 2031. The preferred alternative also includes a south by-pass around Omagh and a grade separation at the CNR tracks.

Information

3.2 The right-of-way on Britannia Road is 47m and the ultimate cross-section will consist of the following:

Information

- 6 lanes at 3.5m (including 2 future High Occupancy Vehicle curb lanes)
- 1.8m on road cycling lanes



### Minutes of Meeting

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MINUTES: ACTION BY:

• 3.0m multi-use pathways on both sides of the roadway

### ITEM 4 - REVIEW OF PRELIMINARY PLAN

- The original roadway alignment has been shifted to the south after further consultation with the Town of Milton. The shift to the south avoids the Omagh Ball Diamond and increases separation to the Daniel's property. There is no property required from the subject property to implement the realigned roadway.
- 4.2 The existing property currently has one residential driveway to Fourth Line, which will remain.
- 4.3 The property access would be approximately 21m north of the edge of the realigned Britannia Road.
- 4.4 With the planned roadway improvements the edge of the new realigned roadway curb would be about 20m south of the existing property line where the garage is located.
- 4.5 Noise mitigation to the property will be provided in the form of a noise barrier wall. Additional consultation with the home owner regarding the noise barrier wall will be done during detail design.
- 4.6 Fourth line will be widened to accommodate a southbound left turn lane at the intersection of new Britannia Road at Fourth Line. The new west edge of pavement of Fourth Line will be approximately 3.0 m closer to the Daniel's property.

#### ITEM 5 - GENERAL DISCUSSION

- 5.1 Existing Britannia Road will be cul-de-sac at each end and ownership eventually transferred to the Town of Milton. The Town may wish to revisit the traffic control at Fourth Line and existing Britannia Road given the changes in travel patterns.
- 5.2 Connection to Regional services was discussed and Regional staff confirmed that the Halton Regional Official Plan (2006) contains policies that prescribe where municipal water and wastewater services will be provided. Section 89(1) of the Official Plan states that urban services (municipal water and wastewater services) will only be provided within the Urban Area, except where these services are permitted by other policies in the Plan.

At this time, the Urban Area south limit runs along the centreline of Britannia Road and the east limit is James Snow Parkway. Regional services will be available to properties within the Urban Area only and properties on the south side of Britannia Road and east of James Snow Parkway remain in the Rural Area and will not eligible for servicing.



## Minutes of Meeting

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

MINUTES:

ACTION BY:

The Regional Official Plan Amendment ROPA 38 has proposed to change the Urban Boundary resulting in it extending further south and east along Britannia Road post 2021. The Property Owner was encouraged to speak with the Town of Milton to discuss possible land use implications to the subject property.

An Environmental Study Report (ESR) will be prepared documenting the Class EA study process and recommendations. The ESR will be finalized in late 2013 and you will be notified when the ESR is available for public review and comment.

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.



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Public Information Centre No. 2 June 8, 2011

#### **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

Name:				
Address:				
Email:	the Region of Halton is	undertaking a Class Enviro	inmental Assessment (Class E	(A) Study for improvements
to Britannia Road from	m Tremaine Road to Hig this comment sheet, All	nhway 407. Your comment	s and suggestions are importa ered and included in the docu	int to us. Please take a lew
1. My property/Inter	rest is: (please check a	ill that apply).		
[ ] Direct access or	nto Britannia Road	X	Residential property	
M User of Britannia	a Road	[]	Commercial/industrial property	
[ ] General interest		[]]	nstitutional property	
[ ] Other:				
2. How frequently d	o you use Britannia Ro	oad between Tremaine Ro	oad and Highway 407?	
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3. Please provide vo	our comments regardir	ng the following (extra sh	eet has been provided for ad	ditional comments):
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Public information Centre No. 2
June 8, 2011

#### **PUBLIC COMMENT SHEET**

C.	The Design Concepts being considered:
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d.	Are there any additional Design Concepts that you feel should also be considered?:
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θ.	The considerations used in developing the Design Concepts:
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f.	Are there any additional considerations that you feel should be used in developing the Design Concepts?:
7.	

4. How did you hear about this public meeting?





Public Information Centre No. 2
June 8, 2011

#### **PUBLIC COMMENT SHEET** Notice in the mail [ ] Other: [ ] Newspaper Ad 5. Please indicate your satisfaction with the following: Satisfied if not, please specify your preference here. Yes / No Location of meeting 4 E > Time of meeting 4 E- 5 Day of week 4º ES 6. On a scale of 1 to 5, where 1 = "very" and 5 = "not at all", please rate the following by circling the appropriate number: a. How informative were the display boards? Somewhat Not at all Very 3 5 1 b. How helpful were the staff and consultants in attendance? Not at all Somewhat Very 3 5 2 1 7. Were all your questions answered satisfactorily?

#### THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the 'Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Ditwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

[ ] No

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

[]Yes

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email:





Public Information Centre No. 2
June 8, 2011

#### **PUBLIC COMMENT SHEET**

Other Comments:  UN FORTUNATURE WE WERE UNABLE TO ATTEND THE
MEETING ON THNE 8, 2011,
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USE AND WOULD NEED TO BE DEMOCISHED.



August 9, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation and the comments submitted as part of the public consultation process.

The Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a> The Technically Preferred Alternative for the Omagh by-pass is the Alternative 2C, as presented in December 2011. The 2C Alternative includes Britannia Road being realigned to the south of the Omagh Community.

The Technically Preferred Alternative is also proposed to include; 3.0 metre multi-use paths, 1.8 metre on road cycling lanes on both sides along the Britannia Road corridor, as well as a combination of 5 metre raised centre median to enhance corridor features, and a shared centre left turn lane where appropriate.

If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Cc. Manoj Dilwaria, Delcan Coorporation

Maureen Van Ravens, Manager Transportation Services – Halton Region Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region





Public Information Centre No. 2 June 8, 2011

#### **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

Name:			
Address:			
to Britannia Road from Trems minutes to complete this con process, Please print, Thank	aine Road to Highway 407. You Iment sheet. All comments will	comments and s	al Assessment (Class EA) Study for Improvements luggestions are Important to us. Please take a few Id Included in the documentation of the Class EA
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[4] User of Britannia Road		[ ] Comme	rclai/Industrial property
[ ] General Interest		( ) Institutio	onal property
[ ] Other:			
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Public Information Centre No. 2 June 8, 2011

#### **PUBLIC COMMENT SHEET**

	The Design Concepts being considered:
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_	Are there any additional Design Concepts that you feel should also be considered?:
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	The considerations used in developing the Design Concepts:
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	Are there any additional considerations that you feel should be used in developing the Design Concepts?:
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Public Information Centre No. 2 June 8, 2011

	PUBLIC COMMENT SHEET							
[ ] Newspaper Ad	M Notic	e in the mail	[ ] Othe	)r <u>;                                    </u>				
5. Please Indicate your	satisfaction with	the following:						
	Satisfied Yes / No	If not	, please specify y	our preference hare.				
Location of meeting	105							
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Day of week	105							
6. On a scale of 1 to 5,			il", please rate the	e following by circling the ap	propriate number:			
Very		Somewhat		Not at all				
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b. How helpful were	the staff and cons	ultants in atten	dance?	50				
Very		Somewhat		Not at all				
1	2	3	4	5				
7. Were all your question	ons answered sati	sfactorily?						
[]Yes	[ ] No							

#### THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 2
June 8, 2011

# **PUBLIC COMMENT SHEET**

Other Comments:
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we alere and of Town and unable to attend the meeting.
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August 9, 2012

Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

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If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or <u>alicia.jakaitis/a/halton.ca</u>

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Cc. Manoj Dilwaria, Delcan Coorporation
Maureen Van Ravens, Manager Transportation Services – Halton Region
Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region





Public Information Centre No. 1 January 26, 2011

## **PUBLIC COMMENT SHEET**

Please return the comment sheet by: February 11, 2011.

наше:	
Address:	
Email:	
to Britannia Road from Tremaine Road to Highy	dertaking a Class Environmental Assessment (Class EA) Study for improvements way 407. Your comments and suggestions are important to us. Please take a few omments will be considered and included in the documentation of the Class EA
1. My property/interest is: (please check all t	hat apply).
TDirect access onto Britannia Road	1 Residential property
[] User of Britannia Road	[ ] Commercial/industrial property
[ ] General interest	[ ] Institutional property
[ ] Other:	
2. How frequently do you use Britannia Road	d between Tremaine Road and Highway 407?
Daily [] Weekly	[ ] Monthly [ ] Rarely
3. Please provide your comments regarding	the following (extra sheet has been provided for additional comments):
a. The problem being addressed by the	study:
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SEEN 5 IN THE	PAST WEEK WITHIN ENE KILDMETRE
OF MY HOUSE	- 1 DOUBT IF ANY WERE ZEVORTED





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

c.	The evaluation criteria considered in the study:
	UF ALL KNOW IT IS A PROBLEM
	WE KNEW THAT BEFORE.
d.	The alternative solutions considered:
	145 MOST IMPORTANTIS MISSING, OPEN
	JAMES SNOW DOWN TO 407 & BEYOND ANY
	GET RID OF A LOTOF CARS IN THE MORNING
	BUCH BEFORE THEY BACK UP AT 6 TH TRAFAIGH
e.	The materials and PIC #1 display boards presented today:
	PRETTY PICTURES & POSTERS - 1 AN NOT
	SURE EVERYONE MUDERSTOOD 11.
f.	Based on "study issues" that have been identified, are there other issues that the study team should be aware of?
	WINTER WEATHER PROTECTION - PREVALINE WIND
	PRODUCE PANGEROUS SIMU BLOWN AL ACROSS THE
	ROAD-MAKING THE ROAD WIDER WILL RESULT
	IN MORE WINTER ACCIDENTS
g.	Similar to question 3c, please identify any other criteria (not highlighted on the display boards), which you feel should be considered when analyzing and evaluating alternative designs during the next phase of the study.
3	PROPERTY VALUES OF CURRENT RESIDENTIAL
9	HOMES - WILL ANYOUTE BUY MY HOUSE IF IT IS
ā	ON A 4 LANE 80 K/H, ALTERNATIVE TO 407?
9	





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

[ ] Newspaper Ad	F Notice in the mail		[ ] Other		
5. Please indicate you	ur satisfaction with	the following:		¥1	
	Satisfied Yes / No	If not, p	lease specify yo	our preference here.	
Location of meeting	NO	- WHY	NOT	THE COMMU.	NITY HAIL
Time of meeting	YES	A	T BUT	ANNIA & Z	5 OR WILL
Day of week	1/ES	THE	TRAZE	TIC BE TOO 1	34D 7
6. On a scale of 1 to 5	i, where 1 = "very"	and 5 = "not at all"	, please rate the	following by circling the ap	propriate number:
6. On a scale of 1 to 5			, please rate the	following by circling the ap	propriate number:
a. How informative	e were the display t			Not at all	propriate number:
a. How informative		ooards?	, please rate the		propriate number:
a. How informative	e were the display b	Somewhat	4	Not at all	propriate number:
<ul><li>a. How informative</li><li>Very</li><li>1</li></ul>	e were the display b	Somewhat	4	Not at all	propriate number:
<ul><li>a. How informative</li><li>Very</li><li>1</li><li>b. How helpful wer</li></ul>	e were the display b	Somewhat  3 sultants in attenda	4	Not at all 5	propriate number:
<ul><li>a. How informative Very</li><li>1</li><li>b. How helpful were Very</li></ul>	e were the display by 2 re the staff and con	Somewhat  3 sultants in attenda Somewhat 3	4 nce?	Not at all 5 Not at all	propriate number:

# THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by February 11, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 1 January 26, 2011

### **PUBLIC COMMENT SHEET**

Other Comments:
RIGHT NOW THERE ARE FEW HEAVY TRUCTUSE OF THE CONGESTION.  TRUCKER CAN'T WAIT FOR 4 KILDMETRE LOW LINES: IF YOU REPUCE CONGESTION, TRUCK WILL LEAVE 40T FOR BRITANNIA & ZS TO AVOID THE TOLL. WITHOUT CONTROT OF THE TRUCK YOU WILL HAVE ANOTHER HAZZARD TO DEA





Public Information Centre No. 2
June 8, 2011

### **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

	Name:		
Ac	dress:		
	Email:		
to Brita minute	annia Road from Tremaine Road to High	ndertaking a Class Environmental Assessment (Class EA) St way 407. Your comments and suggestions are important to comments will be considered and included in the document	us. Please take a few
1. My	property/interest is: (please check all	that apply).	
ME	Pirect access onto Britannia Road	[ ] Residential property	. 2
[]	ser of Britannia Road	[ ] Commercial/Industrial property	:4
[]	General interest	[ ] Institutional property	
[][	ther:		
2. Ho	w frequently do you use Britannia Road	d between Tremaine Road and Highway 407?	
ME	aily []Weekly	[ ] Monthly [ ] Rarely	
~ .			
J. Pie	ase provide your comments regarding	the following (extra sheet has been provided for addition	nal comments):
a.	The evaluation of the Alternative Sol	utions:	nal comments):
	The evaluation of the Alternative Sol	utions:	Gy OOD
	The evaluation of the Alternative Sol	- ,	Gy OOD
	The evaluation of the Alternative Sol	utions:	Con OTD
	The evaluation of the Alternative Sol	utions:	Gy (CC)
	The evaluation of the Alternative Sol	utions:	Gy OOD
	The evaluation of the Alternative Sol	utions:	Gr OOD
	The evaluation of the Alternative Solo  SOUTH BYPASS  IDG A  The selection of the Preliminary Pre	eferred Solution (combination of road widening (additions, accommodation of other modes of travel (transit, cy	onal through lanes),
a.	The evaluation of the Alternative Solo  SOUTH BYPASS  IDG A  The selection of the Preliminary Pretravel demand management measure	eferred Solution (combination of road widening (additions, accommodation of other modes of travel (transit, cy	onal through lanes),
a.	The evaluation of the Alternative Solo  SOUTH BYPASS  IDG A  The selection of the Preliminary Pretravel demand management measure	eferred Solution (combination of road widening (additions, accommodation of other modes of travel (transit, cy	onal through lanes),
a.	The evaluation of the Alternative Solo  SOUTH BYPASS  IDG A  The selection of the Preliminary Pretravel demand management measure	eferred Solution (combination of road widening (additions, accommodation of other modes of travel (transit, cy	onal through lanes),
a.	The evaluation of the Alternative Solo  SOUTH BYPASS  IDG A  The selection of the Preliminary Pretravel demand management measure	eferred Solution (combination of road widening (additions, accommodation of other modes of travel (transit, cy	onal through lanes),





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

c.	The Design Concepts being considered:
d.	Are there any additional Design Concepts that you feel should also be considered?:
	The considerations used in developing the Design Concepts:
е.	The considerations used in developing the besign concepts.
f.	Are there any additional considerations that you feel should be used in developing the Design Concepts?:





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

[ ] Newspaper Ad	[]*Ńotice ii	n the mail	[ ] Other	<u> </u>	
5. Please indicate you	r satisfaction with the	o following:			
	Satisfied Yes / No	If not, p	olease specify yo	our preference here.	
Location of meeting	YES_	7			
Time of meeting	V= 9				
Day of week	VEC				
	102	-			
6. On a scale of 1 to 5	, where 1 = "very" and	d 5 = "not at all'	', please rate the	e following by circling the app	propriate number:
			', please rate the	e following by circling the app	oropriate number:
	were the display boa		', please rate the	e following by circling the app Not at all	oropriate number:
a. How informative	were the display boa	rds?	', please rate the		oropriate number:
a. How informative  Very  1	were the display boa S	ords? comewhat	4	Not at all	oropriate number:
a. How informative Very  1 b. How helpful were	were the display boa S 2 e the staff and consu	ords? comewhat	4	Not at all	oropriate number:
a. How informative  Very  1	were the display boa S 2 e the staff and consu	omewhat  3  Itants in attenda	4	Not at all 5	oropriate number:
a. How informative Very  1 b. How helpful were Very  1	were the display boa S 2 e the staff and consu S	omewhat  3  Itants in attendationewhat  3	4 ance?	Not at all 5 Not at all	oropriate number:
a. How informative Very  1 b. How helpful were	were the display boa S 2 e the staff and consu S	omewhat  3  Itants in attendationewhat  3	4 ance?	Not at all 5 Not at all	oropriate number:

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 2 June 8, 2011

PUBLIC COMMENT SHEET
Other Comments:



August 2, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation and comments submitted as part of the study process.

Please be advised that the Class Environmental Assessment for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when it is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>.

If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Manoj Dilwaria, Delcan Coorporation
 Maureen Van Ravens, Manager, Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

# Omagh Church of Christ 9850 Britannia Rd., Milton, ON L9T 7E8

June 20, 2011

Mr. Manoj Dilwaria, B.Eng., Principal and Technical Director, Delcan, 3115 Harvester Rd., Suite 102, Burlington, ON L7N 3N8

Re: Britannia Rd. Class Environmental Assessment Study

Dear Mr. Dilwaria.

1 attended the Stakeholder Advisory Group meeting #2 on June 6, 2011 and two other representatives of our congregation attended the Public Information Centre #2 on June 8, 2011.

Based on our understanding of the alternatives presented for Britannia Rd. in the village of Omagh area, the proposed roadway and other related facilities are so massive that the straight through route would be very devastating to our church building, grounds, and cemetery, all of which are near the present roadway. It would also appear to be quite devastating to the village of Omagh in general, destroying the heritage character it has. Therefore, we strongly favor a bypass route around the village.

Yours truly,

At iti

Hurold Ellis,

Socretary/Treasurer



August 2, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation as a member of our Stakeholder Group and your comments submitted as part of the study process.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="https://www.halton.ca/caprojects">www.halton.ca/caprojects</a>. The Technically Preferred Alternative for the Omagh bypass is Alternative 2C as presented in December 2011. The 2C Alternative includes Britannia Road being realigned to the south of the Omagh Community, thus eliminating any impacts to the Church property.

If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Manoj Dilwaria, Delcan Coorporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region





Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: January 6, 2012.

Name:	
Address:	
Email:	
Britannia Bood from Tromaina Boad to Highway 407, You	Class Environmental Assessment (Class EA) Study for improvements or comments and suggestions are important to us. Please take a few to be considered and included in the documentation of the Class EA
My property/interest is: (please check all that apply).	_ '
W Direct access onto Britannia Road	[V Residential property
User of Britannia Road	[ ] Commercial/Industrial property
] General interest	[ ] Institutional properly
] Other:	
The state of the s	Panalas Band and Highway 4072
How frequently do you use Britannia Road between T	remaine Road and highway 4077
Daily []Weekly []Mo	nthly [ ] Rarely
a. The considerations made in developing the Alter	REE
b. The considerations made in developing the Alter	rnative Design Concepts at Omagh (board 11):
NONE TIME	- Ka.
	of rec!





Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

C.	The Alternative Design Concepts considered (board 12):
	NONE-AGREE
d.	The evaluation of the Alternative Design Concepts (board 13):  NONE - POPEE
-	
е.	The selection of the Preliminary Preferred Design (board 14):  None - Agree
-	
9	
f.	Are there any additional considerations that you feel should be used in the evaluation of the Alternative Design Concepts?: $NoNE-PGREE$
5	
_	
(6)	

Dec 16/11





Public Information Centre No. 3
December 14, 2011

### **PUBLIC COMMENT SHEET**

4. How did you hear ab	out this public me	eting?			
[ ] Newspaper Ad	[ ] Notice	e in the mail	[ ] Other <u>:</u>	Prom FAI	BRITANNIA ROAD
5. Please indicate your	satisfaction with	the following:			
	Satisfied Yes / No	If not,	please specify you	r preference her	9.
Location of meeting	YES				
Time of meeting	YES	_			
Day of week	YES	_			
6. On a scale of 1 to 5,			", please rate the f		ing the appropriate number:  SOME BOARD MAPS  TOO SMALL
Not at All		Somewhat		Very	Too Small
1	2	3	4	5	
b. How helpful were	the staff and cons	sultants in attend	lance?		
Not at All		Somewhat		Very	
1	2	3	4	(5)	75
7. Were all your questi	ons answered sati	sfactorily?			Dec 16/11

# THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by January 6, 2012 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontarlo L7N 3N8

Telephone: 905-651-0500, Ext. 6408

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

Other Comments:	- PLEASE SEE LETTER TO ME A HEAD CE	·T.
	- PLEASE SEE LETTER TO ME A HEAD CE. DATED DECEMBER 16/11 - ATTACHED	
<del></del>		
	The DEC 16/11	
Name		
***************************************		
vite di locale di la		

# 1367577 Ontario Limited

# 3165 Limestone Road Campbellville, Ontario LOP 180

December 16, 2011

Regional Municipality of Halton 1151 Bronte Road Oakville, Ontario L6M 3L1

Attention:

Mr. Andrew Head, C. E. T.

**Project Manager** 

**Transportation Services** 

Dear Sir:

Re:

9470 Britannia Road

Con. 4 NS PT Lot 5

This property is owned by our Family Holding Corporation, 1367577 Ontario Limited. Family members currently reside on the property.

l attended the public information meeting, held on December 14, 2011. After the presentation by Mr. Dilwaria, I spoke briefly with you regarding the Britannia Road corridor improvements.

Further to our conversation, I have the following questions:

- 1) Will municipal services (sewer/watermain) be installed at the time of road construction?
- 2) If road construction and/or services are installed and during or after construction adversely affect the water table, the existing well and/or septic leaching bed, what remedies, at Halton Region expense, be implemented?
- 3) If services are installed, will our property be allowed to connect?

- 4) In reviewing the preliminary preferred design route map, it would appear that although the road alignment shifts slightly to the north, the Region will still require a portion of the property as new ROW. What is the procedure in obtaining fair market value for the land required?
- 5) Could I obtain a copy of the section of the preferred design route map ( as presented at the information meeting) pertaining to the property?
- 6) Existing on the property, which might be within the new ROW, are a horse paddock chain link fence, driveway entrance gates, asphalt driveway and culverts. It is my understanding that Halton Region, at it's expense, will relocate and/or reconstruct these structures. Please confirm my understanding.
- 7) I assume that since this is a major reconstruction of an existing Regional arterial roadway, that property owners along the route will not be responsible for or incur any direct or indirect costs pertaining to this project (other than MPAC assessed changes to property values). Please confirm my assumption.

Enclosed is the public comment sheet from the December meeting.

Thank you for your assistance.

Yours truly

c.c. Mr. Manoj Dilwaria, B. Eng.
Principal and Technical Director
Delcan Corporation
3115 Harvester Road
Suite 102
Burlington, Ontario
L7N 3N8



July 17, 2012

Mr. Kevin Kent 1367577 Ontario Limited 3165 Limestone Road Campbellville, Ontario LOP 1B0

Dear Mr. Kent

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. We sincerely apologize for the delay in responding to your comments submitted as part of the Public Information Centre in December 2011 and in your subsequent letters dated April 9, 2012 and June 12, 2012. Please find below our responses to your numbered questions outlined in your December 2011 letter.

- 1. Wastewater Design and Construction is scheduled as follows:
  - west of Regional Road 25 design 2012, construction 2013
  - east of Regional Road 25 design 2012/2014, construction starting 2014/2015
  - west of James Snow Pkwy design 2012/2014, construction starting 2014/2015
  - east of James Snow Pkwy design 2018, construction starting 2019

The above noted schedule is tentative and subject to the Halton Region Allocation Program. Should you require further information, please contact John Duong, Manager Waste Water Planning at (905)825-6000 x7961 or at john.duong@halton.ca

Water Design and Construction is scheduled as follows:

- Trafalgar Road. to Fourth Line near completion
- Tremaine Road to approximately 700m east design 2012, construction starting 2013
- from #5867 Britannia Road to approximately 2,100m west design 2013, construction starting 2014
- 4th Line to Regional Road 25 design 2015, construction starting 2016
- from 600 m east of Trafalgar Road to 8th Line design 2023, construction starting 2024
- Trafalgar Road to 600 m east design 2021, construction starting 2022

The above noted schedule is tentative and subject to the Halton Region Allocation Program. Should you require further information, please contact David Simpson, Manager Water Planning at (905)825-6000 x7601 or <a href="mailto:david.simpson@halton.ca">david.simpson@halton.ca</a>

- 2. A hydrogeotechnical study will be completed during the detailed design phase of the project. As part of the geotechnical evaluation, potential impacts to drainage infrastructure will be examined and mitigation measures to prevent any negative surface groundwater interactions will be determined. Where required, groundwater protection measures will be recommended to ensure that the groundwater resources (e.g. existing wells) are not impacted.
- 3. The Halton Regional Official Plan (2006) contains policies that prescribe where municipal water and wastewater services will be provided. Section 89(1) of the Official Plan states that urban services (municipal water and wastewater services) will only be provided within the Urban Area, except where these services are permitted by other policies in the Plan.
  - At this time, the Urban Area south limit runs along the centreline of Britannia Road. Regional services will be available to properties within the Urban Area on the north side of Britannia Road, however properties on the south side remain in the Rural Area and will not eligible for servicing.
- 4. The Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. Any property requirements from individual landowners to accommodate the future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. Property requirements for improvements are normally acquired two to three years prior to construction. If you have any questions regarding the property acquisition process please contact Don Williams, Manager Realty Services at (905)825-6000 ext 7238.
- 5. As mentioned above, refinements are being made to the Technically Preferred Alternative and will be included in the final ESR. To see the most up to date information available, please go to Halton Region's website, The Britannia Road Class Environmental Assessment Study can be viewed at: http://www.halton.ca/planning sustainability/environmental assessments eas /ea studies/
- 6. As mentioned above, any property requirements from individual landowners to accommodate the future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. As part of the property acquisition process, structures required to be relocated and/or reconstructed will be negotiated at that time.
- 7. Individual property owners adjacent to Britannia Road will not be responsible for any direct or indirect costs as a result from the construction activities associated with the road improvements to Britannia Road.

# Page 3

The Environmental Study Report (ESR) will be finalized in Fall 2012. You will be notified when the ESR is available for public review and comment. If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

c. Manoj Dilwaria, Delcan Coorporation
Maureen van Ravens, Manager Transportation Services – Halton Region

Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region



Name:

# Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study



Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: February 11, 2011.

Address:	
Emali:	
Delcan, on behalf of the Region of Halton is uno	dertaking a Class Environmental Assessment (Class EA) Study for improvements way 407. Your comments and suggestions are important to us. Please take a few omments will be considered and included in the documentation of the Class EA
1. My property/interest is: (please check all t	that apply).
[ ] Direct access onto Britannia Road	[ ] Residential property
User of Britannia Road	[ ] Commercial/industrial property
M General interest	[ ] Institutional property
Mother: We live just a	little south of Britannia
2. How frequently do you use Britannia Road	
[] Daily Weekly	[ ] Monthly [ ] Rarely
3. Please provide your comments regarding	the following (extra sheet has been provided for additional comments):
a. The problem being addressed by the	
a. The problem being during by the	,,
b. The background information being c	ollected:
b. The background information being c	ollected:
b. The background information being c	collected:
b. The background information being c	ollected:





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

c.	The evaluation criteria considered in the study:
d.	The alternative solutions considered:
e.	The materials and PIC #1 display boards presented today:
f.	Based on "study issues" that have been identified, are there other issues that the study team should be aware of?
g.	Similar to question 3c, please identify any other criteria (not highlighted on the display boards), which you feel should be considered when analyzing and evaluating alternative designs during the next phase of the study.





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

4. How did you hear about this public meeting?							
Newspaper Ad	[ ] Notic	e in the mail	[ ] Oth	ner <u>:</u>			
5. Please indicate your	satisfaction with	the following:					
	Satisfied Yes / No	If not, please	specify	your preference here.			
Location of meeting	_Yes	_	_				
Time of meeting	Yes	_					
Day of week		_					
	6. On a scale of 1 to 5, where 1 = "very" and 5 = "not at all", please rate the following by circling the appropriate number:  a. How Informative were the display boards?						
Very		Somewhat		Not at all			
1	(2)	3	4	5			
b. How helpful were	the staff and cons	sultants in attendance?	N/A	(I did not need not at all	ana hels)		
Very		Somewhat	. // -	Not at all			
1	2	3	4	5			
7. Were all your question	ns answered sati	sfactorily? N/A					
[ ] Yes	[ ] No						

# THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by February 11, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

Other Comments:
Given the amount of growth that has already occurred in the are
I would be in favour of expanding Britannia Road to 2 lanes
in each direction. I am not in favour of expanding any of
the roads south of Britannia, including Fourth Line, Fifth
Line, and Lower Base Line. I am also not in favour of
extending James Snow Parkway south of Britannia.
In 2010, the Bobolink was listed as Threatened on the
SARO list (species at Risk in Ontario). We have observed
Bobolinks in the spring/summer of 2009 and 2010, not
only in the study area (along Britannia), but also in
the fields south of Britannia. It is extremely important
to us that the Bobolinks in this area are not
negatively impacted by any development that occurs. What specific measures will be implemented in the study
What specific measures will be implemented in the study
area that will promote the breeding of grassland species
such as the Bobolink?
The EA process needs to include a thorough survey
of birds, including the Bobolink, that is performed during
the appropriate time of year to ensure accuracy.
Thanks!





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: February 11, 2011.

N	ame:				
Add	ress:				
					ğ
E	mail:		V		ž.
to Britan	nia Boad from I	Tremaine Road to Hig s comment sheet. All	undertaking a Class En	vironmental Assessment (Class lents and suggestions are importable sidered and included in the doc	ant to us. Please take a few
1. My p	property/interes	it is: (please check a	il that apply).		
[ ] Dir	rect access onto	Britannia Road	ļ	Residential property	
1/4Us	er of Britannia F	Road		Commercial/industrial property	<i>'</i>
[ ] Ge	eneral interest			] Institutional property	
[ ] Otl	her:				
2. How			_		
	frequently do	you use Britannia Ro	oad between Tremains	Road and Highway 407?	
[ ] []a		_		Road and Highway 407?	
[ ] Da	aily	Weekly	[ ] Monthly	[ ] Rarely	
	aily	Weekly	[ ] Monthly		dditional comments):
	aily Ise provide you	Weekly	[ ] Monthly	[ ] Rarely	dditional comments):
3. Plea	aily Ise provide you	₩eekly r comments regardl	[ ] Monthly	[ ] Rarely	dditional comments):
3. Plea	aily Ise provide you	₩eekly r comments regardl	[ ] Monthly	[ ] Rarely	dditional comments):
3. Plea	aily Ise provide you	₩eekly r comments regardl	[ ] Monthly	[ ] Rarely	dditional comments):
3. Plea	aily Ise provide you	₩eekly r comments regardl	[ ] Monthly	[ ] Rarely	dditional comments):
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Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

c.	The evaluation criteria considered in the study:
d.	- Will there be i) Centre ten law on Buta
	when it goes & 4, langs
	2) Bile Partialorg Bulanni
e.	The materials and PIC #1 display boards presented today:
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f.	Based on "study issues" that have been identified, are there other issues that the study team should be aware of?
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g.	Similar to question 3c, please identify any other criteria (not highlighted on the display boards), which you feel should be considered when analyzing and evaluating alternative designs during the next phase of the study.
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-	



Email: m.dilwaria@delcan.com

#### Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study



Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

4. How did you hear a	bout this public me	eting?		0 /11/
Newspaper Ad	[ ] Notice	e in the mail	[ ] Other <u>:</u>	Regional Website
5. Please indicate you	r satisfaction with t	the following:		
	Satisfied Yes / No	If not, p	lease specify your	r preference here.
Location of meeting	Y			
Time of meeting	$\checkmark$			
Day of week	Ŷ			
6. On a scale of 1 to 5,	_		, please rate the fo	bllowing by circling the appropriate number:
Very	were the display of	Somewhat		Not at all
1	2	3	4	5
b. How helpful were	e the staff and cons	ultants in attenda	nce?	
Very		Somewhat		Not at all
1	2	3	4	5
7. Were all your quest	ions answered sati	sfactorily?		
[]Yes	[ ] No			
	тн	ANK YOU F	OR YOUR T	ГІМЕ
Please complete the form	n and either deposit	the form in the "Cor	mment Box" provide	ed or mail, fax, email by February 11, 2011 to:
Mr. Manoj Dilwaria, B. I Principal and Technica		.), MCIP, RPP, AVS	3	
Delcan Corporation 3115 Harvester Road, S Burlington, Ontario L7I				
Telephone: 905-651-056 Fax: 905-651-0570	00, Ext. 105			





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET** Other Comments:



August 2, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. We sincerely apologize for the delay in responding to your comments submitted as part of the study process. Please find below our responses to the comments you provided.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>. The Technically Preferred Alternative is proposed to include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the Britannia Road corridor as well as a combination of 5 metre raised centre median to enhance corridor features and shared centre left turn lane where appropriate.

If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

**Transportation Coordinator** 

Manoj Dilwaria, Delcan Coorporation
Maureen Van Ravens, Manager Transportation Services – Halton Region
Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

1 Aleau Siv I would like to make some points ) regarding your meeting at the Sports besitre I believe your idea of going north and affecting the McCann property is dessible. Deat family has found on that properly are of their lines and their boys are still farming and very intensted in continuing. Doesn't at seem unfair to aprile their way of life when you have all that vacaning land south of Bretannia Road, owned by developers; that you could use and not purt anyone. your pictures whowed that if your take the northern route its will go right through their buildings and forush their business. They have worked all of their live producing these ladding & silve, etc., and coethout a thought they would be gone. and realize the parm you were be doing.



August 9, 2012

Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation and the comments submitted as part of the public consultation process.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>. The Technically Preferred Alternative for the Omagh bypass is Alternative 2C. The 2C Alternative includes Britannia Road being realigned to the south of the Omagh Community.

If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely

Alicia Jakaitis

Transportation Coordinator

Cc. Manoj Dilwaria, Delcan Coorporation

Maureen Van Ravens, Manager Transportation Services – Halton Region Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: February 11, 2011.

Name:				
Address:				
Email:				
to Britannia Road	from Tremaine Road to Higher this comment sheet. Al	phway 407. Your comments and	ntal Assessment (Class EA) Study for suggestions are important to us. Plea and included in the documentation of	ase take a few
1. My property/i	nterest is: (please check a	ill that apply).		
[ ] Direct acces	s onto Britannia Road	[ ] Resid	ential property	
⊠ User of Brita	nnia Road	[ ] Comn	nercial/industrial property	
[ ] General inte	rest		itional property	
[ ] Other:		fo	im	
2 How frequent	ly do you use Britannia R	oad between Tremaine Road a	nd Highway 407?	
[X] Daily	[ ] Weekly	[ ] Monthly	[ ] Rarely	
·	blem being addressed by		as been provided for additional con	gre ceelteene
9 4	Same I stone	de de de son	6	
		3		
b. The back	kground information bein	g collected:		





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

C.	The evaluation criteria considered in the study:
	not restrate, a new read needs to be considered going
	south of Amagh of Arremoguein
	also the James, Snew Parkway should swind to
	Mey avera on the bushander is
d.	The alternative solutions considered:
e.	The materials and PIC #1 display boards presented today:
Ī.	Based on "study issues" that have been identified, are there other issues that the study team should be aware of?
	The contract of the contract o
~	Cimilar to question 2s places identify and the last of
g.	Similar to question 3c, please identify any other criteria (not highlighted on the display boards), which you feel should be considered when analyzing and evaluating alternative designs during the next phase of the study.
	·
10	
25	





Public Information Centre No. 1 January 26, 2011

## **PUBLIC COMMENT SHEET**

4. How did you hear a	bout this public me	eting?			
[ ] Newspaper Ad	[X] Notic	e in the mail	[ ] Other	<u>:</u>	
5. Please indicate you	r satisfaction with	the following:			
	Satisfied Yes / No	If not,	please specify yo	ur preference here.	
Location of meeting	48				
Time of meeting	MES				
Day of week	HO				
			", please rate the	following by circling the a	opropriate number:
<ul><li>a. How informative</li><li>Verv</li></ul>	were the display b	Somewhat		Not at all	
very 1	(2)	3	4	5	
b. How helpful were	e the staff and con	sultants in attend	апсе?		
Very		Somewhat		Not at all	
1	(2)	3	4	5	
7. Were all your quest	ions answered sat	sfactorily?			
[ ] Yes	[ ] No				

# THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by February 11, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 1 January 26, 2011

PUBLIC COMMENT SHEET				
Other Comments:				
3				





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

Name:					
Address:					
Email:					
Delcan, on behalf of the Region of Halton is undertaking a Class E to Britannia Road from Tremaine Road to Highway 407. Your comminutes to complete this comment sheet. All comments will be coprocess. Please print. Thank you.	ments and suggestions are important to us. Flease take a lew				
1. My property/interest is: (please check all that apply).					
[ ] Direct access onto Britannia Road	[ ] Residential property				
User of Britannia Road	[ ] Commercial/industrial property				
[ ] General interest	[ ] Institutional property				
[ ] Other:					
2. How frequently do you use Britannia Road between Tremain	ne Road and Highway 407?				
[ ] Daily K] Weekly [ ] Monthly	[ ] Rarely				
3. Please provide your comments regarding the following (ext	ra sheet has been provided for additional comments):				
	,				
a. The evaluation of the Alternative Solutions:					
- The southern alters	caline to Britainia look				
is the lest route	by for It doesn't impact				
5 generation residiplesas the northern route					
21 s. bourlide	Samery who make their				
- would be something					
- levery garning.	A A A A A A A A A A A A A A A A A A A				
b. The selection of the Preliminary Preferred Solution (combination of road widening (additional through lanes), travel demand management measures, accommodation of other modes of travel (transit, cycling and walking), and improving signal timing and/or adding turn lanes at intersections):					





Public Information Centre No. 2 June 8, 2011

## **PUBLIC COMMENT SHEET**

c.	The Design Concepts being considered:
d.	Are there any additional Design Concepts that you feel should also be considered?:
e.	The considerations used in developing the Design Concepts:
-	
f.	Are there any additional considerations that you feel should be used in developing the Design Concepts?:
50	





Public Information Centre No. 2 June 8, 2011

#### **PUBLIC COMMENT SHEET**

4. How did you hear al	bout this public meet	ing?			
[ ] Newspaper Ad	[X] Notice in	n the mail	[]Othe	r <u>i</u>	
5. Please indicate you	r satisfaction with the	following:			
	Satisfled Yes / No	lf not	, please specify yo	our preference here.	
Location of meeting	ues	-			
Time of meeting	rsex				
Day of week	uas.				F
	J				
6. On a scale of 1 to 5,	where 1 = "very" and	i 5 = "not at a	ili", please rate the	following by circling the a	ppropriate number:
a. How informative	were the display boa	rds?			
Very	Se	omewhat		Not at all	
<b>①</b>	2	3	4	5	
b. How helpful were	the staff and consul	tants in atten	dance?		
Very	So	omewhat		Not at all	
1	2	3	4	5	
7. Were all your questi-	ons answered satisfa	ctorily?			
[X] Yes	[ ] No				

# THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Dilwarla, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET** Other Comments:



August 9, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation and the comments submitted as part of the public consultation process.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at <a href="www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>. The Technically Preferred Alternative for the Omagh bypass is Alternative 2C. The 2C Alternative includes Britannia Road being realigned to the south of the Omagh Community.

If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

**Transportation Coordinator** 

Cc. Manoj Dilwaria, Delcan Coorporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region



Derry Road (Regional Rd. 7) to Britannia Road (Regional Rd. 6)

Public Information Centre #1
Wednesday, January 26, 2011
Our Lady of Victory School, 540 Commercial Street, Milton

#### **COMMENT SHEET**

#### COMMENTS

My FAMILY LIVE, on the NORTH EAST
CORNER Of BRITANNIA . 4th Line
WE ME OREN TO AQUISITION
DIS CUSSIONS AS ant our
Neighbors to the NORTH AND
EASTONEN
4Th NE UREN
WINE TO THE WIND
WIES ISRITANNIA

Place your completed comment sheet in the box provided or return by February 11, 2011 to:

#### Project Manager:

Mr. Marek Trzaski, P. Eng. McCormick Rankin Corporation 2655 North Sheridan Way, Suite 300 Mississauga, Ontario L5K 2P8 Phone: 905-823-8500

Fax: 905-823-8503 e-mail: mtrzaski@mrc.ca





Public Information Centre No. 2 June 8, 2011

## **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

Name:	
Address:	
Email:	
to Britannia Road from Tremaine Road to Highway	rtaking a Class Environmental Assessment (Class EA) Study for improvements y 407. Your comments and suggestions are important to us. Please take a few iments will be considered and included in the documentation of the Class EA
1. My property/interest is: (please check all tha	at apply).
Direct access onto Britannia Road	Residential property
[ ] User of Britannia Road	[ ] Commercial/industrial property
[ ] General interest	[ ] Institutional property
[ ] Other:	
2. How frequently do you use Britannia Road b	petween Tremaine Road and Highway 407?
	[ ] Monthly [ ] Rarely
3. Please provide your comments regarding th	e following (extra sheet has been provided for additional comments):
a. The evaluation of the Alternative Soluti	ions:
5A 5 601	n choice
-	
24	
b. The selection of the Preliminary Prefe travel demand management measures and improving signal timing and/or add	erred Solution (combination of road widening (additional through lanes), accommodation of other modes of travel (transit, cycling and walking), ding turn lanes at intersections):
10	





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

c.	The Design Concepts being considered:
d.	Are there any additional Design Concepts that you feel should also be considered?:
€.	The considerations used in developing the Design Concepts:
f.	Are there any additional considerations that you feel should be used in developing the Design Concepts?:
- 6	
2	





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

4. How did you hear about this public meeting?							
[ ] Newspaper Ad Notice in the mail		e in the mail	[ ] Othe	or <u>:</u>			
5. Please indicate your	satisfaction with	the following:					
	Satisfied Yes / No	If not	, please specify y	our preference here.			
Location of meeting	VES	_					
Time of meeting	100						
Day of week	105						
	<ul><li>6. On a scale of 1 to 5, where 1 = "very" and 5 = "not at all", please rate the following by circling the appropriate number:</li><li>a. How informative were the display boards?</li></ul>						
Very		Somewhat		Not at all			
	2	3	4	5			
b. How helpful were	the staff and con	sultants in atten	dance?				
Very		Somewhat		Not at all			
(1)	2	3	4	5			
7. Were all your question	ons answered sat	isfactorily?					
Yes	[ ] No						

# THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontarlo L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 2 June 8, 2011

**PUBLIC COMMENT SHEET** 

<del></del>	
Other Comments:	



July 31, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. We sincerely apologize for the delay in responding to your comments submitted as part of the study process. Please find below our responses to the comments you provided.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>. The Technically Preferred Alternative for the Omagh bypass is Alternative 2C as presented in December 2011. The 2C Alternative includes Britannia Road being realigned to the south of the Omagh Community, thus eliminating any impacts to your property.

The Environmental Study Report (ESR) will be finalized in Fall 2012. You will be notified when the ESR has been submitted to the Ministry of the Environment and where it will be available for review and comment. If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ea

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Manoj Dilwaria, Delcan Coorporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

# **Andrew McGregor**

Subject:

FW: Omagh area by pass

From: Jakaitis, Alicia

Sent: Monday, March 24, 2014 1:33 PM

To:

Subject: RE: Omagh area by pass

Hi Nicole,

Thank you for following up and I can provide an update for you. We are looking to file or put the final Environmental Assessment Report (ESR) on the public record at the end of April. Please be advised that you are included in our mailing list and will be sent a letter once the ESR is available for public review and comment. The project was delayed as we worked through some additional natural environmental work with the conservation authority – Conservation Halton. We have made some final refinements to the preferred alternative, but the alignment remains the same as the one presented at PIC 3. The small shifts were made at the south bypass around the Omagh Community.

Once the ESR is completed, the project will proceed to detail design and construction. At this time, it is proposed that construction will be staged from west to east. The first section is proposed to extend from Tremaine Road to Regional Road 25 and construction is anticipated to commence by the end of 2015. The remaining sections of Britannia Road would then be staged accordingly through 2016 and beyond. As part of the detail design process, additional public consultation will be undertaken and as part of this process residents and other stakeholders will be advised of the detailed construction timing and staging including the bypass to the south of the Omagh community.

Please let me know if you have any other questions.

Alicia

# Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca

From:

Sent: Sunday, March 23, 2014 9:53 AM

To: Jakaitis, Alicia

**Subject:** Fw: Omagh area by pass

Hi, there,

I have been online reviewing documents on the Halton Region website and cannot find anything pertaining to the plan outlined below.

Could you please provide me with an update, in laymans terms, along with a timeline and specific steps involved?

# Regards,

On Friday, March 15, 2013 11:42:28 AM, "Green-Battiston, Melissa" < Melissa. Green-Battiston@halton.ca wrote: Nicole.

Thank you for your email regarding the Britannia Road Class Environmental Assessment Study (Highway 407 to Tremiane Road).

Please be advised that the Project Team is currently documenting the study process and recommendations in an Environmental Study Report in light of comments received from the public, stakeholders, Town of Milton and other agencies (such as Conservation Halton). It is anticipated that the Environmental Study Report will be completed by the end of 2013 and you will be notified when the Environmental Study Report is available for public review and comment.

Once the Class Environmental Assessment Study is completed, the project will proceed to detail design and construction. At this time, it is proposed that construction will be staged from west to east. The first section is proposed to extend from Tremaine Road to Regional Road 25 and construction is anticipated to commence by the end of 2015. The remaining sections of Britannia Road would then be staged accordingly through 2016 and beyond. As part of the detail design process, additional public consultation will be undertaken and as part of this process residents and other stakeholders will be advised of the detailed construction timing and staging including the bypass to the south of the Omagh community.

The Project Manager for the Class Environmental Assessment Study is Alicia Jakaitis and she can be contacted at 905-825-6000, ext. 7556 or <u>alicia.jakaitis@halton.ca</u>

Sincerely,

Melissa Green-Battiston, P. Eng. Supervisor, Transportation Planning Transportation Services Regional Municipality of Halton 1151 Bronte Road Oakville, ON L6M 3L1

Tel: (905) 825-6000 ext 7623

Fax: (905) 825-8822

Email: melissa.green-battiston@halton.ca

From:

**Sent**: Friday, March 15, 2013 06:33 AM

To: Dennis, Tim

Subject: Omagh area by pass

# God day,

I am a resident of Omagh, the Milton area of 4th line and Britannia.

There is a plan to have a by pass built south of this intersection, in the near future. We have been going to all the meetings, but haven't seen anything lately with a timeline.

There is road construction on Britannia and 25 planned, but we would like to know when the by pass at this location will started and the approximate completion date.

# Regards,

This message, including any attachments, is privileged and intended only for the person(s) named above. This material may contain confidential or personal information which may be subject to the provisions of the Municipal Freedom of Information & Protection of Privacy Act. Any other distribution, copying or disclosure is strictly prohibited. If you are not the intended recipient or have received this message in error, please notify us immediately by telephone, fax or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

Thank you

# Stanley Pijl

From:

Manoj Dilwaria [m.dilwaria@delcan.com]

Sent:

Tuesday, June 21, 2011 11:47 AM

To:

Stanley Pijl

Subject:

Fwd: PIC 2 comments - Britannia Road Environmental Assessement

Sent from my iPhone

Begin forwarded message:

From:

Date: June 21, 2011 11:35:54 AM EDT

To: m.dilwaria@delcan.com

Cc: "Mike Cluett" < mike@mikecluett.ca>, colin.best@milton.ca

Subject: PIC 2 comments - Britannia Road Environmental Assessement

Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study
Public Information Centre No. 2 June 8, 2011

PUBLIC COMMENT SHEET

- 1. My property/interest is:
- [x]User of Britannia Road
- [x]General Interest
- 2. How frequently do you use Britannia Road between Tremaine Road and Highway 407 [x]Daily
- 3. Please provide your comments regarding the following:
- a) The evaluation of the alternative solutions:

None.

b) The selection of the Preliminary Preferred Solution:

Looks great. Looking forward to having the other modes of transportation available along the corridor. Turning lanes would be a good addition, particularly for left turns

- c) Design concepts being considered:
- -North bypass of Omagh passes through operating local beef farm. I purchase my beef from them and know they have no interest in selling. I'd be very concerned about the impact this would have on their operations.
- -Straight through option I'd be concerned about impact on historical properties and residents and the cost and time involved in making that work. As a commuter I'd like to see this project completed as quickly as possible so long as it makes sense.
- -South bypass option. Seems most reasonable. I understand this land is developer owned but not sure. What are the impacts environmentally in dealing with the Omagh tributary of 16 mile creek

at what appear to be it's headwaters at 4th line & Britannia?

- d) Are there any additional design concepts you feel should also be considered? A more detailed consultation with the McCanns regarding the options for farm equipment access for the South by-pass option with the cul de sacs on the original right of way.
- e) Considerations used in developing the design concepts: None.
- f) Are there any additional considerations that you feel should be used in developing the design concepts?:

My concerns are more with the timing than the actual design concepts themselves. As a commuter I would like to avoid what I perceived happened on Derry Road, with widening happening from West to East. It has made for terrible bottlenecks in both morning and evening rush hours for a very long time for pretty much everyone trying to commute to Mississauga. Ideally I would like to see Britannia widening happen from East to West so that the route out of Milton gets opened before the area inside Milton, and particularly before development begins to take place in Boyne Survey area. My hope would be between Louis St. Laurent and Derry people have other options to get through town then make their way down to a widened Britannia from JSP to 407 and reverse in the evening traffic. Then this is done for the a good cross-section of commuters making their way to Mississauga while widening then takes place progressively westward to Tremaine affecting fewer and fewer commuters as the construction progresses westward as opposed to the work on Derry.

- 4. How did you hear about this public meeting?: Colin Best's post on Hawthorne Villager, the Champion
- 5. Please indicate your satisfaction with the following: Location of meeting: a little small but that worked OK. Time of meeting: fine Day of week: fine
- 6. On a scale of 1 to 5, please rate the following:
- a) How informative were the display boards?
- b) How helpful were the staff and consultants in attendance:
- 7. Were all your questions answered satisfactorily? Yes

#### Additional comments:

I felt the display boards, particularly the design concepts could have used a bit more explanation. I didn't recognize the cul de sac information on the concepts until Mike Cluett pointed it out, and a number of other people missed that too, thinking the original right of way would connect directly with the by-pass. Delcan staff was very pleasant in addressing specific questions I had on the road layout, bike trails and the property issues with the bypass options and the traffic circle at Tremaine & Britannia.

Please consider the environment before printing this email.

This communication may contain information that is confidential, privileged or subject to copyright. If you are not the intended recipient, please advise by return e-mail and delete the message and any attachments immediately without





Public Information Centre No. 3 December 14, 2011

#### **PUBLIC COMMENT SHEET**

Please return the comment sheet by: January 6, 2012.

Name:				
Address:				
Email:	3			
to Britannia Boad from Trom	laine Road to Highway 40 mment sheet. All comme	37 Your comments a	nental Assessment (Class EA) Study for nd suggestions are important to us. Plead d and included in the documentation of	ase take a rew
1. My property/interest is:	(please check all that a	pply).		
[ ] Direct access onto Brita	annia Road	• •	sidential property	
🔀 User of Britannia Road		[ ] Co	mmercial/industrial property	
[ ] General interest		[ ] Ins	titutional property	
[ ] Other:				
2. How frequently do you	use Britannia Road bety	veen Tremaine Road	I and Highway 407?	
			[ ] Rarely	
2. Blance provide your con	mmante ragarding the fo	ollowing (extra shee	t has been provided for additional con	nments):
			t has been provided for additional con	nments):
a. The considerations	s made in developing th	e Alternative Desigi	n Concept <del>s</del> (board 10):	nments):
a. The considerations		e Alternative Desigi	n Concept <del>s</del> (board 10):	nments):
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Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

c.	The Alternative Design Concepts considered (board 12):
	great! South BNAth bygass really only realistic options south
	bypass best for local residents. I usual los dissappointed
	to see the North option chosen as a pation of
	the Mc Ran Farm.
	the in want tun.
d.	The evaluation of the Alternative Design Concepts (board 13):
	Shooz.
e.	The selection of the Preliminary Preferred Design (board 14):
	catering to serious road across and more recreational
	calling to serious roca lacors and male recheational
	Cyclists.
f.	Are there any additional considerations that you feel should be used in the evaluation of the Alternative Design Concepts?:
	WORK TO THE PERSON OF THE PERS
	they concern is not so much design concert but phasing at implementation, but an happy to hear options being
	evaluated as possible to award the congston experience
19	with the east-ward expansion of Derry.



Telephone: 905-651-0500, Ext. 6408

Email: m.dilwarla@delcan.com

Fax: 905-651-0570

## Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study



Public Information Centre No. 3 December 14, 2011

## **PUBLIC COMMENT SHEET**

4. How did you hear ab	out this public me	eeting?	,		1.7
[ ] Newspaper Ad	<b>⋈</b> Notic	e in the mail (୧-୩	rail) [] Other;	Hawthorne Villager por Louncella Best	st ling
5. Please indicate your	satisfaction with	the following:			
	Satisfied Yes / No	If not	, please specify yo	ur preference here.	
Location of meeting	485				
Time of meeting	Yes			and the same of th	
Day of week	Yes				
<ul><li>a. How informative of Not at All</li><li>b. How helpful were Not at All</li></ul>	were the display t	ooards? Somewhat 3	4	Very  Very  Very  Very	e number:
1		_	·	O	
7. Were all your questi		usiactority			
∑XYes	[ ] No				
	Ti	HANK YOU	FOR YOUR	TIME	
Please complete the form	n and either deposi	t the form in the "	Comment Box" prov	ided or mail, fax, email by January 6, 2	2012 to:
Mr. Manoj Dilwaria, B. E Principal and Technical	ng., M. Pl. (Trans				
Delcan Corporation 3115 Harvester Road, S Burlington, Ontario L7N	uite 102, N 3N8				



August 2, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. We sincerely apologize for the delay in responding to your comments submitted as part of the study process. Please find below our responses to the comments you provided.

The Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: www.halton.ca/eaprojects.

Please be advised that the widening of the Britannia Road corridor is proposed as follows in the 2012 Capital Program. The Roads Capital Program is reviewed on a yearly basis and is subject to Council approval.

- 2013 start of construction from Tremaine Road to Regional Road 25;
- 2014 start of construction from Regional Road to Trafalgar Road;
- 2015 start of construction from Trafalgar Road to Highway 407.

If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

**Transportation Coordinator** 

Manoj Dilwaria, Delcan Coorporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region





Public Information Centre No. 2 June 8, 2011

## **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

Name:	
Address:	
Email:	
Delcan, on behalf of the Region of Halton is undertaking a Class to Britannia Road from Tremaine Road to Highway 407. Your cominutes to complete this comment sheet. All comments will be process. Please print. Thank you.	mments and suggestions are important to us. Please take a few
1. My property/interest is: (please check all that apply).	
✓ Direct access onto Britannia Road	[ ] Residential property
[√] User of Britannia Road	[ ] Commercial/industrial property
[ 🗹 General interest	[ ] Institutional property
[ ] Other:	
2. How frequently do you use Britannia Road between Trema	aine Road and Highway 407?
[√ Daily [ ] Weekly [ ] Monthly	[ ] Rarely
3 Please provide your comments regarding the following (e)	xtra sheet has been provided for additional comments):
3. Please provide your comments regarding the following (ex	xtra sheet has been provided for additional comments):
a. The evaluation of the Alternative Solutions:	
a. The evaluation of the Alternative Solutions:	
a. The evaluation of the Alternative Solutions:	
a. The evaluation of the Alternative Solutions:	
a. The evaluation of the Alternative Solutions:	
<ul> <li>a. The evaluation of the Alternative Solutions:</li> <li>b. The selection of the Preliminary Preferred Solution travel demand management measures, accommodate</li> </ul>	(combination of road widening (additional through lanes), tion of other modes of travel (transit, cycling and walking),
a. The evaluation of the Alternative Solutions:  600 d.  b. The selection of the Preliminary Preferred Solution travel demand management measures, accommodal and improving signal timing and/or adding turn lanes	(combination of road widening (additional through lanes), tion of other modes of travel (transit, cycling and walking), s at intersections):
a. The evaluation of the Alternative Solutions:  600 cl.  b. The selection of the Preliminary Preferred Solution travel demand management measures, accommodat and improving signal timing and/or adding turn lanes	(combination of road widening (additional through lanes), tion of other modes of travel (transit, cycling and walking),
a. The evaluation of the Alternative Solutions:  600 d.  b. The selection of the Preliminary Preferred Solution travel demand management measures, accommodal and improving signal timing and/or adding turn lanes	(combination of road widening (additional through lanes), tion of other modes of travel (transit, cycling and walking), s at intersections):
<ul> <li>a. The evaluation of the Alternative Solutions:</li> <li>b. The selection of the Preliminary Preferred Solution travel demand management measures, accommodat and improving signal timing and/or adding turn lanes</li> <li>6 and . Turning lanes (duble left and lanes)</li> </ul>	(combination of road widening (additional through lanes), tion of other modes of travel (transit, cycling and walking), s at intersections):
<ul> <li>a. The evaluation of the Alternative Solutions:</li> <li>b. The selection of the Preliminary Preferred Solution travel demand management measures, accommodat and improving signal timing and/or adding turn lanes</li> <li>6 and . Turning lanes (duble left and lanes)</li> </ul>	(combination of road widening (additional through lanes), tion of other modes of travel (transit, cycling and walking), s at intersections):
<ul> <li>a. The evaluation of the Alternative Solutions:</li> <li>b. The selection of the Preliminary Preferred Solution travel demand management measures, accommodat and improving signal timing and/or adding turn lanes</li> <li>6 a. J. Turning Inner (duble left in the content of the present of the presen</li></ul>	(combination of road widening (additional through lanes), tion of other modes of travel (transit, cycling and walking), s at intersections):





Public Information Centre No. 2 June 8, 2011

## **PUBLIC COMMENT SHEET**

c.	The Design Concepts being considered:
	boods
d.	Are there any additional Design Concepts that you feel should also be considered?:
	Turning lanes at Terra Greenhause entrance, many people
	Turning lanes at Terra Greenhause entrance, many people stop here at rush hour blocking though troffic as there is
	no left turn lanes.
	The considerations used in developing the Design Concepts:
e.	Gond.
fe	Are there any additional considerations that you feel should be used in developing the Design Concepts?:
0	





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

4. How did you hear abo	out this public meet	ing?			
[] Newspaper Ad	[ ] Notice i	n the mail	( Other: F	alla Region	weppeys.
5. Please indicate your	satisfaction with the	e following:			
	Satisfied Yes / No	If not, ple	ase specify your p	reference here.	
Location of meeting	Yes				
Time of meeting	Yes				
Day of week	Yes	-			
6. On a scale of 1 to 5, w			olease rate the folio	owing by circling t	he appropriate number:
Very		omewhat		Not at all	
1	2	3	4	5	
b. How helpful were t	he staff and consul	tants in attendan	ce?		
Very	S	omewhat	_	Not at all	
1	2	3	(4)	5	
7. Were all your question	ns answered satisfa	actorily?			
[√]Yes	[ ] No				

## THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

	Other Comments:
1.	Rail crossing (between Tremaine and 1st line) should be constructed
	at some time. Cost savings can be realized by doing this together
	rather than tearing the road up again a few years later.
2,	Turning lanes for Terra Greenhouses, high volume of left luras bring
	made at evening rush har blocks traffice.
	Phasing. Start east section first if possible.
Η,	Many cyclists towel this route, cycling lines are needed to
	separte then from traffic
1 ,	Use double left him lines at high avalone interections (R.R. 25, 715.



August 3, 2012

Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. We sincerely apologize for the delay in responding to your comments submitted as part of the study process. Please find below our responses to the comments you provided.

The Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="www.halton.ca/eaprojects">www.halton.ca/eaprojects</a> The Technically Preferred Alternative is proposed to include 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the Britannia Road corridor as well as a combination of 5 metre raised centre median to enhance corridor features and shared centre left turn lane where appropriate. The Preferred Alternative also includes a grade separated crossing of the CN tracks.

Please be advised that the widening of the Britannia Road corridor is proposed as follows in the 2012 Capital Program. The Roads Capital Program is reviewed on a yearly basis and is subject to Council approval.

- 2013 start of construction -- from Tremaine Road to Regional Road 25
- 2014 start of construction from Regional Road to Trafalgar Road
- 2015 start of construction from Trafalgar Road to Highway 407

If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Manoj Dilwaria, Delcan Coorporation
 Maureen van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region





Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: January 6, 2012.

Name:	
Address:	
Email:	
to Britannia Road from Tremaine Road	on is undertaking a Class Environmental Assessment (Class EA) Study for improvements to Highway 407. Your comments and suggestions are important to us. Please take a few et. All comments will be considered and included in the documentation of the Class EA
1. My property/interest is: (please ch	eck all that apply).
[ ] Direct access onto Britannia Road	Residential property
[ ] User of Britannia Road	[ ] Commercial/industrial property
[ ] General interest	[ ] Institutional property
[ ] Other:	
2. How frequently do you use Britani	nía Road between Tremaine Road and Highway 407?
- How had and a you ooo britain	na Road Settleth Fremains Road and Highway 4077
<b>*</b> //	
Daily [ ] Weekly	[ ] Monthly [ ] Rarely
3. Please provide your comments re	garding the following (extra sheet has been provided for additional comments):
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3. Please provide your comments re	garding the following (extra sheet has been provided for additional comments):
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Public Information Centre No. 3 December 14, 2011

#### **PUBLIC COMMENT SHEET**

4. How did you hear a	bout this public m	eeting?		*	
Newspaper Ad	Noti	ce in the mail	[ ] Othe	ar: NGICAH	BOURS
5. Please indicate you	r satisfaction with	the following:			
	Satisfied Yes / No	If not,	please specify y	our preference here.	
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Time of meeting	11		bet. EVD	NEFT OF	C.
Day of week	71			,11,01	
<ul><li>a. How informative</li><li>Not at All</li><li>b. How helpful were</li><li>Not at All</li></ul>	2	Somewhat 3	4 lance?	Very 5	
1	2	3	4	Very 5	
7. Were all your question	ons answered sat	isfactorily?		Ū	
[]Yes	[ ] No				
	TH	IANK YOU I	FOR YOUR	TIME	
Please complete the form	and either deposit	the form in the "Co	omment Box" prov	ided or mail, fax, email by	January 6, 2012 to:
Mr. Manoj Dilwaria, B. E. Principal and Technical	ng., M. Pl. (Transp				
Delcan Corporation					

Telephone: 905-651-0500, Ext. 6408

Fax: 905-651-0570

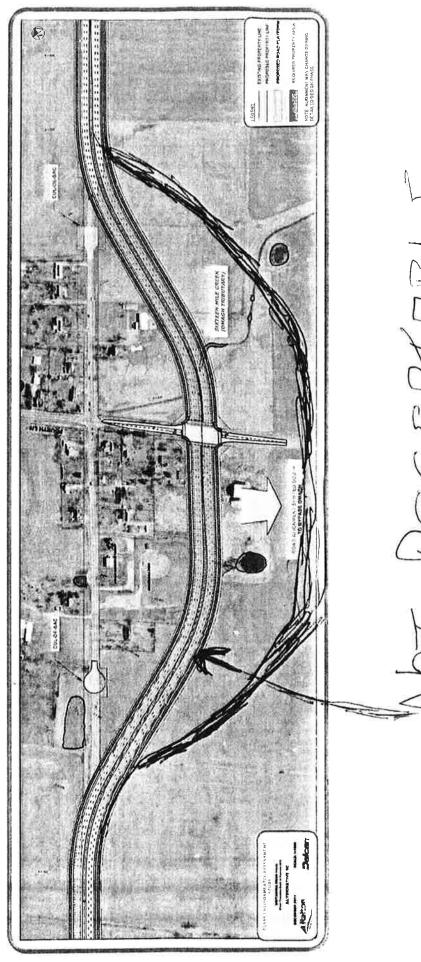
Email: m.dilwarla@delcan.com

3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

The alternative plan which runs South of Britannia Road is definitely NOT ACCEPTABLE as shown. The plan has to be moved a lot further south away from private buildings and the barn full of cows. Open space where there are only dead crops and weeds.

- I. Our garage is our property not yours, we need it to keep our cars, expensive garden equipment and boat safe from vandals and thieves.
- 2. Our WELL is located close to the garage, hence that would be a health problem should it be disturbed.
- 3. Small children play all around the garage and trees with their pets so that would definitely be a safety issue.
- 4. There are some 200 year old trees around the property which are not allowed to be cut down. (They are older than Milton and Halton Region). They are also a safe haven for numerous variety of birds, hawks etc., who I feed.
- 5. Having an intersection plus traffic lights at the end of our driveway is also very dangerous for all our family. We don't have sidewalks and we have to deal with the Indianapolis 500 (i.e. Fourth Line) every day which can be hazardous at times. I happen to be handicapped. Now you want to add a speeding highway to the equation (Deaths just waiting to happen).
- 6. The mail delivery would also be a suicide mission.
- 7. The hydro and telephone wires are also at the end of the driveway, interfering with them will be a health and safety issue.
- 8. The Town will have to move the baseball diamond.

When we moved here 16 years ago we were told that this area was all GREEN BELT not to be built on, no roads to be made, just agriculture. Who changed the rules and coerced the farmers to sell?



(

ACCEPTABLE





Public Information Centre No. 3 December 14, 2011

## **PUBLIC COMMENT SHEET**

Please return the comment sheet by: January 6, 2012.

١	lame:				
Add	iress:				
E	Email:				
to Brita minutes	nnia Road from 1	Tremaine Road to His comment sheet. A	lighway 407. Your com	invironmental Assessment (Class Ements and suggestions are importainsidered and included in the docu	nt to us. Please take a few
1. My	property/interes	t is: (please check	ail that apply).		
[]Di	rect access onto	Britannia Road		Residential property	
	ser of Britannia R	toad		[ ] Commercial/industrial property	
[v] G	eneral interest			[ ] Institutional property	
[]0	ther:				
2. Hov	v frequently do	you use Britannia i	Road between Tremain	ne Road and Highway 407?	
				ne Road and Highway 407?	
NO	aily	[] Weekly	[ ] Monthly	[ ] Rarely	
NO	aily	[] Weekly	[ ] Monthly		iditional comments):
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Public Information Centre No. 3 December 14, 2011

#### **PUBLIC COMMENT SHEET**

		eeting?			
Newspaper Ad	[ ] Notic	e in the mail	[ ] Other <u>: .</u>		
5. Please indicate you	r satisfaction with	the following;			
	Satisfied Yes / No	If not,	please specify you	r preference here.	
Location of meeting	15.	_			
Time of meeting	Yol.				
Day of week	Yas.	_			
6. On a scale of 1 to 5	, where 1 = "not at	all" and 5 = "ver	/", please rate the fo	ollowing by circling the a	ppropriate number:
a. How informative		ooards?			
			4	Very 5	
a. How informative Not at All	were the display t	Somewhat	4	Very	
a. How informative	were the display t	Somewhat	4	Very	
a. How informative  Not at All  1  b. How helpful were	were the display t	Somewhat  3 sultants in attention	4	Very 5	
a. How informative Not at All  1 b. How helpful were Not at All	were the display to 2 e the staff and con 2	Somewhat  3 sultants in attend Somewhat 3	4	Very 5 Very	
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a. How informative Not at All  b. How helpful were Not at All  1  7. Were all your quest	were the display to 2 the staff and con 2 ions answered sat [ ] No	Somewhat  3 sultants in attent Somewhat 3	4	Very 5 Very 5	

Mr. Manoj Dilwaria, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

Telephone: 905-651-0500, Ext. 6408

Fax: 905-651-0570

Email: m.dilwaria@delcan.com

Dear Mr. Manoj Dilwaria,

I am writing in response to the public comment request, re the Britannia Road Transportation Corridor Improvement project.

I am very concerned about the proposed Britannia Road intersection with Fourth Line. The proposed southern route around the village of Omagh will devastate my property. It will put a 6 lane road very close to my house and make access to my property almost impossible. A Fourth Line southbound right turn lane onto Britannia with traffic light across my property and driveway is not necessary, the by-pass could be further south.

I would logically request that if the Southern route be chosen that it be moved further south so as to not devastate my property.

My driveway cannot be relocated as my septic bed occupies the front lawn.

The drawing of the southern by-pass appears to give a wider allowance to the baseball diamond and old barn that is falling down than it does for my house, why would this be? is the baseball diamond and old barn more important than my home?

I don't see why the by-pass cannot go around the North side of Omagh. Most of the traffic using Britannia will be from Milton which is on the North side of Britannia Road.

The City of Milton development plan lists phase 3 of development to build houses from Louise St Laurent Blvd to Britannia Road. Therefore using the Northern by-pass route, the Milton traffic would not be required to pass through the village and an extra traffic light at the present intersection to get to the traffic light at Britannia Road. There would be less effect to existing properties and would allow traffic to be closer to the future phase 3 homes.

The current intersection at rush hour has traffic backed up alone Britannia for miles. The proposed Southern bypass route would have traffic turning North onto Fourth line through the village traffic light would also be backed up for miles especially when phase 3 building is complete.

The Northern route around Omagh would allow traffic to flow easier not having to go through the village traffic light. The Southern bypass route intersection with Fourth Line would be a traffic nightmare.

The North side by-pass road could have other future Road junctions attached easier without going through the village also.

Regards



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment (EA) Study. The Project Team appreciates your participation in the study process and your comments submitted as part of the study consultation.

Please be advised that the Class EA for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the technically preferred alternative are also being made and will be included in the final ESR.

The Technically Preferred Alternative (5C) includes Britannia Road being realigned to the south of the Omagh Community. Subsequent to the public meeting and in light of comments received, the by-pass around the Omagh Community has been shifted further south to minimize impacts in the area of Omagh. The alignment shift has eliminated the need to acquire land from your property to implement the technically preferred alternative. The proposed and revised alignments are illustrated in Figure 1 attached.

The ESR will be finalized and made available for public review in late 2013 and you will be notified of the filing at that time. If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or at alicia.jakaitis@halton.ca.

Sincerely

Alicia Jakaitis

Transportation Coordinator

c.c. Nick Palomba, Delcan Corporation

Maureen van Ravens, Manager Transportation Services - Halton Region Melissa Green-Battiston, Supervisor Transportation Planning - Halton Region

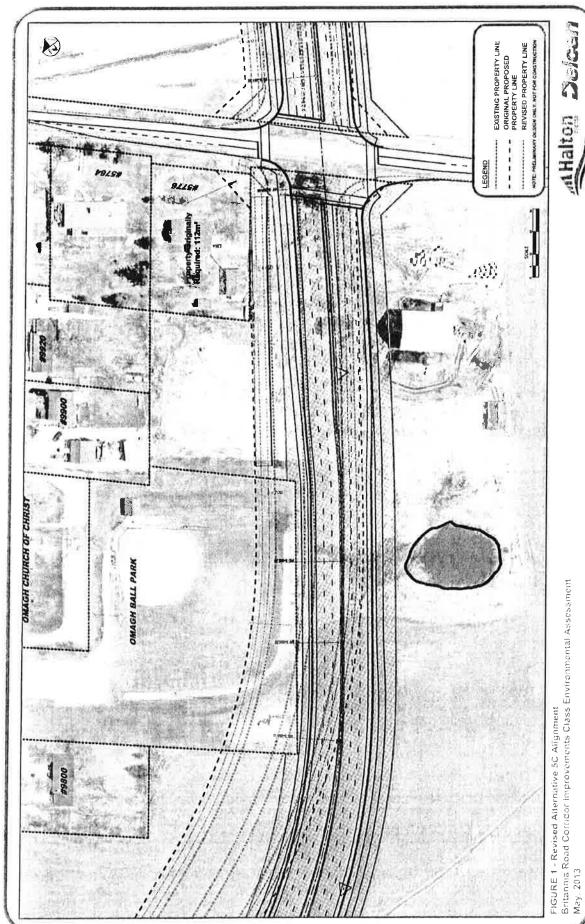


FIGURE 1 - Revised Alternative SC Alignment Britannia Road Corndor Improvements Class Environmental Assessment May, 2013





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: February 11, 2011.

Name:	
Address:	
Email:	
to Britannia Road from Tremaine Road to Highway 407, Your	ss Environmental Assessment (Class EA) Study for improvements comments and suggestions are important to us. Please take a few le considered and included in the documentation of the Class EA
1. My property/interest is: (please check all that apply).	Lan M
[ ] Direct access/onto Britannia Road	[] Residential property
User of Britannia Road	[] Commercial industrial property DRADERT
[ ] General interest	[ ] Institutional property
[ ] Other	
D. C. J. David behavior Tea	mains Bood and Highway 4072
2. How frequently do you use Britannia Road between Tre	maine Road and righway 407:
[ ] Daily [ ] Weekly [ ] Montl	nly [ ] Rarely
3. Please provide your comments regarding the following	(extra sheet has been provided for additional comments):
a. The problem being addressed by the study:	and the state of the state of
- Up III apana	any now acroning
too may	LANGE and farme done
Baltinania	, ·
- Warran	
b. The background information being collected:	
KE	FD AFFAUR
1 ( 2	
}	70.4.
<i>j</i>	VRONDRTV
	0 1 1 1 1
- Jutal on Var	village in invalle





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

C.	The evaluation criterla considered in the study:
d.	The alternative solutions considered:
e.	The materials and PIC #1 display boards presented today:
f.	Based on "study issues" that have been identified, are there other issues that the study team should be aware of?
,	Cimilar to supplies 2s places ideals.
g.	Similar to question 3c, please identify any other criteria (not highlighted on the display boards), which you feel should be considered when analyzing and evaluating alternative designs during the next phase of the study.
,	
V.	



Telephone: 905-651-0500, Ext. 105

Email: m.dllwarla@delcan.com

Fax: 905-651-0570

### Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study



Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET**

4. How did you hear abo	out this public meet	ing?			
[ ] Newspaper Ad	Notice i	n the mail	[ ] Other:	<b>.</b>	
5. Please indicate your	satisfaction with the	e following:			
	Satisfied Yes / No	If no	t, please specify yo	ur preference here.	
Location of meeting	no	-	B-513 824	?	
Time of meeting			2		
Day of week	ALL STATE OF THE S	-			
				full with the second se	
			all", please rate the	following by circling the ap	propriate number.
a. How informative t				81-4 -4 -1l	
Very	\$	Somewhat	Via:	Not at all	
1	2	3	( <u>4</u> )	5	
b. How helpful were	the staff and consu	Iltants in atte	ndance?		
Very	Ş	Somewhat	į.	Not at all	
1	2	3	(4)	5	
7. Were all your question	ons answered satisf	factorily?			
[]Yes	(No)				
	THA	ANK YOU	J FOR YOUR	TIME	
Please complete the form	and either deposit th	ne form in the	"Comment Box" prov	ided or mail, fax, email by Fe	bruary 11, 2011 to:
Mr. Manoj Dilwaria, B. E Principal and Technical	ing., M. Pl. (Transp.)				
Delcan Corporation 3115 Harvester Road, S Burlington, Ontario L7N					





Public Information Centre No. 1 January 26, 2011

# **PUBLIC COMMENT SHEET** Other Comments:



Name:

# Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study



Public Information Centre No. 2
June 8, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: June 24, 2011.

Ad	idress:
	Email:
to Brita minute	n, on behalf of the Region of Halton is undertaking a Class Environmental Assessment (Class EA) Study for improvements annia Road from Tremaine Road to Highway 407. Your comments and suggestions are important to us. Please take a few as to complete this comment sheet. All comments will be considered and included in the documentation of the Class EA as. Please print. Thank you.
1. My	property/Interest is: (please check all that apply).  VEARM PROPERTY
[HO	Direct access onto Britannia Road [ ] Residential property
	User of Britannia Road [ ] Commercial/industrial property
[]G	General interest and RIM [ ] Institutional property
[]0	General interest FARM [] Institutional property  Other: MOVE MACHINERY ON BRITANNIH ROAD
2. Hov	w frequently do you use Britannia Road between Tremaine Road and Highway 407?
(ND	ally [ ] Weekly [ ] Monthly [ ] Rarely
3. Plea	ase provide your comments regarding the following (extra sheet has been provided for additional comments):
a. b.	The evaluation of the Alternative Solutions:  Definally feel of should go south of the Comaghi wellager  The selection of the Preliminary Preferred Solution (combination of road widening (additional through lanes), travel demand management measures, accommodation of other modes of travel (transit, cycling and walking),
	and improving signal timing and/or adding turn lanes at intersections):  EROM THE TURN AROUNDS TO BRITANIELA  RAPLO THERE SHOULD BE PECIES FOR FRIM  MACHINERY.





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

c.	The Design Concepts being considered:
d.	Are there any additional Design Concepts that you feel should also be considered?:
e.	The considerations used in developing the Design Concepts:
f.	Are there any additional considerations that you feel should be used in developing the Design Concepts?:





Public Information Centre No. 2
June 8, 2011

# **PUBLIC COMMENT SHEET** 4. How did you hear about this public meeting? Mewspaper Ad [ ] Other:\_ [ ] Notice in the mall 5. Please indicate your satisfaction with the following: Hard to find proper room. To signage maybe Boyon butte would be Satisfied Yes / No Location of meeting Time of meeting Day of week 6. On a scale of 1 to 5, where 1 = "very" and 5 = "not at all", please rate the following by circling the appropriate number: a. How informative were the display boards? Not at all Somewhat Very 3 2 1 b. How helpful were the staff and consultants in attendance? Not at all Somewhat Very 5 3 1

# THANK YOU FOR YOUR TIME

Please complete the form and either deposit the form in the "Comment Box" provided or mail, fax, email by June 24, 2011 to:

Mr. Manoj Dilwarla, B. Eng., M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director

[] No

7. Were all your questions answered satisfactorily?

Delcan Corporation 3115 Harvester Road, Suite 102, Burlington, Ontario L7N 3N8

ilXYes

Telephone: 905-651-0500, Ext. 105

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET**

Other Comments:
106

frene 9, 2011

Year Lin! Sports Caentre in Milton on June 8/11 I would like to put forward over , So south of Omagh on Britannia and The property is sund by Developers, There are no obstructions The farm on the southeast corner of the Bourth Line and Britannia is vacant with the barn and sheds removed. The house remains with a ecurity fence nound it . Que home farm on Butarisa food & a leentury fain and has been generated by the McCans famely for o planners. We cannot understand ony planners would go through a wishing farm briedings. We rent several farms in the onea and the home Haim is home base.

at your display on June 8/11 at Millon Trena, I descovered you are taking land off us along Britannia and not the neighbours, who know for years that this was going to be done troad widening) and they started building birms and having trees trucked in and planting them? (I think they are on the road allowance. L. Dhe road widning should be 50-50. I have two some interested in agriculture, One son farms full time after completing no University education. The other one works for Doyotor, plus is a butcher and sells beef eff the farm at the Millon Farmus Market Saturday morninge. . We have a pond near Britannia Good and this is our main source We have cattle on the farm and Lences one very important. Whe farm on the East corner of the Routh Line and Bretonnia Road when the buildings were removed

and the house remains with a security fence around it, had a contractor in to smooth the banks on the Omagh trebutory. How the ditch is very narrow and they can grow crops to the edge of the ditch.

I hope you will consider our comments very sesionaly and think about going south where the divelopers row the land.





Public Information Centre No. 2 June 8, 2011

		PUBLIC COMMENT SHEET	by: June 24, 2011.
Name:			
Address:			
Email:			
Delcan, on behalf of the Re to Britannia Road from Tren minutes to complete this co process. Please print. Than	gion of Halton is naine Road to Hi omment sheet. A nk you.	undertaking a Class Environmental Assessr ighway 407. Your comments and suggestion Il comments will be considered and include	nent (Class EA) Study for improvements a are important to us. Please take a few d in the documentation of the Class EA
1. My property/interest is:	: (please check :	all that apply),	
[ ] Direct access onto Brita		[ ] Residential proper	4.
[ ] User of Britannia Road		[ ] Commercial/indus	
[ ] General interest		[ ] Institutional proper	
LI Other: Russ	direct	4 2/ 2	ween Thompson + 4th
2. How frequently do you to	use Britannia Ro	oad between Tremaine Road and Highway	4072
	] Weekly	[ ] Monthly [ ] Rarely	
3. Please provide your com	nments regardin	ng the following (extra sheet has been prov	ilded for additional community
a. The evaluation of th	ne Alternative S	olutions:	ioi additional comments):
The b;	pass	should go so	outh of
Britannice	bec	acese it will not	inter-fere with
any bui	Wine, 0	ther than dovele	Darc it +
Worth is	+w+11 c	1	7.
settlement	s in C	mach in half	2 original Karm
<ul> <li>The selection of the travel demand mana and improving signa</li> </ul>	Preliminary Pr igement measur I timing and/or a	referred Solution (combination of road w res, accommodation of other modes of tr adding turn lanes at intersections):	idening (additional through lanes), avel (transit, cycling and walking),





Public Information Centre No. 2 June 8, 2011

	PUBLIC COMMENT SHEET					
C.	The Design Concepts being considered:					
d.	Are there any additional Design Concepts that you feel should also be considered?:					
٥.	The considerations used in developing the Design Concepts:					
2.5						
29	- 273					
<b>f</b> .	Are there any additional considerations that you feel should be used in developing the Design Concepts?:					
5						
-						
-						



Fax: 905-651-0570

Email: m.dilwaria@delcan.com

# Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study



Public Information Centre No. 2 June 8, 2011

PUBLIC COMMENT SHEET						
4. How did you hear a	bout this public me	eting?		1 4 1 -1		
[ ] Newspaper Ad	[ ] Notice	in the mail	[ ] Othe	n. Akter it	WUS OVER	
5. Please Indicate you	r satisfaction with t	he following:				
	Satisfied Yes / No	lf not, p	lease specify y	our preference here.		
Location of meeting						
Time of meeting						
Day of week					·	
		-			(IIII	
6. On a scale of 1 to 5,	where 1 = "very" a	nd 5 = "not at all"	, please rate the	following by circling th	e appropriate number:	
a. How informative	were the display bo	ards?				
Very		Somewhat		Not at all		
1	2	3	4	5		
b. How helpful were	the staff and consi	ultants in attenda	nce?			
Very	;	Somewhat		Not at all		
1	2	3	4	5		
7. Were all your questle	ons answered satis	factorily?				
[ ] Ye <b>s</b>	[ ] No					
	THA	ANK YOU F	OR YOUR	TIME		
Please complete the form	and either deposit th	ne form in the "Con	nment Box" prov	ided or mail, fax, email by	June 24, 2011 to:	
Mr. Manoj Dilwarla, B. E Principal and Technical		, MCIP, RPP, AVS	<b>;</b>			
Delcan Corporation 3115 Harvester Road, St Burlington, Ontario L7N						
Telephone: 905-651-050	0. Ext. 105					





Public Information Centre No. 2 June 8, 2011

# **PUBLIC COMMENT SHEET** Other Comments;

The Region of Halton is expanding Britannia road. They are proposing to save the village of Omagh by putting a bypass around it. There are two proposals: one would go north of Britannia and one would go south of Britannia. Going south of Britannia would go through land owned by developers and leave virtually all buildings untouched. Going north of Britannia however would go straight through most of the barns, buildings and sheds of the McCann farm. This would essentially cut the farm in two DESTROYING one of the last livestock farms in Milton. This would also DESTROY the livelihood of one of the original and oldest farm settlements of this areal

Please sign our petition to encourage the Region to put the bypass south of Britannia.

Petition on file with Halten Region



### Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study



VHIVE 155

Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

Please return the comment sheet by: January 6, 2012.

ss Environmental Assessment (Class EA comments and suggestions are importan e considered and included in the docum	t to us. Please take a few
[ ] Residential property	JAN 03 2011
[ ] Commercial/industrial property	HALTON REGION
	PUBLIC WORKS & ENC
Bo tanuice	
ly [ ] Rarely / 5 (extra sheet has been provided for add ative Design Concepts (board 10):	itional comments):
ntive Design Concepts at Omagh (board	d 11):
	[ ] Residential property [ ] Commercial/industrial property [ ] Institutional property  [ ] Institutional property  maine Road and Highway 407?  [ ] Rarely  [ ] Rarely  (extra sheet has been provided for adductive Design Concepts (board 10):





Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

c.	The Alternative Design Concepts considered (board 12):
d.	The evaluation of the Alternative Design Concepts (board 13):
e.	The selection of the Preliminary Preferred Design (board 14):
	E .
f.	Are there any additional considerations that you feel should be used in the evaluation of the Alternative Design Concepts?:
9,	
2	
12	





Public Information Centre No. 3 December 14, 2011

### **PUBLIC COMMENT SHEET**

4. How did you hear al	bout this public me	eting?			
[ ] Newspaper Ad	[ ] Notice	e in the mail	[ ] Othe	ri	
5. Please indicate you	r satisfaction with t	he following:			
	Satisfied Yes / No	If not,	please specify ye	our preference here.	
Location of meeting	a mart	/01			
Time of meeting	3. or orl	13.		-11	
Day of week	XI mond	_			
a. How informative Not at All			4	Very	
b. How helpful were	the staff and cons	ultants in attend	lance?		
Not at All		Somewhat		Very	
1	2	3	4	, 5	
7. Were all your questi	ions answered satis		No. Nessel	) (.	
	TH	ANK YOU	FOR YOUR	TIME	
Please complete the form	n and either deposit t	the form in the "Co	omment Box" prov	rided or mail, fax, email by Janua	ry 6, 2012 to:
Mr. Manoj Dilwaria, B. E		), MCIP, RPP, A	vs .		

Principal and Technical Director

**Delcan Corporation** 3115 Harvester Road, Suite 102, **Burlington, Ontario L7N 3N8** 

Telephone: 905-651-0500, Ext. 6408

Fax: 905-651-0570

Email: m.dilwaria@delcan.com





Public Information Centre No. 3 December 14, 2011

# **PUBLIC COMMENT SHEET**

Other Comments:	
I am of the opinion that the	_
toadway should be moved Further south	
in order to preserve the Daniels	
property and to preserve the	
Omagh baseball park. We have	
seen what has happened to the	
Palerno ball parte with the bypa	5
coming so close to the prock.	
With the bypass entering back	
onto Britannia Road I also Delieve	_
that the read allowances should be	
taken equally from both sides.	
	_
	-
	_
	_
	-
	_

Comments Re Meeting it Boyne Community Concerning wedering of Bretannia Road 1. We are pleased the road well veer south and not north. However, we feel fifty percentage of the land required for this project should be taken from lach side. We are willing to give our share In recent years the trees planted on the Robellard and Dougherty properties Ilso a berm was erected They both have large frontages and the trees can be transplanted. By culling into sur fields excessively and irregularly it will mean irregular fields, They are then harder to cultivate and harvest. On our farm we have a natural pond. With your proposed plan you will be right up against it. This is a working farm and our cattle water here. With the proposed charge the cattle will not be able to water from the

south side. The traffic will also some the cattle when they are right up?

area is comparatively new and it is very important to have good fencing when upon are against a major roadway: We have strong wooden fence posts, and not steel posts. We would like this to stay the same.

It is important that the ditches of along the road be maintained, If the ditches are not kept up the water must go somewhere the fields - and floods occur.

Lincerely,



August 2, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

# RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study and meeting with the Region to discuss the above noted project. We sincerely apologize for the delay in responding to your most recent comments submitted as part of the Public Information Centre held in December 2011. Please find below our responses to the comments you provided.

As a member of the Stakeholder Group, we have met with you separately to specifically discuss the Omagh by-pass alternatives on November 1, 2011 and again on December 6, 2011, and as you are aware, the Technically Preferred Alternative for the Omagh by-pass is Alternative 2C. The 2C Alternative includes Britannia Road being realigned south of the Omagh Community, minimizing impacts to your property.

Any property requirements from individual landowners to accommodate the future Britannia Road improvements will be acquired at fair market value through the Region's standard property acquisition process. It should also be noted that any impacts to landscaping will be mitigated and separate consultation will be undertaken at detail design to discuss the changes across property frontages. Individual property owners adjacent to Britannia Road will not be responsible for any direct or indirect costs as a result from the construction activities associated with the road improvements to Britannia Road. If you have any questions regarding the property acquisition process, please contact Don Williams, Manager – Realty Services at (905)825-6000 ext 7238.

At this time, the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: www.halton.ca/eaprojects.

Re: Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) to Highway 407, Town of Milton. PR-2667

We are in our 25<sup>th</sup> year of living in Milton and specifically in Omagh, our heritage home, built in 1882; is located on the South West corner of Britannia Road and Fourth Line. The hamlet of Omagh was founded in 1818.

We moved to this area as it was then a rural setting in a farming community, it is still an active farming community, however the rural setting is now greatly diminished.

We have some major concerns with regard to the proposals for widening Britannia Road. Some of these concerns are:

Widening will be cost prohibitive, certain properties that are very close to the road as it is now, will have to be bought out. Others will be literally feet and inches from a four-lane highway, traffic noise, pollution from exhaust fumes. The health hazards to residents will be increased dramatically.

There is no drainage system (storm sewers), the effect of petroleum products with increased traffic will only add to the pollution of the land, which is a fragile eco system as it is.

A heritage community will just become some old and existing houses in another subdivision of Milton.

Properties will be devalued.

There are now 6 sets of traffic lights on Britannia Road from Highway 25 to the 407 Highway, not including those at the 407.

James Snow Parkway is planned to go South of Britannia Road to join up with the 407, a diversion South of Omagh, to join up with the James Snow Parkway South, would be far less disruptive and a more direct route to the 407, as well as being far less expensive.

We will be attending the information sessions and meetings as they arise, and continue to advocate our concerns.

# Stanley Pijl

From: Manoj Dilwaria [m.dilwaria@delcan.com]

**Sent:** Sunday, June 26, 2011 11:14 PM

To: 'Stanley Pijl'

Subject: FW: Britannia Road Transportation Corridor Improvements - Assessment Study

From:

Sent: Saturday, June 25, 2011 3:09 PM

To: andrew.head@halton.ca; m.dilwaria@delcan.com

Subject: Re: Britannia Road Transportation Corridor Improvements - Assessment Study

June 24, 2011

From: Phone

Our property is a residential property (Heritage Home), on the SW corner of Britannia Road and Fourth Line. We have direct access to Britannia with our drive or entry way being on Britannia Road.

We use Britannia Road daily, westbound and eastbound.

Our concerns which were submitted previously in writing, we were opposed to the widening of Britannia through Omagh Village, as it is an historical area. Homes/Land/Properties would have to be bought out as some are just too close to the existing road, ours being one of them. The Environmental issues are also a concern.

The fact we were told Britannia would go to 4 lanes and then to 6, would totally destroy this whole area, as well, the other modes of travel being considered, bike lanes etc; and blvd's, walking paths, bus lanes. These roads are huge.

The proposals for the "Alternative Solutions" were well presented, the alternative route going "North" of Britannia appears to be the one with more obstacles, unless it could be taken further north, that was mentioned at the meeting we attended, however where that route could go was not discussed.

From our own perspective to keep the village from being destroyed the "South" Alternative appears to be the better option. There will however be other community residents that have homes or property south of Britannia who would then be affected by a four lane highway being closer to their homes.

The proposal to make Omagh a cul-de-sac, we assume then, there would be no need for traffic lights at Britannia and Fourth Line, Fourth Line being then the direct route and only route either north or south for residents of the village, and other area residents.

One would hope that the speed limit on Fourth Line would be set at a low speed limit no matter which alternative route for Britannia is chosen. Otherwise Fourth Line becomes another high speed access road for commuters, a lower speed limit would encourage people to use the alternative roads such as James Snow Parkway.

There are still many questions and concerns, does the name of our road change if Britannia road detours either north or south?

We just went through numbering changes in 2009 when the Town of Milton re-numbered all the homes on Britannia (and Derry), and changed our postal codes. The reason given then was for Emergency personnel as there was too much confusion with the old numbering. There is still confusion as two years later we still don't exist on GPS under the new address.

We are glad that we attended the meeting and felt it was well presented and the staff were helpful. The location itself was okay, however the room was very small and very noisy, making it difficult to discuss things in more detail. As far as the proposals, there has obviously been a lot of work undertaken to come up with different solutions.

We have a big concern however with how quickly this is being pushed through, all of a sudden this project seems to be top of the list.

Moving too quickly on projects has been Milton's problem all along, helped along the way by the Province and Halton Region, oh yes not to leave out the Developers.

The town and surrounding area has been ruined with housing developments, shopping malls industrial malls. What was once a beautiful farming and agricultural community has been totally destroyed.

And now of course it is time to ruin the rest of it with ugly 4 and 6 lane Highways, all over the place.

We came to Milton because it was a small, quiet, nice town, and Omagh was the icing on the cake. Unfortunately for us, once the first big water pipe came in that all changed, and

Milton may be attracting many new residents to the town, but they are driving all the old ones out.

Thank you for your time



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Aug 2, 2012

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation and the comments submitted as part of the public consultation process. Please find below our responses to the comments you provided.

The Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Fall 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>. The Technically Preferred Alternative for the Omagh by-pass is Alternative 2C as presented in December 2011. The 2C Alternative includes Britannia Road being realigned to the south of the Omagh Community.

Please be advised that once the Britannia Road Class EA Study is completed the project will progress into detail design. During detail design, additional consultation with the community will be undertaken for the implementation of improvement, including construction staging.

If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely.

Alicia Jakaitis

Transportation Coordinator

Manoj Dilwaria, Delcan Coorporation
 Maureen Van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region



# TREMAINE ROAD (REGIONAL RD. 22) Class EA Study Derry Road (Regional Rd. 7) to Britannia Road (Regional Rd. 6)

Public Information Centre #1
Wednesday, January 26, 2011
Our Lady of Victory School, 540 Commercial Street, Milton

Brittania

### **COMMENT SHEET**

	The same of the sa
OMMENTS / COMCOUNS	a supplement a month in the and
what will happen with my well water	during construction?
Es it possible to preserve my treen south side of Brittania. They lose on Northside from 407-120 a nouses - already set for back from Br	e line in front of house necould for privacy to italgar there are only
light now it is difficult to turn in in not slow down I am womicd wase with 4 lange. Is it possible	1 My drive way, traffic this will only get to install a signal?
can I have a proposed map Mod	led to me of the city ph
will the mad be vaised or livered?	ie disinge of water.
	<u> </u>
lace your completed comment sheet in the box provided or return by Februa	ry 11, 2011 to:
roject Manager:	
lr. Marek Trzaski, P. Eng. lcCormick Rankin Corporation	
655 North Sheridan Way, Suite 300	
lississauga, Ontario L5K 2P8 hone: 905-823-8500	
ax: 905-823-8503	
-mail: mtrzaski@mrc.ca	

### PLEASE PRINT

Name:

Address:

Thank you for your participation. The purpose of the information being gathered on this form is to ensure that further information, when it becomes available, can be forwarded to those parties who have expressed an interest in this study and to gather information from the public for use in the study. Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. We sincerely apologize for the delay in responding to your comments submitted as part of the study process. Please find below our responses to the comments you provided.

- 1. A hydrogeotechnical study will be completed during the detailed design phase of the project. As part of the geotechnical evaluation, potential impacts to drainage infrastructure will be examined and mitigation measures to prevent any negative surface groundwater interactions will be determined. Where required, groundwater protection measures will be put in place to ensure that the groundwater resources (e.g. existing wells) are not impacted during and after construction.
- 2. Property requirements from individual landowners to accommodate the future Britannia Road improvements would be acquired at fair market value through the Region's standard property acquisition process. It should also be noted that any impacts to landscaping will be mitigated and separate consultation will be undertaken at detail design. To see the most up to date information as presented a the 3<sup>rd</sup> Public Information Centre in December 2011 please go to <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>
- At this time the Technically Preferred Alternative will not include a signalized intersection into your property. However, the widened Britannia Road will include a centre left turn lane adjacent to residential properties allowing for greater ease of turning movements into and out of the driveways.
- 4. Attached to this letter is the Region's Capital Project Map (2012-2031) which includes all road related projects to 2031. Please note that the Region's Capital Program is approved yearly by Regional Council and is subject to schedule refinements.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically

Preferred Alternative are also being made and will be included in the final ESR. The Environmental Study Report (ESR) will be finalized in Fall 2012. You will be notified when the ESR has been completed and where it will be available for public review and comment. If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Manoj Dilwaria, Delcan Coorporation
 Maureen van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

Attach.

# Stanley Pijl

From:

Manoj Dilwaria [m.dilwaria@delcan.com]

Sent:

Friday, February 11, 2011 5:07 PM

To:

Stanley Pijl

Subject:

Fwd: Brittaina Road Class EA

Sent from my iPhone

Begin forwarded message:

From:

Date: February 11, 2011 4:50:37 PM EST

To: <andrew.head@halton.ca>
Cc: <m.dilwaria@delcan.com>,
Subject: Brittaina Road Class EA

Reply-To:

In response PIC # 1 on January 26, 2011, we offer the following comments:

- As we are working as the engineer for landowner's within the Phase 3 expansion area, and have also completed a considerable amount of engineering work that would be relevant to the study area, we would appreciate it if DSEL could participate in the review of design alternatives as they are prepared, and have an opportunity to provide input as the evolution of design alternatives progress.

To what degree will future water and wastewater infrastructure be considered as with of this Class EA study?

Yours truly,



February 11, 2011

Transportation Services
Regional Municipality of Halton
1151 Bronte Road
Oakville, Ontario
I.6M 3L1

Attention:

Mr. Andrew Head, C.E.T.

Project Manager

RE:

Halton Region Class Environmental Assessment Study Britannia Road (Regional Road 6) Corridor Improvements

Public Information Centre No.1

Dear Sir,

We represent Orianna Glen Homes Corp. who own lands located at the southest corner of the intersections of Britannia Road and Fourth Line, Town of Milton. These lands are located within the noted study area.

On behalf of Orianna Glen Homes Corp., we provide the following comments based on our initial review of the materials presented at Public Information Centre No. 1 on January 26, 2011.

- 1. The Omagh Tributary of the Sixteen Mile Creek conveys stormwater flows through the noted lands. We respectfully request the Region to ensure any proposed realignment options arrived at through the ongoing Environmental Assessment (EA) process both consider and accommodate any future road culvert sizing and crossing locations to ensure no increase of existing regional storm floodlines and to the extent possible, accommodate for potential future creek lowerings and realignments.
- 2. Should the valuation of options analyzed through the EA process determine the preferred option is to realign the Britannia Road right-of-way through lands to the south, we would request that the Region bring any lands to the north of a southern alignment into the Boyne Survey Secondary Plan Area as these lands would effectively become part of the Boyne Survey Secondary Plan from community, transportation and servicing perspectives.
- 3. The Orianna Glen Homes Corp. Landholding contains a heritage house located at municipal address 10080 Britannia Road West. We respectfully request the Region to provide consideration to this property during the valuation of right-of-way realignment options through the EA.



On behalf of Orianna Glen Homes Corp. we thank you for the opportunity to submit these comments and look forward to being active participants in this study.

Yours Truly,

MTE Consultants Inc.

Paul Brown, Director, Land Development

Cc: Mr. Manoj Dilwaria, B.Eng; M. Pl. (Transp.), MCIP, RPP, AVS Principal and Technical Director Delcan Corporation



June 16, 2011 MTE File No.: 10478-100

Mr. Andrew Head, C.E.T. Transportation Services Regional Municipality of Halton 1151 Bronte Road Oakville, ON L6M 3L1

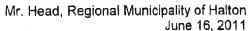
Dear Mr. Head:

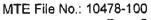
Re: Halton Region Class Environmental Assessment Study Britannia Road (Regional Road 6) Corridor Improvements Public Information Centre No. 2

We represent Orianna Glen Homes Corp., who own lands located at the southeast corner of the intersections of Britannia Road and Fourth Line, Town of Milton. These lands are located within the noted study area.

On behalf of Orianna Glen Homes Corp., we provide the following comments based on our initial review of the materials presented at Public Information Centre No. 2 on June 08, 2011.

- 1. The Omagh Tributary of the Sixteen Mile Creek conveys stormwater flows through the noted lands. We respectfully request the Region to ensure any proposed realignment options arrived at through the ongoing Environmental Assessment (EA) process both consider and accommodate any future road culvert sizing and crossing locations to ensure no increase of existing regional storm floodlines and to the extent possible, accommodate for potential future creek lowerings and realignments.
- 2. The south by-pass alignment alternative (5C) would require taking portions of the Orianna Glen Homes Corp. Lands. Orianna Glen Homes Corp. have no interest whatsoever in accommodating this alternative. The alignment presented under alternative 5C would result in remnant irregular shaped land parcels between the by-pass alignment and the existing hamlet of Omagh which would be highly inequitable to Orianna Glen Homes Corp.







On behalf of Orianna Glen Homes Corp. we thank you for the opportunity to submit these comments and continue to look forward to being active participants in this study.

Yours Truly,

MTE CONSULTANTS INC.

Director, Land Development

PXB:emw:lxa M:\10478\Halton Region Class Environmental Assessment Study.doc

Cc: Mr. Manoj Dilwaria, B.Eng; M. P1. (Transp.), MCIP, RPP, AVS Principal and Technical Director **Delcan Corporation** 



January 6, 2012 MTE File No.: 10478-100

Mr. Andrew Head C.E.T.
Project Manager, Transportation Services
Halton Region
1151 Bronte Road
Oakville, ON L6M 3L1

Dear Mr. Head;

RE: Britannia Road Class Environmental Assessment Study
Public Information Centre #3
Tremaine Road to Highway 407, Town of Milton

MTE Consultants Inc. represents Orianna Glen Homes Corp. (Orianna) which owns lands located south of Britannia Road between Fifth Line and Thompson Road (Third Line), in the Town of Milton. Thank you for providing we with the opportunity to review the presentation materials provided for the Britannia Road Class Environmental Assessment (Britannia EA) public information centre #3 (PIC3) held by the Halton Region (Halton) on December 14<sup>th</sup>, 2011.

The preliminary preferred alignment of Britannia Road (Alternative 5C) as presented at PIC3 proposes to divert Britannia Road south of Omagh, traversing Orianna's lands as illustrated on Figure 1.0 (attached). Orianna does not support the preliminary preferred alignment which provides for a southern by-pass of Omagh. The immediate and short term need for the Britannia widening is being generated by development north of Britannia Road and in particular, the Boyne Survey Secondary Plan. As such, it is appropriate for the Omagh by-pass to be located within the Boyne Survey where it will traverse the lands which are generating the traffic and where the road can be more comprehensively planned in conjunction with land uses currently being developed through the Boyne Secondary Plan process.

Notwithstanding the above, we are providing the following technical comments based on our review of the materials presented at PIC #3 on December 14<sup>th</sup>, 2011, should the preliminary preferred alignment prevail.

1. The Omagh Tributary crosses Britannia Road at Fourth Line and traverses Orianna's Lands. The Omagh Tributary is a localized low point on Britannia

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Road. Urbanization of Britannia Road from its current design as a two (2) lane rural cross section to a six (6) lane urban cross section will result in a significant increase in stormwater runoff from the roadway. The discharge of untreated and uncontrolled stormwater, increased flows and the change in flow regime from intermittent to continuous flow are key concerns that have the potential to increase flooding events and increase the constraint rating of the Omagh Tributary through Orianna's Lands. These concerns were brought to the Study Team's attention at the stakeholder meetings we attended on October 24<sup>th</sup>, 2011 and November 1<sup>st</sup>, 2011. We were advised by the EA Study Team on both occasions that the intent is to collect stormwater runoff from the Britannia Road corridor and convey the flows to the Main Branch of Sixteen Mile Creek. Orianna is in support of this approach and we recommend that a section be included in the Environmental Study Report (ESR) addressing stormwater management and providing direction to the detailed design team with respect to the conveyance of stormwater to the Main Branch of Sixteen Mile Creek.

2. The Omagh Tributary crossing on Britannia Road is a 4.3m wide by 1.2m high concrete box culvert. The realignment of Britannia Road to the south will result in an additional crossing of the Omagh Tributary and the installation of a new culvert. The size of the new culvert at this point is unknown, but it is assumed that an appropriately sized structure will be installed so not to increase flooding events and/or increase the floodplain limits on Orianna's lands. The height of the proposed road above existing grade is also a concern, as the land impact will not only be the 47m Right-of-Way but also the transition slopes required to match Britannia Road grades. Further, the height of the proposed road may impose additional fill requirements on the Orianna lands when development proceeds in the future. We request an opportunity to review the preliminary plan and profile drawings that have been prepared in support of the recommended road alignment prior to filing the ESR so that opportunities to mitigate this concern can be reviewed. If necessary, a meeting with the EA Study Team will be requested to discuss the findings of our review.

On behalf of Orianna Glen Homes Corp., MTE sincerely appreciates the invitations to attend the stakeholder meetings and the level of input solicited throughout the Britannia Road EA process. We look forward to reviewing the remaining materials and meeting with the Region in advance filing the ESR.



Yours truly,

MTE CONSULTANTS INC.

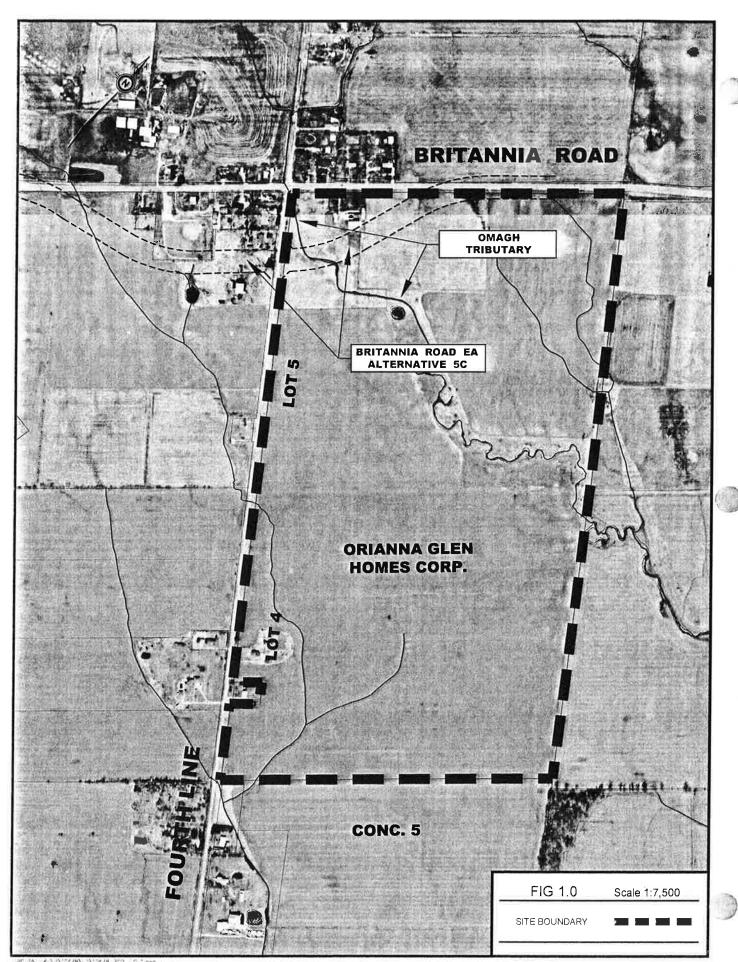
Spark

Anita Sparre, C.E.T Project Manager

cc: Orianna Glen Homes Corp.

ALL: emw

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May 28, 2013

MTE Consultants Inc. Anita Spare 1016 Sutton Drive, Unit A Burlington, Ontario L7L 6B8 Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: 905-847-2192

Dear Ms. Anita Sparre

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) Orianna Glen Homes Corp.

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation as a member of our Stakeholder Group and your comments submitted as part of the study process.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>. The Technically Preferred Alternative for the Omagh by-pass is Alternative 5C as presented in December 2011. The 5C Alternative includes Britannia Road being realigned to the south of the Omagh Community. It should be noted that Halton Region is in receipt of a letter from Orianna Glen Homes Inc. dated May 9, 2012, which offers its support for the Technically Preferred Alternative (5C) around the Omagh community and withdrawing MTE's previous objections to this alignment.

In addition to the above, the Study Team would like to offer the following regarding previous comments concerning the future storm water management of Britannia Road:

• The Britannia Road Study Area is adjacent to the Boyne Secondary Plan Area where future urban development and associated stormwater ponds are planned. There is an opportunity to overcome the drainage area limitations for Britannia Road by itself, by combining the future roadway drainage into larger adjacent Boyne stormwater pond catchments.

The planning and design of the future storm sewer drainage system will be undertaken to anticipate future connections to the proposed stormwater management ponds within the Boyne Secondary Plan. The Region is in receipt of the FSEMS dated April 2013 and during detailed design, Halton Region will consult with the Town of Milton to ensure that crossings are realigned with what has been proposed as part of the Secondary Planning

process. The sizing for future stormwater management ponds in the Boyne Secondary Plan Area will be required to include sufficient water quality and quantity storage to provide treatment for the future drainage of Britannia Road.

As identified in previous comments provided by MTE, the Omagh Community is known
to be flood susceptible. The flood vulnerability at this location is due to backwater from
the existing Britannia Road and Fourth Line structures. The Region has completed its
hydraulic analysis and has proposed an acceptable combination of improvements to
Conservation Halton and flood levels will not be increased.

The Environmental Study Report (ESR) will be finalized in Winter 2013 and you will be notified when the ESR has been completed and where it will be available for public review and comment. If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region



January 6, 2012 MTE File No.: 10321-100

Mr. Andrew Head C.E.T.
Project Manager, Transportation Services
Halton Region
1151 Bronte Road
Oakville, ON L6M 3L1

Dear Mr. Head:

RE: Britannia Road Class Environmental Assessment Study
Public Information Centre #3
Tremaine Road to Highway 407, Town of Milton

Thank you for providing Trinison Management Corp. (Trinison) the opportunity to review the presentation materials provided for the Britannia Road Class Environmental Assessment (Britannia EA) public information centre #3 (PIC3) held by the Halton Region (Halton) on December 14<sup>th</sup>, 2011. We represent Trinison's "Main Sail Estates Inc." lands located north of Britannia Road between Bronte Street South (formerly First Line) and Regional Road 25, in the Town of Milton.

The preliminary preferred alignment of Britannia Road (Alternative 5C) as presented at PIC3 proposes to widen Britannia Road across the frontage of Trinison's lands as illustrated on Figure 1.0 (attached). On behalf of Trinison, we provide the following technical comments based on our review of the materials presented at PIC #3 on December 14<sup>th</sup>, 2011, should the preliminary preferred alignment prevail.

1. The West Tributary to the Main Branch of Sixteen Mile Creek traverses Trinison's lands and crosses Britannia Road approximately half way between First Line and Regional Road 25. The widening of Britannia Road through this area will result in reconstruction of the existing culvert crossing. The size of the new culvert at this point is unknown, but it is assumed that an appropriately sized structure will be installed so not to increase flooding events and/or the floodplain limits on Trinison's lands. The height of the widened road above existing grade is also a concern, as the land impact will not only be the 47m Right-of-Way but also the transition slopes required to match Britannia Road grades. Further, the height of the proposed road may impose additional fill requirements on the Trinison Lands when development proceeds in the future. We request an opportunity to review the preliminary plan and profile drawings that have been prepared in support of

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the recommended road alignment prior to filing the ESR so that opportunities to mitigate this concern can be reviewed. If necessary, a meeting with the EA Study Team will be requested to discuss the findings of our review.

On behalf of Trinison, MTE sincerely appreciates the invitations to attend the stakeholder meetings and the level of input solicited throughout the Britannia Road EA process. We look forward to reviewing the remaining materials and meeting with the Region in advance filing the ESR.

Yours truly,

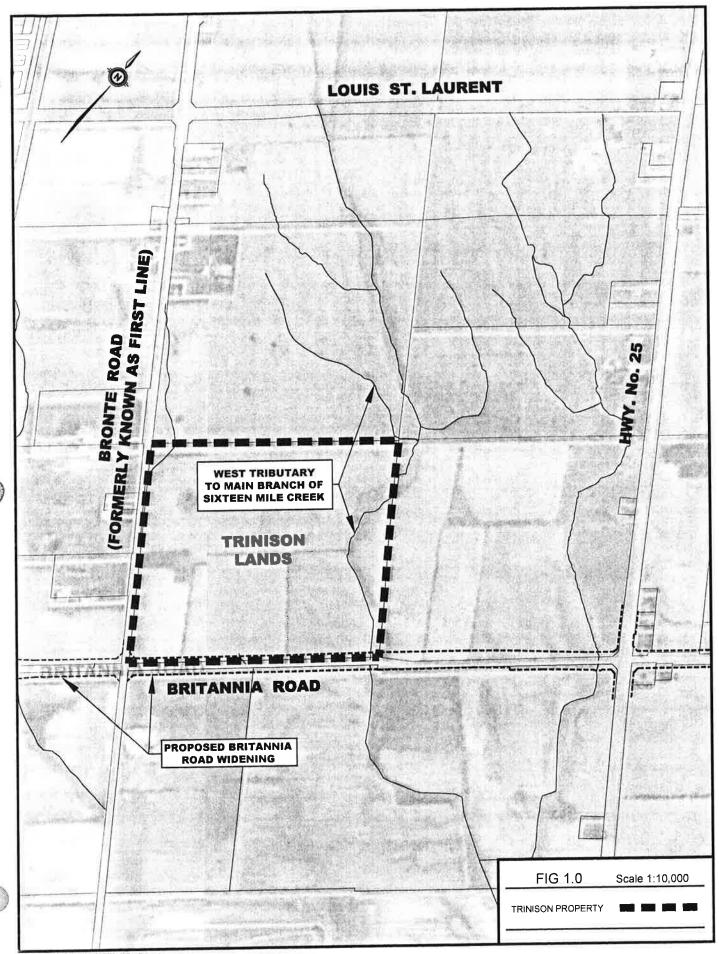
MTE CONSULTANTS INC.

Anita Sparre, C.E.T Project Manager

cc: Trinison Management Corp.

ALL: emw

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May 29, 2013

MTE Consultants Inc. Anita Spare 1016 Sutton Drive, Unit A Burlington, Ontario L7L 6B8 Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

Dear Ms. Anita Sparre

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22) Trinison Management Corp.

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation as a member of our Stakeholder Group and your comments submitted as part of the study process.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>. The Technically Preferred Alternative for the Omagh by-pass is Alternative 5C as presented in December 2011. The 5C Alternative includes Britannia Road being realigned to the south of the Omagh Community. It should be noted that Halton Region is in receipt of a letter from Orianna Glen Homes Inc. dated May 9, 2012, which offers its support for the Technically Preferred Alternative (5C) around the Omagh community.

In addition to the above, the Study Team would like to offer the following regarding previous comments concerning Crossing #4 – please see attached figure:

- Crossing #4 will be an outlet for a future stormwater management pond for the Boyne Secondary Plan. The required size is 4400x1000 and has been sized to accommodate the Regional Storm. Crossing #4 is an unregulated watercourse and the design of the culvert will be dealt with at detailed design in consultation with Conservation Halton.
- The hydraulic analysis for the Britannia Road corridor was completed with the objective to not increase flood levels and to accommodate the Regional Storm for all 19 crossings. The final recommended culvert sizes accomplished both the stormwater objective and that of wildlife requirements identified by Conservation Halton. As such, there is no anticipated impact associated with Britannia Road improvements at Crossing #4 It should also be noted that all proposed Crossing replacements/improvements will be

accommodated within the Region's 47 metre right-of-way, however grading easements may be necessary at some locations and will be further refined during detailed design.

 The plan and profile drawings will be included in the Environmental Study Report and available for your review during the day public review period.

The Environmental Study Report (ESR) will be finalized in Winter 2013 and you will be notified when the ESR has been completed and where it will be available for public review and comment. If you have any other questions or require additional information, please contact me at (905) 825-6000 ext. 7556 or at <a href="mailto:alicia.jakaitis@halton.ca">alicia.jakaitis@halton.ca</a>

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Nick Palomba, Delcan Corporation
 Maureen van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

# **Andrew McGregor**

Subject:

FW: Letter to Halton Councillors

From: Head, Andrew

Sent: Thursday, June 23, 2011 3:24 PM

To:

Cc: Dennis, Tim; 'Manoj Dilwaria'

Subject: RE: Letter to Halton Councillors

Thank you for providing your comments pertaining to the Britannia Road Class Environmental Assessment Study currently being undertaken by the Region.

As a part of the Class EA process, all viable alternatives must be considered and evaluated to develop a preferred alternative which will not only satisfy the technical issues, but have minimal impact on the natural environment, socio-economic environment and be overall cost effective.

In developing the design alternatives, it was apparent that widening of Britannia Road through the Omagh Community would have significant impacts in terms of socio-economic, built and cultural heritage. As such, for this section of roadway, two additional alternatives were considered, i.e. bypassing to the north and bypassing to the south of the community of Omagh. These alternatives were presented at the second Public Information Centre (PIC) conducted on June 8, 2011. The purpose of this PIC was to present the alternative design concepts and to obtain feedback from the members of the public on these alternatives. At this stage, the project team is currently evaluating these alternatives and as such, no decision has been made as to which alternative will be selected.

Your feedback is valuable to the process and is being considered in the evaluation process.

Please rest assured that the preferred alternative will be selected after due consideration of all comments received from the members of the public, stakeholders and technical agencies, and the inputs from various ongoing technical studies (i.e. natural environment assessment, built heritage, cultural assessment, archaeological assessment, transportation and safety analysis, etc.), being undertaken as part of this project.

Following the completion of these studies, as well as a detailed evaluation of the alternatives, the preferred alternative will be selected. The evaluation and preferred alternative will be presented at the third PIC scheduled to be held in the Fall of 2011.

We thank you for your interest in this study and we look forward to your further involvement as the study proceeds.

Please feel free to contact me for clarification or additional information.

Thank you

Andrew Head Project Manager

#### Halton Region 905 825-6000 ext 7475

From:

Sent: Monday, June 20, 2011 12:52 AM To: Lathan, Susan; Head, Andrew **Subject:** Letter to Halton Councillors

Hello:

I am unclear as to whether there has been any additional discussion, recommendations or decisions made yet regarding the Britannia Road Corridor, since the last Public meeting concerning the re-routing of the road to by-pass the village of Omagh.

Could you please forward my letter to the members of the Standing Committee for Planning and Public Works, and to the members of council as needed.

Thank you!



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Thank you



June 21, 2012

RECEIVED

Mr. Andrew Head Project Manager Halton Region 1151 Bronte Road Oakville, ON L6M 3L1

AUG 17 2012

HALTON HEGION PUBLIC WORKS & ENG.

Dear Mr. Head:

Re: Britannia Road EA

Ruth Victor and Associates represents Gill and Associates the owner of the property located on the northwest corner of Trafalgar Road and Britannia Road. This property contains a gasoline dispensing facility and the fuel tanks are located along the south limits of the property in close proximity to Britannia Road. Our major concern with respect to the proposed widening of Britannia Road relates to the viability of the existing business should the lands be taken by the Region. The pumps are located in the southeast corner of the property and the signage identifying the business is located within the area that potentially is subject to widening.

As you may be aware, current legislation would require Phase I and Phase II soils reports to ensure that there is no soil contamination in the vicinity of these existing tanks. We consider that the responsibility for financing these reports would fall to the Regional Municipality of Halton under expropriation of the property for road widening.

We recommend that consideration be given to the design of a road, which is not centered on a right-of-way, and that the alignment be moved to the south to avoid the fuel tanks.

Respectfully submitted,

Ruth Victor, MCIP, RPP



September 21, 2012

Ruth Victor & Associates 1243 Valleybrook Drive Oakville, Ontario L6H 4Y1

Dear Ms. Victor,

Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

Thank you for your comments regarding the Britannia Road Class Environmental Assessment Study. The Study Team appreciates your participation and comments submitted as part of the study process. Please find below our response to your comments.

Any property requirements from individual landowners to accommodate the future Britannia Road improvements will be acquired at fair market value through the Region's standard property acquisition process. It should also be noted that any impacts to landscaping and/or signage will be mitigated and separate consultation will be undertaken at detail design to discuss the changes across property frontages. If you have any questions regarding the property acquisition process please contact Don Williams, Manager – Realty Services at (905)825-6000 ext 7238.

At this time, the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred Alternative are also being made and will be included in the final ESR. The ESR will be finalized in Winter 2012 and you will be notified when the ESR is available for public review and comment. The Technically Preferred Alternative, as presented in December 2011 can be viewed at: <a href="https://www.halton.ca/eaprojects">www.halton.ca/eaprojects</a>

If you have any other questions or require additional information, please contact me at (905)825-6000 ext. 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

Transportation Coordinator

Manoj Dilwaria, Delcan Coorporation
 Maureen van Ravens, Manager Transportation Services – Halton Region
 Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region



2596 Britannia Road West RR2, Milton, Ontario L9T 2X6 905.336.1158 Fax 905.336.7014 www.conservationhalton.on.ca

October 19, 2010

Mr. Manoj Dilwaria
Delcan
3115 Harvester Road, Suite 102
Burlington, ON
L7N 3N8

Dear Mr. Dilwaria:

Re: Notice of Study Commencement

Britannia Road Transportation Corridor Improvements

Tremaine Road to Highway 407

Class EA Study CH File: MPR 558

Staff of Conservation Halton have reviewed the Notice of Study Commencement for the above noted project and offer the following comments. The purpose of the study is to address capacity deficiencies along Britannia Road. According to the notice, a number of road improvement alternatives will be examined including widening of the roadway, cross-sectional requirements, intersection improvements, overall traffic operations as well as the impacts of such improvements on the social and natural environment. As noted in the checklist below, there are numerous valleys and watercourse crossings within the Study Area. As such, we recommend that, in addition to the TAC meetings, individual meetings with Conservation Halton would be appropriate to ensure the final ESR contains the information that this agency will require to support a preferred alternative. The following checklist identifies a list of issues and criteria that Conservation Halton staff foresee as being important to evaluate during the study. The list is not meant to be exhaustive and additional requirements may become evident as the study progresses.

# Ontario Regulation 162/06

The study area contains several tributaries of Sixteen Mile Creek and Bronte Creek. Conservation Halton regulates the hazardous lands (erosion and flooding hazards) associated with the watercourses and the associated 15 metre adjacent tableland. In addition, Conservation Halton regulates all wetlands within the study corridor and the associated 30-120 metre adjacent lands. Ontario Regulation 162/06 requires that a Permit be obtained from Conservation Halton prior to development, interference with wetlands or alterations to shorelines and watercourses. A copy of Ontario Regulation 162/06 and the associated Policy document, Policies, Procedures and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document can be found at <a href="https://www.conservationhalton.ca">www.conservationhalton.ca</a>. Please ensure that the EA contains sufficient information to allow Conservation Halton staff to determine whether Permits could be issued at detailed design. Specific information requirements are detailed below.



 $\boxtimes$ 

A MEMBER OF THE CONSERVATION ONTARIO NETWORK

 $\boxtimes$ The EA should identify areas where Permits pursuant to Ontario Regulation 162/06 will be required and include such Permits as future commitments in the ESR. Some details related to future Permits may not be deferred to detailed design. This could include impacts to upstream/downstream flooding, delineation of hazardous lands (i.e. stable top of bank, flood plain and/or meander belt) and wetlands. Please review the requirements of Policy 3.51 (Public Infrastructure – Utilities, Trails and  $\boxtimes$ Transportation) of Conservation Halton's Policies Procedures and Guidelines for the Administration of Ontario Regulation 162/06 and Land Use Planning Policy Document (see enclosed). Staff have enclosed Approximate Regulation Limit (ARL) mapping for your information. The Region of Halton's GIS Department has access to all of Conservation Halton's GIS layers. The ARL mapping includes watercourses, flood plains, stable top of bank, meander belt limits and wetlands as well as the adjacent regulated tablelands. Please plot all areas regulated by CH on drawings. ARL mapping may be utilized if more detailed study is not  $\boxtimes$ required at this time however, please ensure that drawings indicate that limits shown are an approximation of the regulated area. A Data Request Form is required for all digital information requests. This form and additional information on data holdings can be found in the "GIS & Mapping" section of Conservation Halton's website: www.conservationhalton.ca. However, as noted above, the Region of Halton should have all of the necessary information.  $\boxtimes$ Please survey all drainage features, watercourses, ditchlines, culverts, etc. It is recommended that 'Potential Impacts to Natural Hazards' (flooding and/or erosion hazards) should be one of the evaluation criteria within the ESR. At a minimum, a proposed alternative must have no negative impacts on flooding and erosion hazards in order for  $\boxtimes$ Conservation Halton to issue a future approval under Ontario Regulation 162/06. Opportunities to improve any deficiencies with respect to flooding and erosion should be investigated. The EA should assess all flood plain impacts associated with each alternative including  $\boxtimes$ consideration of any change in storage, velocity and up and down stream water levels for a variety of flow conditions. Please identify any potential areas of unstable soils within the study area. These areas are  $\boxtimes$ regulated by Conservation Halton pursuant to Ontario Regulation 162/06. A hydrologic and/or hydraulic analysis will be required to support changes to any of the crossing structures, and may also be required for any areas where significant grade changes X are proposed. This work must be included in the Environmental Study Report. Please consider MTO's flooding criteria, guidelines and/or the municipal engineering  $\boxtimes$ standards for flooding along/over roads. At a minimum, safe access & egress as defined in

the MNR's 2002 Technical Guide: River & Stream Systems - Flooding Hazard Limit, should be provided.

- If a roadway is considered by the local municipality to be an Emergency Route then there should be no overtopping of the road with flood waters.
- A fluvial geomorphological assessment may be required in the Environmental Study Report, should the document consider adjustment to any of the existing watercourses.
- Please contact staff to arrange a site visit to stake the physical top of bank of the confined valleys associated with Sixteen Mile Creek within the study area.
- A geotechnical assessment of slope stability is required in the Environmental Study Report.

  MNR guidelines should be followed. The assessment must demonstrate that any proposed changes to the valley of the main east and west branches of Sixteen Mile Creek will not negatively impact valley stability and demonstrate that the road will achieve an appropriate factor of safety. Please consult staff before the geotechnical assessment is initiated to establish a Terms of Reference.
- A hydrologic evaluation may be required to determine if there is an impact to the hydrological functions of wetlands within the study area as a result of the proposed works, should works be required within the critical function zone of these features. Preconsultation with staff is recommended to determine if and where this study is required.

# Natural Heritage

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When undertaking any fieldwork and/or when making recommendations related to natural heritage and/or natural hazards, staff recommend that reference be made to the following guidelines prepared by the Ministry of Natural Resources: Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement, 2005, 2nd Edition, 2010; Significant Wildlife Habitat Technical Guideline; and, Natural Hazards Technical Guide and Understanding Natural Hazards. Field data sheets are required with the ESR submission (please include digital species spreadsheets). Please refer to Conservation Halton's Environmental Impact Study Guidelines for information on general study requirements, impact assessment and appropriate timing and protocols for surveys. These guidelines can be found at www.conservationhalton.ca. Pre-consultation is strongly encouraged to ensure correct methodologies and timing for the surveys is completed. The study area passes between natural features. As per Policy 2.1.2 of the Provincial Policy Statement, the diversity and connectivity of natural features in an area, and the long-term ecological function and biodiversity of natural heritage systems, should be maintained, restored or, where possible, improved, recognizing linkages between and among natural heritage features and areas, surface water features and groundwater features. Where applicable, the use of ecopassages or other measures to facilitate wildlife movement should be evaluated. Reference should be made to the Subwatershed Update Study, prepared by AMEC on behalf of the Town of Milton, as well as the Halton Natural Areas Inventory prepared by CH on behalf of the Region of Halton for further details with respect to wildlife and wildlife movement within the study area.

As noted above, the study area contains regulated wetlands. As per Policy 2.1.3 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant wetlands or significant coastal wetlands.

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The study area may contain the habitat of Endangered or Threatened species. As per Policy 2.1.3 of the Provincial Policy Statement, development and site alteration shall not be permitted in the habitat of Endangered/Threatened Species. Please ensure that the EA considers the impact of any proposed works on these features/functions in-keeping with the PPS requirements. The provincial Endangered Species Act and/or federal Species at Risk Act may also apply. Please contact Melinda Thompson-Black (melinda.thompson-black@ontario.ca, (905) 713-7425) of Aurora District MNR for further information on Endangered Species Act requirements. Discussions with the MNR should be initiated as soon as possible and timelines may need to be adjusted to allow for the ESA permit requirements if warranted.

The study area abuts the Sixteen Mile Creek area of natural and scientific interest (ANSI). As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in an ANSI unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please contact the MNR for further information on ANSI's.

The study area may contain significant wildlife habitat. As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant wildlife habitat unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please ensure that the EA considers the impact of any proposed works on these features/functions in-keeping with the PPS requirements. Please refer to the Ministry of Natural Resource's Significant Wildlife Habitat Technical Guidelines. Please refer to the Area 2 and 7 Subwatershed Update Study prepared by AMEC on behalf of the Town of Milton and the Natural Areas Inventory for further information.

The study area contains two significant valleylands (two branches of Sixteen Mile Creek). As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant valleylands unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please ensure that the EA considers the impact of any proposed works on these features/functions in-keeping with the PPS requirements.

The study area contains several significant woodlands as identified by the Region of Halton. As per Policy 2.1.4 of the Provincial Policy Statement, development and site alteration shall not be permitted in significant woodlands unless it has been demonstrated that there will be no negative impacts on the natural features or their ecological functions. Please ensure that the EA considers the impact of any development on these features/functions in-keeping with the PPS requirements. Please contact the Region of Halton for further information on significant woodlands.

- Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas identified in Policies 2.1.3, 2.1.4 and 2.1.5 of the Provincial Policy Statement unless the ecological function of the adjacent lands has been evaluated and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions. Please ensure that the EA considers the impact of any development on the adjacent land functions in-keeping with the PPS requirements.
- The Ministry of Natural Resources' Natural Heritage Reference Manual for Natural Heritage Policies of the Provincial Policy Statement 2005, Second Edition (2010) considers adjacent lands to be within 120 metres. Given the number of natural heritage features and functions within the Britannia Road corridor, staff recommend that the Study Area for the EA be 120 metres north and south of the centerline of the existing road. If any road realignments are recommended, the study area should be expanded accordingly.
- The study area contains the Sixteen Mile Creek Valley ESA as identified by the Region of Halton. The ESR must address impacts to the ESA. Please contact the Region of Halton for further information on the ESA.
- Please use Ecological Land Classification to map natural and semi-natural features to vegetation type and identify protection/mitigation measures. **ELC data sheets are required with the ESR submission (please include digital species spreadsheets).** Please refer to Conservation Halton's Environmental Impact Study Guidelines for information on general study requirements, impact assessment and appropriate timing and protocols for surveys. These guidelines can be found at <a href="https://www.conservationhalton.ca">www.conservationhalton.ca</a>
- Conservation Halton's *Landscape Guidelines* should be consulted at detailed design. These guidelines can be found at <a href="https://www.conservationhalton.ca">www.conservationhalton.ca</a>.
  - Other: A Tree Preservation Plan may be required at detailed design. Please refer to Conservation Halton's Landscaping Guidelines for further assistance in this regard. These guidelines can be found at <a href="https://www.conservationhalton.ca">www.conservationhalton.ca</a>.

#### Fish Habitat

- Staff will review the EA under our Level II Agreement with DFO. As per Policy 2.1.5 of the Provincial Policy Statement, development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements. Please ensure that the EA considers the impact of development on fish habitat in-keeping with PPS requirements.
- Please include fish habitat mapping as per MTO Protocol "Environmental Guide for Fish and Fish Habitat, 2006". Please also include photo documentation of the study area with a key map indicating photo locations.
- Staff note that there are numerous local drainage features/hydrologic connections within

the study area. Please be advised that although these drainage features are not regulated under Ontario Regulation 162/06, future development may be subject to review or approvals under the Fisheries Act.

# **Groundwater**

- Please identify groundwater recharge/discharge areas. Refer to the Subwatershed Update Study prepared by AMEC on behalf of the Town of Milton.
- Please complete a water balance assessment to determine any infiltrative deficit. Please ensure that this assessment considers the impact of transitioning to an urban cross section if an urban cross section is an identified alternative. If a deficit is identified, all potential impacts should be identified and assessed.
- Please identify recommended mitigation measures for groundwater impacts and if appropriate, any opportunities to improve infiltration.
- All proposed works must consider Policies 2.2.1 and 2.2.2 of the Provincial Policy Statement regarding water.

# Stormwater Management/Drainage

- Please discuss quality/quantity/erosion controls within the Stormwater Management Section of the Environmental Study Report.
- As per the Subwatershed Update Study please be advised that the quality requirements are Enhanced (Level 1)
- The Town of Milton, and their consultant AMEC is currently engaged in the completion of the FSEMS which incorporates this study area. Please contact the Town and/or their consultant AMEC to obtain the appropriate quantity and erosion control targets.
- Please examine the potential to combine SWM with adjacent development.
- Please identify existing vs. proposed drainage areas. Every effort should be taken to maintain existing drainage divides. Any proposed diversions must be clearly identified and the potential impacts fully assessed as part of the project's evaluation.
- Please discuss the mitigation of thermal impacts.

#### Other

- Recommendations and requirements from the Area 2 and 7 Subwatershed Update Study should be followed, as well as the recommendations from the forthcoming FSEMS.
- The EA should identify whether infrastructure is proposed within existing easements/r-o-w or whether there are additional property requirements.

- Please assess the impacts of utility relocation (i.e. telephone poles, union gas, etc.) on natural heritage features, natural hazard areas and fish habitat. This should not be left to detailed design as the relocation can have a significant impact on natural heritage features.
- Please note that Conservation Halton staff do not screen on behalf of MNR for Lakes and Rivers Improvement Act or Endangered Species Act implications. We recommend you contact the MNR to determine if these Acts will apply to the proposed works.
- In order to allow sufficient time to review the Draft Environmental Study Report, staff would appreciate it if a review timeline of 8 weeks could be incorporated into the project schedule. We would like to request 3 copies of the draft and final ESR for review.

We trust the above is of assistance. If you require additional information please contact the undersigned at extension 266.

Yours truly,

Jennifer Lawrence

Manager, Environmental Planning

Encl.

cc: Mr. Andrew Head, Region of Halton, email

Mr. Paul Cripps and Mr. Martin Bateson, Town of Milton, email

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#### **MEETING MINUTES**

# Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study

Date: Thursday June 30, 2011

Location: Conservation Halton Main Office

#### Attendance:

Chris Parent (Aquafor Beech)
Chris Lorenz (Aquafor Beech)
Brent Tegler (North-South Environmental)
Andrew Head (Halton Region)
Alicia Jakaitis (Halton Region)

Stanley Pijl (Delcan)
Samantha Mason (Conservation Halton)
Kim Barrett (Conservation Halton)
Jennifer Lawrence (Conservation Halton)

# 1. Options for Improvements to Britannia Road

Stanley Pijl provided an overview of Delcan's options for improvements to the Britannia Road corridor. Specific elements of relevance to the Natural Heritage component of the EA study include the following:

- Britannia Road is proposed to be widened to four lanes initially; the road is proposed to be further widened to six lanes at some point during 2021-2031.
- The ultimate right-of-way will be 47 m wide; this includes the roadway, sidewalks and shoulder.
- Culverts will generally match the existing road grade.
- Existing culverts will have to be replaced or extended to at least 47 m in length; each culvert will need to be assessed individually to determine whether it is replaced or extended.
- Between First Line and Regional Road 25 the proposed alignment shifts north to avoid impacts to a woodland block that abuts the southern edge of the existing Britannia Road alignment.
- The bridge crossing the Main Branch of 16 Mile Creek will have to be replaced. Widening is currently proposed to occur on both sides of the existing alignment. Kim Barrett indicated that the northern limit of the Sixteen Mile Creek Valley Environmentally Sensitive Area (ESA 16) extends to Britannia Road and that it would be desirable to limit the intrusion of proposed road improvements into the ESA.

- Kim Barrett also indicated that portions of the Boyne Natural Heritage System (NHS) extend into the study area along the north side of Britannia Road. Figure NHS-2A of the draft Functional Servicing and Environmental Management Strategy (FSEMS) for the Boyne Survey shows a number of 'Enhanced Wildlife Crossing Locations' that Conservation Halton recommends be taken into account in the EA. The Region of Halton's Planning Department has a copy of this report for reference.
- Jennifer Lawrence noted that a proposed stormwater management facility associated with future development of the Boyne Survey lands may discharge into the Main Branch of 16 Mile Creek immediately upstream (i.e. north) of Britannia Road.
- The bridge crossing the East Branch of 16 Mile Creek will have to be replaced. Immediately west of this crossing the width of the roadway is proposed to be reduced to minimize impacts on adjacent properties; the reduced roadway width is likely to continue to Trafalgar Road.
- Immediately west of Highway 407 the proposed road alignment shifts south to avoid impacts to a woodland block that abuts the northern edge of the existing Britannia Road alignment.
- There are three options for the future alignment of Britannia Road at Omagh: (i) Option 5A follows the existing alignment through Omagh, (ii) Option 5B involves a bypass to the north of Omagh, and (iii) Option 5C involves a bypass to the south of Omagh. These options will need to be assessed to determine the preferred alternative.
- Jennifer Lawrence noted that a flood damage centre of approximately 12 homes is located in Omagh. The assessment of Options 5A, 5B and 5C should address their implications to this flood damage centre.
- Option 5B and Option 5C both involve watercourse crossings; to achieve a perpendicular crossing, the current configuration of Option 5C would require a realignment of a portion of the Omagh Tributary.
- Options 5B and 5C are not fixed and could be revised to address environmental issues.

# 2. Work Plan to Address Natural Heritage Component of EA Study

Jennifer Lawrence asked why calling amphibian surveys were not completed in the spring. Chris Parent indicated that existing information is adequate to characterize the amphibian species of the study area; knowledge of potential amphibian habitat (particularly breeding ponds) is sufficient to inform the evaluation of options and assess potential impacts.

# Kim Barrett noted the following:

• ELC should be completed to Vegetation Type level at the crossings of the Main Branch and East Branch of 16 Mile Creek; ELC could be completed to more general levels (i.e. Community Series or Ecosite) at other portions of the study area.

- A general characterization of plant species is sufficient but specimen trees should be identified.
- The boundary of the wetland in the woodland block immediately west of Highway 407 should be delineated as soon as possible. Conservation Halton will confirm the staking of the wetland limits.
- The EA Study should consider the need to incorporate wildlife crossings at existing culverts, and recommendations should be made for the installation of additional culverts (or similar wildlife crossing structures) to accommodate wildlife movements where considered necessary.
- A road mortality survey should be completed to identify areas where wildlife road crossing structures may be appropriate.

Brent Tegler agreed that the Project Team would complete the Natural Heritage fieldwork per the above points.

# Samantha Mason noted the following:

- Silver Shiner (*Notropis photogenis*) is present in 16 Mile Creek (East Branch). Silver Shiner was caught at or near this bridge in 2011.
- Silver Shiner was recommended for uplisting to "threatened" status in May 2011 by COSEWIC. Accordingly, there is the potential that an authorization under the *Fisheries Act* may be required for the replacement of this bridge and there is also the potential that a permit may be required under the *Species at Risk Act* (SARA). This should be noted in the ESR.
- Conservation Halton would like data loggers to be installed to obtain data on the thermal regimes of all permanently flowing watercourses.
- Conservation Halton would prefer open bottom culverts for all watercourse crossings, particularly coldwater streams and those that receive groundwater inputs.

The Project Team noted the potential presence of Silver Shiner in 16 Mile Creek in the vicinity of Britannia Road. It was agreed that data loggers would be installed to obtain data on the thermal regimes of all permanent flowing watercourses.

#### 3. Access to Private Property

The requirements to access private property were discussed and the following indicated:

• There has been no general mail-out to solicit permission for the Project Team to access private property.

- Brent Tegler noted that to date, most terrestrial fieldwork has been completed from the edge of the road. He noted that access to private property would be required to address elements of the Natural Heritage component of the EA Study, such as the assessment of Option 5B and Option 5C at Omagh.
- Andrew head noted that, if required, Halton Region can provide the Study Team with landowner contact information.
- Jennifer Lawrence noted that permission should be obtained to access private property upstream and downstream of the crossings of the Main Branch and East Branch of 16 Mile Creek.

#### 4. Evaluation Criteria

Chris Parent noted that the project team would like to review evaluation criteria with Conservation Halton staff. It was agreed that the Project Team will prepare and circulate to Conservation Halton draft evaluation criteria for review and comment.

# 5. Next Steps

Aquafor Beech Limited will prepare and circulate draft meeting minutes.

# Fluvial Geomorphology Summary

#### Overview of Fieldwork Conducted

- Collection of watercourse inventory data began on May 18<sup>th</sup>, 2011 and continued for 3 more field visits (last one June 20, 2011)
- During this time, the crossings experienced higher flow conditions as well as low flow conditions
- At each crossing a visual assessment was completed both upstream and downstream of the road crossing
- This visual assessment included identification of:
  - o floodplain land-use on both sides of the channel and whether there were any constraints; floodplain gradient; channel connection to the floodplain; bank face vegetation; bank erosion, description and the distance from the culvert; bank/riparian vegetation; in-channel vegetation; presence of roadside ditches; evidence of backwater and potential cause; bar types; planform/setting; additional notes
  - Streambed composition was identified at each crossing were access permitted; pebble counts were completed at crossings were sediment sizes were large enough to measure
- At each crossing culvert data was collected both upstream and downstream of the crossing:
  - Culvert dimensions (bridge span, width x height or diameter, headwall height); length of culvert; culvert or bridge condition; culvert type; whether there is material in the culvert; angle of the channel approaching and leaving the culvert; water depth in culvert downstream, identification of wood debris or sediment obstructing the opening; identification of a pool immediately downstream of culvert; as well as additional notes
- At each crossing (where the channel was accessible) cross section measurements were taken upstream and downstream.
  - This was completed using a tape measure and meter stick
  - At bridge crossings 7 and 15 a total station was used due to the size of the watercourses
  - Measurements included bankfull width, water's edge, and depth. This data was not collected at locations were fences or an on-line pond impeded access to the channel
  - Width and depth measurements were taken close to the culvert for culvert hydraulics and if possible were taken further upstream and downstream
- North, South, East and West pictures were taken at each crossing at both the upstream and downstream side of the crossing

Detailed survey data collected by Delcan was also used as part of the analysis.

#### Overview of Methods Used

Data analysis took into consideration the shear stress, velocity, and the grain size entrained for each crossing. Velocities and shear stress values for existing and proposed conditions were taken from the hydraulic analyses (HEC RAS and HY8). Grain Size Entrained was calculated using the boundary shear stress calculated by the hydraulic analysis. Survey data taken from Delcan fieldwork was used to calculate slope (culvert invert elevation and downstream channel bed elevation) and field measurements of channel parameters contributed to the hydraulic output. Hydraulic analysis was completed using HEC RAS and HY8 analysis.

# **Example of Boundary Shear Stress and Grain Size Entrained calculation**

Shields Equation

 $\tau cr = kg(\rho s - \rho)D$ 

 $\tau$ cr - critical shear stress, k - co-efficient in velocity discharge relation (0.045), g - gravitational force,  $\rho$ s – sediment density,  $\rho$  – water density, D – grain size

Example (crossing 1)

 $\tau cr = 0.045(9.810 \text{m/s})(1650 \text{Kg/m}^3)D$ 

= 728D

Grain size entrained

= Boundary Shear/728

Grain Size Entrained (crossing 1)

46.94 N/m<sup>2</sup> / 728

 $= 0.06 \, \text{m}$ 

- This was completed for the 19 crossings and various scenarios (crossing 10 and 11) and then repeated for various flow return periods (2yr, 5yr, 10yr, 20yr, 50yr, and 100yr).
- This data was then compared to the field estimated permissible shear stress and permissible velocity values for various boundary materials (Fischenich, 2001). These estimated values were chosen based on field collected data (i.e. streambed composition and identification of vegetation within the channel).

#### Overview of Preliminary Results (crossing 10, 11 and 5a not included)

- Analysis of velocity was completed by a comparison of the velocities determined from the HEC RAS and HY8 output for the proposed and existing conditions.
- This analysis showed that 7 crossings experienced either a decrease or an increase in velocity (Table 1).
- Comparison of the proposed velocities (HEC RAS and HY8) to the field estimated permissible velocities (Fischenich, 2001) shows that some of the crossing velocities above the 20-year Return begin to exceed the field estimated permissible velocities.

Crossing	Flow Return Period Experiencing the Maximum Difference in Velocity	Proposed Velocity m/s	Existing Velocity m/s	Change in Downstream Velocity m/s (proposed – existing)
3	100 year	0.69	0.78	-0.61
4	50 year	0.75	0.83	-0.08
8	100 year	1.26	1.06	0.20
12	100 year	0.36	0.60	-0.24
13	100 year	0.37	0.58	-0.21
16	100 year	0.88	0.44	0.44
17	10 year	0.73	0.57	0.16

**Table 1** Results of analysis show that 7 crossings experienced either a decrease or an increase in velocity. This chart shows the flow return period that experiences the maximum difference in velocity.

- Analysis of boundary shear stress was completed by a comparison of existing and proposed boundary shear stress values.
- These values were determined using HEC RAS and HY8.
- All of the crossings analyzed experienced either an increase, decrease, or no change in boundary shear stress (**Table 2**).
- Comparison of the proposed boundary shear stresses to the field estimated permissible boundary shear stresses (Fischenich, 2001) show that Crossing 8 and Crossing 13 are the only crossings that exceed the field estimated Permissible Boundary Shear Stresses. Crossing 13 has bare soil exposed along the channel with no vegetation along the banks or bed and therefore has a low field estimated Permissible Boundary Shear Stress.
- Analysis of grain size entrained was completed by a comparison of the estimated existing and proposed grain sizes entrained.
- These values were determined using the formula mentioned above.
- All of the crossings analyzed experienced either an increase, decrease, or no change in grain size entrained (**Table 2**).

Crossing	Flow Return Period Experiencing the Maximum Difference in Boundary Shear Stress	Proposed Boundary Shear Stress N/m <sup>2</sup>	Existing Boundary Shear Stress N/m²	Change in Downstream Boundary Shear Stress N/m2 (proposed - existing)	Proposed Grain Size Entrained (m)	Existing Grain Size Entrained (m)	Change in Downstream Grain Size Entrained (m) (proposed - existing)
1	100	46.94	46.94	0	0.06	0.06	0
2	100	28.55	28.55	0	0.04	0.04	0
3	100	17.42	69.12	-51.7	0.02	0.09	-0.07
4	100	20.80	31.11	-10.31	0.03	0.04	-0.01
5	100	56.92	56.92	0	0.08	0.08	0
6	20	24.84	33.70	-8.86	0.03	0.05	-0.02
7	100	4.58	4.58	0	0.01	0.01	0
8	100	68.42	33.82	34.6	0.09	0.05	0.04
9	100	42.76	42.76	0	0.06	0.06	0
12	100	7.40	13.50	-6.10	0.01	0.02	-0.01
13	100	7.95	43.27	-35.32	0.01	0.06	-0.05
14	100	16.39	42.23	-25.84	0.02	0.06	-0.04
15	100	35.20	35.92	-0.72	0.05	0.05	0
16	100	41.10	9.33	-31.77	0.06	0.01	0.05
17	100	27.31	35.45	-8.14	0.04	0.05	-0.01
18	100	10.21	10.21	0	0.01	0.01	0

**Table 2** Results show that the crossings analyzed experienced a decrease, increase, or no change in boundary shear stress. This chart shows the flow return period that experienced the maximum difference in boundary shear stress. The maximum change in grain size entrained is also shown.

# **Preliminary Mitigation Measures**

Some of the preliminary mitigation measures that can be used include:

- Addition of vegetation to the channel to alter the permissible boundary shear stress
- Adjusting culvert parameters, such as culvert size and slope
- Incorporating a scour pool at the downstream end of the culvert

Fischenich, C. (2001). "Stability Thresholds for Stream Restoration Materials," EMRRP Technical Notes Collection (ERDC TN-EMRRP-SR—29), U.S. Army Engineer Research and Development Center, Vicksburg, MS.

#### **Aquatic Ecology - Summary**

#### Field Work Completed

- Aquafor Beech Limited (ABL) staff completed assessment of existing aquatic habitat conditions between August 17, 2011 and November 24, 2011.
- As requested by Conservation Halton (CH) in their letter dated October 19, 2010, ABL staff
  completed fish habitat mapping per Ministry of Transportation (MTO) Protocols documented in
  the Environmental Guide for Fish and Fish Habitat (Ministry of Transportation, June 2009). Fish
  habitat mapping was completed for all watercourse crossings deemed fish habitat as defined by
  the Interim Guidelines for the Evaluation, Classification and Management of Headwater
  Drainage Features (CVC and TRCA, March 2009).
- Fish habitat mapping was completed between August 17, 2011 and November 4, 2011. In total, 11 reaches upstream of a Britannia Road crossing were mapped as well as 14 downstream reaches and 14 culverts or bridges. The remaining reaches were either classified as Not Fish Habitat or Aquafor Beech Limited did not receive permission to enter private land (see Table 1).
- On November 16, 2011, ABL received permission from the MNR to undertake a fisheries
  assessment in the form of a License to Collect Fish for Scientific Purposes. On November 24,
  2011, ABL staff performed an exploratory fisheries assessment using a backpack electrofisher on
  watercourse crossings within the study area with no history of fish community assessment for
  the purpose of classifying watercourses per the Interim Guidelines for the Evaluation,
  Classification and Management of Headwater Drainage Features (CVC and TRCA, March 2009).

#### Overview of Results

Table 1 illustrates the reach lengths of each of the 18 watercourse crossings within the study area assessed by Aquafor Beech Limited staff using MTO habitat mapping protocols. Certain reaches were not assessed because they were deemed Not Fish Habitat as defined in the Interim Guidelines for the Evaluation, Classification and Management of Headwater Drainage Features (CVC and TRCA, March 2009) and reported in AMEC, 2010 (AMEC) or by Aquafor Beech Limited staff (ABL).

Exploratory fish surveys were performed on watercourses where fish communities have not previously been established. These surveys yielded fish upstream and downstream of Crossing 18 and downstream of Crossing 14. At Crossing 18, eight (8) Brook Stickleback and one (1) Pumpkinseed were caught, with one (1) Lepomis sp. observed but not captured. Downstream of Crossing 14, one (1) Cyprinid sp. was observed but not caught.

Table 1:

<b>Crossing Number</b>	Upstream Section (m)	Culvert/Bridge (m)	Downstream Section (m)		
1	50	7.35	200		
2	50	11.1	200		
3	No Channel	19	200		
4	50	11.35	200		
5	50	19.45	200		
6	50	15.9	200		
7	50	11.6	200		
8	NOT FISH HABITAT (SWS)				
9	NO PERMISSION TO ENTER PRIVATE LAND				
10	NOT FISH HABITAT (SWS)				
11	50 24		200		
12	NOT FISH HABITAT (ABL)	25.2	200		
13	NOT FISH HABITAT (ABL)				
14	50	9.9	200		
15	48.1 + 45.3 side channel	11.45	200		
16	NOT FISH HABITAT (ABL)	14.5	200		
17	50	12	200		
18	34	47	200		

#### **Preliminary Recommendations**

- Within the boundaries of the study area, there are no particularly sensitive fish species or fish
  habitat present within the smaller tributaries or Main Branch of 16 Mile Creek. Therefore
  standard construction and mitigation measures should be applied around fish habitat when
  widening Britannia Road.
- Silver Shiner is present in the East Branch of 16 Mile Creek and was caught near the Britannia Road crossing in 2011 (Conservation Halton Letter to Andrew Head, October 27, 2011). Silver Shiner is currently listed as Special Concern under the Species at Risk Act (SARA) and has been recommended for uplisting to "Threatened" status in May 2011 by COSEWIC. As such, a permit may be required under SARA for construction activities near the bridge crossing the East Branch of 16 Mile Creek.
- If impacts to fish and fish habitat cannot be fully mitigated during construction activities there is the potential that an authorization under the Fisheries Act may be required.

# **Terrestrial Ecology - Summary**

#### 1.0 INTRODUCTION

#### Natural Environment Assessment

As part of the Environmental Assessment of the proposed widening of Britannia Road between Highway 407 and Tremaine Road a comprehensive field survey and assessment of terrestrial resources was undertaken. This information documents existing conditions and permits an assessment of potential environmental impacts of design alternatives. The terrestrial ecological studies include the following work program:

- 1. Review background reports / studies / models
- 2. Vegetation Inventory/Assessment for the preferred alternative, this included:
  - Tree inventory documenting species and caliper of tree; the location of trees >
     250 mm DBH have been recorded by handheld GPS for mapping.
  - Ecological Land Classification of the East and Main branches of Sixteen Mile
     Creek 125 meters north and south of Britannia Road.
- 3. Wildlife Inventory –Breeding bird point counts will be conducted along Britannia Road in order to identify any species at risk and document any significant wildlife habitat
- 4. Wildlife habitats will be identified based on available information
  - o opportunities for species migrations will be identified
  - o occupied habitats for any species at risk will be identified
  - o propose mitigation strategies
- 5. Delineate wetlands within 125 m of Britannia Road according to the Ontario Wetland Evaluation System (OWES)
  - o map wetlands and propose mitigation strategies

#### 2.0 METHODS

Field inventories were completed between June 26<sup>th</sup> and October 4<sup>th</sup> 2011. The following table provides a summary of the dates for which field work was undertaken.

Table 1. Dates of field work completed for the terrestrial ecology assessment of the Britannia Road EA.

Field Work Tasks	Date(s) Completed		
Breeding bird survey	June 26, and June 27, 2011		
Vegetation surveys and ELC	September 16 and 22, 2011		
Tree inventory	July 18 and 19, 2011		
Wetland staking and delineation	October 4, 2011.		

#### 2.1 Ecological Land Classification

Vegetation communities along the proposed road widening were classified according to ELC protocols (Lee et al. 1998). In the locations where Britannia Road crosses the Main Branch and the East Branch of Sixteen Mile Creek more detailed and more extensive ELC studies were completed including vegetation classification to "Vegetation Type" and the area of study extended 125 meters north and south of Britannia Road and included the valley slopes and floodplain of Sixteen Mile Creek. In other areas the ELC survey classified vegetation communities to "Community Series" for areas adjacent to the existing roadway.

#### 2.2 Wetland Delineation

In order to better understand the potential impact of the proposed road widening on wetlands the boundary of a larger wetland located on the north side of Britannia Road west of Highway 407 was delineated. Wetland delineation was completed following the protocols in the Ontario Wetland Evaluation System Southern Manual (OMNR, 2002). Wetland boundaries determined in the field were flagged by North-South Environmental and verified by Conservation Halton staff on October 4<sup>th</sup>, 2011. UTM coordinates were recorded at each flag using a hand-held GPS.

#### 2.3 Breeding Bird Surveys

Breeding bird surveys were completed along the existing roadway following Breeding Bird Atlas protocols whereby open communities were surveyed every 500 m and closed communities were surveyed every 250 m. At each survey point Forest Bird Monitoring Program point counts (10 min) were made.

# 2.4 Tree Inventory and Assessment

Trees of a size greater than 25 cm DBH located within 40 meters north and south of Britannia Rd. were included in the inventory excluding trees within two woodland blocks. The approximate average size and condition of the trees within the woodlands was noted Tree diameter was measured using a DBH tape and tree health was recorded according to trunk integrity, crown structure, and crown vigour using criteria provided in Appendix 1. The tree health parameters are combined to provide a tree vigour class from excellent (1) to dead (6) for each tree recorded (refer to Appendix 1 for further explanations of each tree vigour class). The location of each tree was recorded using a handheld GPS unit.

#### 2.5 Significant Species

Significant species and significant vegetation communities previously documented from the study area were determined using the biodiversity explorer tool on the Ministry of Natural Resources Natural Heritage Information Centre website (<a href="http://nhic.mnr.gov.on.ca/">http://nhic.mnr.gov.on.ca/</a>). The Species at Risk biologist from the Aurora District office of the MNR was also contacted to obtain the most current information relevant to study area. During all field studies an effort was made to look for significant species and vegetation communities that could potentially exist within the study area and adjacent lands.

References used to evaluate significance of plant and animal species recorded during field work include:

- Committee On the Status of Endangered Wildlife In Canada (COSEWIC) which determines the national status of wild Canadian species that are suspected of being at risk of extinction or extirpation;
- Committee on the Status of Species At Risk in Ontario (COSSARO) which uses criteria developed by COSEWIC and COSSARO to assess and classifying species at risk in Onario; and
- Species at Risk in Ontario (SARO) which includes endangered and threatened species that are protected by the Endangered Species Act in Ontario.

#### 3.0 RESULTS

# 3.1 Ecological Land Classification

#### Sixteen Mile Creek Main Branch

Four vegetation communities were identified along the creek including cultural meadow (CUM1-1), dry-fresh sugar maple deciduous forest (FOD5-1), dry-fresh hickory deciduous forest (FOD2-3), and silver maple mineral deciduous swamp (SWD3-2). The majority of the study area consisted of flood plain occupied by the cultural meadow community. The silver maple swamp was under one hectare in size and was found in the flood plain. The slopes of the valley were comprised of the upland forest communities FOD5-1 and FOD2-3. The soil texture in all communities was classified as sandy clay loam. The soil moisture class varied from 3 (very fresh) on slopes to 4 (moderately moist) within the floodplain. More detailed description of each of the communities is provided below.

#### Cultural Meadow (CUM1-1)

This community occupies the floodplain of Sixteen Mile Creek. The cultural meadow is partly dominated by Canada goldenrod (Solidago canadensis), riverbank grape (Vitis riparia), and red raspberry (Rubus idaeus) with a lesser abundance of New England aster (Symphyotrichum novae-angliae), cow vetch (Vicia cracca), giant hogweed (Heracleum mantegazzianum). There are scattered trees and shrubs throughout this community where successional processes are leading to the transition of this community to a cultural thicket/woodland in parts.

### Dry-fresh sugar maple deciduous forest (FOD5-1)

This community is found along the valley slopes on both east and west slopes of the valley north of Britannia Rd. The canopy is composed primarily of sugar maple (Acer saccharum) with a lesser abundance of bur oak (Quercus macrocarpa), red oak (Quercus rubra), shagbark hickory (Carya ovata) and bitternut hickory (Carya cordiformis). The understory is partly composed of sugar maple, hop hornbeam (Ostrya virginiana) and choke cherry (Prunus virginiana). The dominance in ground cover species varies with the slope due to differences in microclimate where the northeast facing slope is more shaded than the southwest. Ground cover species includes spreading dogbane (Apocynum androsaemifolium) dames rocket (Hesperis matrionalis), zig-zag goldenrod (Solidago flexicaulis) and garlic mustard (Alliaria petiolata) to name a few.

## Dry-fresh hickory deciduous forest (FOD2-3)

The hickory deciduous forest community is located on the drier and warmer west facing slope on the east side of Sixteen Mile Creek Main Branch south of Britannia Rd. The dominant canopy species is bitternut hickory followed by shagbark hickory with a lesser abundance of hop hornbeam and black cherry (*Prunus serotina*). The understory was dominated by hop hornbeam and the understory contained a moderate abundance of enchanters nightshade (*Circaea lutetiana*), poison ivy (*Rhus rydbergii*), Virginia creeper (*Parthenocissus quinquefolia*), and spreading dogbane.

# Silver maple mineral deciduous swamp (SWD3-2)

The silver maple swamp is located in the floodplain north of Britannia Rd. The only canopy species in this community was silver maple. Few individuals of black walnut (*Juglans nigra*) were found in the understory. The groundcover was dominated by giant hogweed.

## Sixteen Mile Creek East Branch

Five vegetation communities were identified along the creek including cultural meadow (CUM1-1), cultural thicket (CUT1-1), dry-fresh hickory deciduous forest (FOD2-3), dry-fresh white ash deciduous forest (FOD4-2), and dry-fresh sugar maple-ironwood deciduous forest (FOD5-4). The majority of the study area consisted of flood plain occupied by the cultural meadow community. The cultural thicket was located partly on the flood plain and along the slope north of Britannia Rd, east of the Creek. The slopes of the valley were comprised of the upland forested communities. The soil texture in all communities was classified as silty clay loam. The soil moisture class varied from 3 (very fresh) on slopes to 4 (moderately moist) within the floodplain. More detailed description of each of the communities is provided below.

#### Cultural Meadow (CUM1-1)

This community occupies the floodplain of Sixteen Mile Creek in the study area. The cultural meadow is mainly dominated by Canada goldenrod, reed canarygrass (*Phalaris arundinacea*), New England aster, and panicled aster (*Symphyotrichum lanceolatum*) with a lesser abundance of cow vetch (*Vicia cracca*), and riverbank grape to name a few. There are scattered trees and shrubs throughout this community including white ash (*Fraxinus americana*), American elm (*Ulmus americana*), hybrid willow (*Salix x rubens*) and Manitoba maple (*Acer negundo*).

#### Cultural Thicket (CUT1-1)

The cultural thicket community is located partly in the floodplain and partly up the slope of the valley. This thicket represents an early successional community partly composed of white ash, apple species (*Malus pumila*), willow species (*Salix* spp.) and hawthorn species (*Crataegus* spp.) in the sub-canopy and shrub layers. The groundcover is mainly composed of asters, goldenrods, wild carrot (*Daucus carota*), and butter-and-eggs (*Linaria vulgaris*).

## Dry-fresh hickory deciduous forest (FOD2-3)

The hickory deciduous forest community is located on the drier and warmer west facing slope on the east side of Sixteen Mile Creek East Branch south of Britannia Rd. The dominant canopy species is bur oak, and white ash which only provide a 10-25% canopy cover. The dominant sub-canopy species were bitternut hickory with a lesser abundance of bur oak, white ash, and American elm with a canopy cover over 60%. Although the dominant canopy species were bur oak and white ash, based on the prism sweep these species were much less abundant than bitternut hickory which had a higher relative abundance resulting in the classification of this community as a hickory deciduous forest. The understory was dominated by black cherry, shagbark hickory, and to a lesser abundance American elm and hawthorn species. The ground cover was sparse, covering only 10-25%, including such species as common buckthorn (*Rhamnus cathartica*), Virginia strawberry (*Fragaria virginiana*), avens species (*Geum* spp.), and enchanters nightshade (*Circaea lutetiana*).

#### Dry-fresh white ash deciduous forest (FOD4-2)

This community is found along the valley slopes on the west slope of the valley, south of Britannia Rd. The canopy is composed mainly of white ash and bur oak a much lesser abundance of hybrid willow. The subcanopy includes species found in the canopy as well as American elm, and shinning willow (*Salix lucida*). The understory is partly composed of common buckthorn, white ash, black walnut, and black locust (*Robinia pseudo-acacia*). The ground cover was sparse with only a 10-25% cover and included Virginia strawberry, riverbank grape, Canada goldenrod, poison ivy (*Rhus rydbergii*) with a lesser abundance of herb robert (*Geranium robertanium*).

# Dry-fresh sugar maple – ironwood deciduous forest (FOD5-4)

The sugar maple forest is located on the west valley slope north of Britannia Rd. Sugar maple was the dominant canopy species with a lesser abundance of bur oak, red oak, and American elm, The sub-canopy was also dominated by sugar maple with a lesser abundance of hop hornbeam, red oak, and common buckthorn. Common buckthorn dominated the understory which also included hawthorn species, white ash, and trembling aspen (*Populus tremuloides*). The groundcover was sparse (10-25% cover) and included Canada goldenrod, large-leaved aster (*Eurybia macrophylla*), Pennsylvania sedge (*Carex pennsylvanica*), and much lesser abundance of Virginia strawberry, Canada anemone (*Anemone canadensis*), and poison ivy to name a few.

At the ecotone of the toe-slope of this community and the cultural meadow community was a small (<0.5 ha) meadow marsh inclusion containing wetland species including American burreed (*Sparganium americanum*), hard-stemmed bulrush (*Scirpus acutus*), soft-stemmed bulrush (*Scirpus validus*), and broad-leaved water-plantain (*Alisma plantago-aquatica*). These species were mainly found surrounding a seasonally wet depression that is devoid of vegetation indicating the presence of a vernal pond.

#### 3.1.1 Wetlands

Two wetland areas were identified near the intersection of Britannia Road East and Eighth Line: a meadow marsh within an area of woodland, and a meadow marsh within a cleared area. These wetlands were staked and the boundaries verified by Conservation Halton staff on October 4<sup>th</sup>, 2011. The following paragraphs provided a brief description of the wetlands.

## Meadow Marsh within the Woodland

A meadow marsh community was identified within the woodland patch along Britannia Road, east of Highway 407. This community is located within a portion of the woodland that appears to have been recently cut. Dominant species include reed canary grass (*Phalaris arundinacea*), purple loosestrife (*Lythrum salicaria*), red osier dogwood (*Cornus stolonifera*), American bugleweed (*Lycopus americanus*) and several different species of sedge. Several piles of felled trees were located within and at the perimeter of this wetland community. Within the clearing, non-wetland portions were dominated by grass-leaved goldenrod (*Euthamia graminifolia*), lance-leaved aster (*Symphyotrichum lanceolatum*) and Canada goldenrod (*Solidago canadensis*). trembling aspen (*Populus tremuloides*) is beginning to regenerate along the western edge of the clearing, some reaching 2 m in height.

#### Meadow Marsh within the cleared area

A meadow marsh community was identified within a cleared areas located north of Britannia Road East and east of Eight Line. This community borders Britannia Road and Eighth Line, and the adjacent woodland. This community is dominated by purple loosestrife, several species of willowherb (*Epilobium* spp.), Small-flowered water plantain (*Alisma plantago-aquatica*), Eleocharis spp., cattail (*Typha angustifolia*) and redtop (*Agrostis gigantea*). reed canary grass is dominant along ditches, adjacent to roadways. Upland portions of the field are dominated by wild carrot (*Daucus carota*), curly dock (*Rumex crispus*) and Canada thistle (*Cirsium arvense*).

#### 3.2 Flora of East and Main Branches of Sixteen Mile Creek

#### 3.2.1 Floristics

Appendix 2 and 3 provide summary statistics for all plants identified within each of the vegetation types identified along the East and Main branches of Sixteen Mile Creek.

Table 2. Floristics of the East and Main Branches of Sixteen Mile Creek (see below for a discussion of native Floristic Quality Index (FQI) and Native Mean C).

Ecosite	Number of Native Plant Species	Number of Non-native Plant Species	Total	Percent Non-native Plants	Native FQI	Native Mean C	
356975	out shearly the	Eas	t Branc	how e'sstard	es franc	ecth sugannia () is	
CUM1-1	37	18	58	31	17.91	2.94	
CUT1-1	13	10	25	40	9.61	2.67	
FOD2-3	12	4	- 19	21	10.71	3.09	
FOD4-2	16	4	21	19	12.00	3.00	
FOD5-4	32	4	39	10	17.91	3.17	
Main Branch							
CUM1-1	41	17	59	29	17.48	2.73	
FOD2-3	21	7	31	23	17.37	3.79	
FOD5-1	33	11	48	23	21.68	3.77	
SWD3-2	16	2	20	10	13.71	3.43	

FQI and Native Mean C provide a measure of "naturalness" of a vegetation community and the degree to which a vegetation community is composed of plant species that are habitat demanding or require more unique or rare natural habitat conditions. Typically, an urban plant community composed of predominantly native species is found to have a Native Mean C of over 4 and a native FQI greater than 40 (NSE 2011). The floristics of all of these communities is relatively low which is likely a result of a single season inventory. A full three season inventory would have yielded a higher number of species, particularly in the woodland communities, resulting in a higher FQI and Native Mean C. See Appendix 3 for the full list of flora identified on the subject property.

#### 3.2.2 Significant Plant Communities

The Natural Heritage Information Centre (NHIC) database notes one plant community as S3S4 (vulnerable – apparently secure): dry-fresh hickory deciduous forest type (FOD2-3). This community is also considered a significant woodland within Peel Region because it is considered a rare-uncommon community (North-South Environmental Inc. *et al.* 2009).

#### 3.2.3 Significant Flora Species

# Provincially Significant Flora

No provincially significant species were documented during the field surveys.

The Natural Heritage Information Centre (NHIC) database notes five provincially significant plant species documented from the general area: Carey's sedge (*Carex careyana*), northern hawthorn (*Crataegus dissona*), Schreber's wood aster (*Eurtbia schreberi*), Virginia lungwort (*Mertensia virginica*), and large round-leaved orchid (*Platanthera macrophylla*). These are ranked S2 (imperiled), S3 (vulnerable), S2S3, S3, and S2 respectively using the provincial standards for rarity<sup>1</sup>. These species were not observed within the study area during field studies.

In reply to our request for information the MNR reported no records for flora Species at Risk within the study area.

## Regionally Significant Flora

#### East Branch of Sixteen Mile Creek

The survey of the east branch of Sixteen Mile Creek found four species ranked as uncommon (HU) and two ranked as rare (HR) based on the Halton Natural Areas Inventory (2006) species ranks for rarity. The four uncommon species include speckled alder (*Alnus incana* spp. *Rugosa*), shinning willow (*Salix lucida*), ditch-stonecrop (*Penthorum sedoides*), and cow parsnip (*Heracleum lanatum*); these species are all ranked as S5 (secure - common, widespread, and abundant within the province). The two species ranked as rare include hard-stemmed bulrush (*Scirpus acutus*) and American bur-reed (*Sparganium americanum*); these species are ranked as S4? (apparently secure within the province) and S5 respectively. All of the regionally significant floral species were located within the cultural meadow (CUM) community.

#### Main Branch of Sixteen Mile Creek

The survey of the Main Branch of Sixteen Mile Creek found four species ranked as uncommon and two ranked as rare. The four uncommon species include shinning willow, great ragweed (Ambrosia trifida), smooth goldenrod (Solidago gigantea), and hairy aster (Symphyotrichum pilosum); these species are ranked S5 in the province. The two species ranked as rare include common juniper (Juniperus communis) and river wild-rye (Elymus riparius); these species are ranked as S5 and S4? respectively within the province. All of the regionally significant floral species were located within the cultural meadow (CUM) community.

S1 – Critically Imperiled – Critically imperilled in the province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the province.

S2 – Imperilled – Imperilled in the province because of rarity due to a very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the province.

S3 – Vulnerable – Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

#### 3.3 Fauna

#### 3.3.1 Breeding Bird Survey

Road side breeding bird point counts recorded 41 species of birds along Britannia Road. (Appendix 4). Most of the birds recorded are common to agricultural fields and smaller woodlots including species such as killdeer, eastern wood-pewee, eastern kingbird, warbling vireo, horned lark, gray catbird, chipping sparrow, and yellow warbler. A discussion of significant bird species recorded is provided below.

It should be noted that although conditions were favourable for conducting breeding bird surveys, the point counts were somewhat hindered due to the noise from traffic along Britannia Road.

## 3.3.2 Significant Fauna Species

#### Federally and Provincially Significant Bird Species

Bobolink, listed as threatened provincially with COSSARO and federally with COSEWIC was recorded at four point count locations during the breeding bird surveys. There were two pairs recorded as probable breeders, one individual observed entering the field, and one individual carrying food. Bobolink is a ground-nesting grassland species that nests in native tall-grass prairies, agricultural fields such as hayfields consisting of timothy (*Phleum pratense*), clover (*Trifolium* sp.), and other broadleaved plants, pasture, and a variety of other grassland habitats (COSEWIC, 2010). Bobolink has been listed as threatened due to the trending decline in population mainly due to habitat loss. Although hayfields provide suitable habitat for breeding, the continual decline of this species has been attributed in large part to early cutting of these fields (COSEWIC, 2010).

Barn Swallow is listed as threatened federally by COSEWIC. Although barn swallow was observed during both surveys, they nest in structures such as barns and were seen foraging for insects during the survey but were not nesting within the study area (they were likely nesting in the barns located along Britannia Rd.). The population of this species is in decline. The reasons for the decline of the barn swallow are not well understood, but one reason for the possible decline is the removal of nesting sites, such as old barns (COSEWIC, 2011b).

# Regionally Significant Bird Species

Five species classified as uncommon in the Halton Natural Areas Inventory (2006) were recorded during the field surveys, they include, willow flycatcher, horned lark, northern roughwinged swallow, northern mockingbird, and vesper sparrow.

#### **Area Sensitive Bird Species**

Three birds recorded during the surveys are considered area sensitive species, they include:

- hairy woodpecker;
- savannah sparrow (also classified as Special Concern by COSEWIC); and
- bobolink, (also classified as Threatened by both COSEWIC and COSSARO).

Hairy woodpecker are mildly area sensitive forest nesting birds that require relatively large woodlands (>10ha) for breeding, particularly in areas where forest cover is less than 15% (Sandilands, 2005). There was one individual observed during the survey. Savannah sparrow, and bobolink are both grassland nesting species that require large areas for nesting (Farina, 2006). Savannah sparrow was observed at 19 of the 22 survey locations with a breeding status of probable at three point count locations.

## Historic Records of Provincially Significant Fauna

The NHIC has documented three provincially significant fauna species from the vicinity of the study area, they include: northern long-eared bat, eastern milksnake, and Jefferson X blue-spotted salamander. The most recent record for northern long-eared bat was in the year1920 suggesting either this species is not longer present within this area or surveys for this species have not been conducted. The records for eastern milksnake and Jefferson X blue-spotted salamander are 1990 and 2002 respectively.

The Jefferson X blue-spotted salamander is ranked as S2 (imperilled) in the province. These salamanders require vernal ponds for breeding. Vernal ponds suitable for breeding are most often found in and around woodlands where the salamanders forage and overwinter (Jefferson Salamander Recovery Team, 2009). A vernal pond is located at the base of the western valley slope of the East Branch of Sixteen Mile Creek, approximately 100 m north of Britannia Rd which is described in section 3.1 in the description of the Dry-fresh sugar maple – ironwood deciduous forest (FOD 5-4) community. It may be possible that this vernal pond is suitable for amphibian breeding. There may also be vernal ponds located within the larger woodlands located along Britannia Rd. Additional surveys for salamanders or vernal ponds were not conducted as part of this study.

Eastern milksnake, an S3 species considered special concern federally and provincially, inhabits old fields and open woodlands. There is suitable habitat for milksnake along Britannia Rd. Milksnake are often found along hedgerows, specifically in rock piles and around larger rocks/boulders scattered in the hedgerows. These habitats provide suitable cover for egg laying, hibernation and thermoregulation (COSEWIC, 2002).

#### 3.4 Significant Wildlife Habitat

During the site visits a survey for significant wildlife habitat was conducted. Significant Wildlife Habitat is defined in the Significant Wildlife Habitat Technical Guide (SWHTG) (2000) as habitat that is "ecologically important in terms of features, functions, representation or amount, and contributing to the quality and diversity of an identifiable geographic area or

Natural Heritage System. Criteria for determining significance may be recommended by the Province, but municipal approaches that achieve the same objective may also be used." The SWHTG is a technical manual developed to assist in the identification of SWH in regard to the Provincial Policy Statement (PPS, 2005) Section 2.3.1 and as discussed in the Natural Heritage Reference Manual.

Examples of significant wildlife habitat include areas where there are seasonal concentrations of wildlife, rare vegetation communities, specialized wildlife habitat, habitat of species of conservation concern, and wildlife movement corridors.

Significant wildlife habitat identified during field surveys includes areas of woodland and grass land adjacent to Britannia Road that provide habitat for the area-sensitive bird species recorded, and the valley systems associated with the East and Main Branches of Sixteen Mile Creek that serve as wildlife movement corridors.

# 3.5 Tree Inventory

A total of 221 trees were surveyed and assessed within 40 meters north and south of Britannia Rd.. Appendix 5 provides a detailed list of all trees surveyed, including information regarding species, location, and tree condition and vigour class. A summary table organized by tree species is provided in Table 4.

At total of 31 tree species were recorded, 21 are native and 10 are non-native species (see Table 4). The majority of the trees recorded (172 of the 221; 78%) are species native to southern Ontario and include: Most notable of the native trees were eight large bur oak, including one that measured 119 cm DBH located on the south side of Britannia Rd. west of Regional Rd 25. Of the non-native trees recorded Manitoba maple, Norway maple, Scott's pine, black locust, and hybrid willow are considered invasive. species

Table 4. Summary of the 221 trees recorded within 40 meters north and south of Britannia Rd. (see Appendix 1 for an explanation of tree vigour classes and Appendix 5 for detailed information on individual trees, \* denotes non-native species).

Trees Recorded		Total	Total in each Tree Vigour C				Class
Scientific Name	Common Name	Recorded	1	2	3	4	5
*Acer negundo	Manitoba maple	15	2	11	1	1	
*Acer platanoides	Norway maple	5	3		1	1	
Acer rubra	red maple	1		1			
Acer saccharinum	silver maple	18	3	8	1	5	1
Acer saccharum	sugar maple	5	2			2	1
Acer x freemanii	Freeman's maple	6	3		1	1	1
Betula papyrifera	white birch	2	2				

Trees Recorded		Total	Tota	Total in each Tree Vigour Cl				
Scientific Name	Common Name	Recorded	1	2	3	4	5	
Carya cordiformis	bitternut hickory	3	2	1				
Carya ovata	shagbark hickory	21	11	8	1	1		
*Catalpa speciosa	catalpa	1	1					
Crataegus sp.	hawthorn species	3		1	2			
Fraxinus americana	white ash	25	5	10	9		1	
Fraxinus pennsylvanica	green ash	1		1				
Juglans nigra	black walnut	3	3					
*Malus pumila	common apple	11	3	7		1		
*Picea abies	Norway spruce	1	1					
Picea glauca	white spruce	2	2					
*Picea pungens	blue spruce	2	2					
*Pinus nigra	Austrian pine	2	2					
Pinus strobus	white pine	1	1					
*Pinus sylvestris	Scots pine	2	1	1				
Populus balsamifera	balsam poplar	1		1				
Populus tremuloides	trembling aspen	1			1			
Quercus alba	white oak	1				1		
Quercus macrocarpa	bur oak	54	21	27	4	2		
Quercus rubra	red oak	5	3		1	1		
*Robinia pseudo- acacia	black locust	1			1			
*Salix x rubens	hybrid willow	9	1	5	2	1		
Tilia americana	basswood	10	2	5	3			
Ulmus americana	American elm	9	5	2	2			
	TOTAL	221						

## 4.0 ENDANGERED SPECIES ACT PROTECTION

The Endangered Species Act 2007 (ESA), protects species listed by COSSARO as provincially endangered, threatened, or extirpated. In addition, the habitat of these species is protected under the ESA. Where development is proposed in an area that contains a listed species and their associated habitat the proponent of development must address requirements of the ESA related to permits, regulations, and agreements. With suitable stewardship, protection, or rehabilitation development may be permitted.

Bobolink, a bird species listed as threatened by COSSARO, was recorded in open habitat adjacent to Britannia Road. The species and its habitat is protected under the ESA. Construction and road work may require a permit under section 17 (c) of the ESA to "damage or destroy" habitat for bobolink.



2596 Britannia Road West Burlington ON L7P 0G3 905.336.1158 Fax 905.336.7014 conservationhalton.ca

February 3, 2012

Mr. Andrew Head Region of Halton 1151 Bronte Road Oakville, ON L6M 3L1

Dear Mr. Head:

Re: Britannia Road Transportation Corridor Improvements

Tremaine Road to Highway 407

Class EA Study CH File: MPR 558

Staff of Conservation Halton have reviewed the following documents:

- "Meeting Minutes Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Class Environmental Assessment Study" June 30, 2011 Revision Date December 8, 2011;
- Table 1: Aquafor Beech Limited Response to Conservation Halton Comments of October 19, 2010;
- Hydraulics, Hydrology/Flooding Summary;
- Terrestrial Ecology Summary;
- Aquatic Ecology Summary;
- Fluvial Geomorphology Summary; and,
- Untitled Figures showing Hydraulic Impact of Various Bridge Configurations.

#### **Meeting Minutes**

The meeting minutes are generally complete and accurate. As an update to Item #8, second bullet point, staff advise that the results of the June COSSARO meeting were released in December 2011 and Eastern Meadowlark and Barn Swallow are now both provincially Threatened. Please clarify whether Eastern Meadowlark is known from the study area, as this species was not discussed in the Terrestrial Ecology Summary.

#### Table 1

Staff have incorporated our responses directly into the attached comment/response table for ease of reference.



# Terrestrial Ecology Summary

Section 3.1 (Ecological Land Classification) - Giant Hogweed is noted in several communities. Due to the toxic nature of this plant, any works within these areas should be undertaken with caution. If disturbance to these areas is required, efforts should be made to carefully eradicate this plant as part of the restoration.

Also, a minor point of clarification, the meadow marsh within the woodland is west of Highway 407, not east.

Section 3.3.2 (Significant Fauna Species) - The vernal pool noted in the FOD5-4 warrants additional investigation, given the potential for both Jefferson Salamanders and Western Chorus Frog. Salamander trapping and amphibian call count surveys should be undertaken in spring 2012.

Section 4.0 (*Endangered Species Act* Protection) - As a result of recent changes to the Species at Risk in Ontario list, the following newly listed provincially Threatened species will require additional consultation with MNR:

- o Eastern Meadowlark (if present)
- o Barn Swallow
- Silver Shiner

# Fluvial Geomorphology Summary

Please confirm how many bankfull channel widths were collected at each road crossing on the upstream and downstream sides of the existing crossings. Please confirm how many bankfull channel widths (at each crossing location) were collected at the following channel morphology types: pools, riffles and runs.

# **Hydraulic Modeling**

In addition to the comments provided in the response table, staff also noted a few basic concerns with the model that should be corrected, at least in the immediate vicinity of Omagh and the modified crossings:

1. The Manning's n values applied range from 0.4-0.035 in the overbank, and do not appear to be appropriate to the area. Similarly, main channel values of 0.025 and 0.024 which are coded up and downstream of bridge crossings also appear inappropriate.

2. The main channel Manning's n was applied over a very broad area throughout the model, including across a 39 m width in the revised portion of the Scenario 2 model and

22 m in width at the revised portion of the Scenario 3 model.

3. The ineffective flow areas do not appear to be coded appropriately around the new bridge sections, and expansion and contraction co-efficients were applied a substantial distance up and downstream as additional cross sections immediately up and downstream were not added around existing bridge structures when the HEC 2 model was converted to HEC RAS.

4. Expansion and contraction coefficients were not applied to the new bridge associated with Scenario 3.

# Stormwater Management

Staff recognize that some or all of Britannia Road through the Study Area will be reconstructed in advance of the development taking place in the Boyne Secondary Plan Area. Where possible, and when timing permits, stormwater from Britannia Road should be directed to existing stormwater management ponds. For those instances when the road is reconstructed in advance of the development north of Britannia, staff recommend that, rather than expending resources on the installation of OGS units, the road and infrastructure be constructed to ultimately connect into the stormwater ponds within the Boyne Secondary Plan Area. CH staff would be supportive of short term impacts to water quality if a commitment was made to ensure, in the long-term, the stormwater would be directed to a stormwater pond. It has been our experience that once a municipality has installed an OGS unit there is reluctance to undertake an additional cost and level of effort to connect to the adjacent stormwater pond (once built). Ultimately, a stormwater pond affords better long-term water quality and quantity controls than an OGS and reduces the amount of individual pieces of infrastructure that a municipality must maintain in perpetuity. Staff note that North Oakville is developing in this manner such that the stormwater ponds adjacent to Dundas Street are being sized to accommodate the drainage from that roadway.

We recognize that a portion of the Study Area is not adjacent to future urban areas and, as such, OGS units would be appropriate and recommended in those situations.

We trust the above is of assistance. If you require additional information, please contact the undersigned at extension 266.

Yours truly.

Jennifer Lawrence, MCIP, RPP Manager, Environmental Planning

encl.

cc: Mr. Chris Parent, Aquafor Beech, email

Mr. Manoj Dilwaria, Delcan, email

Mr. Martin Bateson, Town of Milton, Engineering, email

jl/devl planning\ea\halton\brit rd tremaine to 407\terrestrial hydraulic and fluvial.doc



September 14, 2012

Ms. Jennifer Lawrence Manager Environmental Planning Conservation Halton 2596 Britannia Road West Burlington ON L7P 0G3 Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

Dear Ms. Lawrence:

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

In advance of our next Project Meeting scheduled on October 1, 2012, please find three hard copies of the Natural Environment, Geomorphology and Storm Water Management Appendices for your review and comment.

The Project Team looks forward to working with Conservation Halton and if you have any questions or require additional information, please contact me at 905-825-6000, ext. 7556.

Sincerely,

Alicia Jakaitis

Transportation Coordinator alicia.jakaitis@halton.ca

# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

HELD ON:

Tuesday, October 1, 2012 at 1:00 p.m.

LOCATION:

Conservation Halton, 2596 Britannia Road West

PRESENT:

Melissa Green-Battiston Halton Region Alicia Jakaitis Halton Region

Jennifer Lawrence

Conservation Halton Conservation Halton Conservation Halton

Amy Mayes Samantha Mason Nick Palomba

Conservation Halton Delcan Corporation

Andrew McGregor

Delcan Corporation (Minutes)

Roger Phillips Chris Lorenz Greg Frew Aquafor Beech Aquafor Beech Aquafor Beech

#### **Items Discussed**

#### **Action**

## 1. Introduction - Purpose of Meeting

Halton Region provided an overview of the project and update on Project Manager and Project Team. On behalf of Halton Region, Alicia Jakaitis is the Project Manager and the Consultant Project Manager is Nick Palomba. An update was also provided regarding the acceleration of 6 lanes on Britannia Road from Tremaine Road to Regional Road 25 as per PW 63-11

Information

Draft copies of the Fluvial Geomorphology, Natural Environment and Storm Water Management (SWM) Appendices were delivered to Conservation Halton (CH) on September 17, 2012 for review and comment prior to draft ESR being finalized.

The purpose of the meeting was to discuss CH comments from February 2012 and the preliminary preferred alternative.

#### 2. Fluvial Geomorphology

Aquafor Beech (AB) provided an overview of the hydraulic modeling and changes between existing and proposed hydraulic performance.

Comments were raised by CH regarding the base modeling parametres and assumptions, specifically that Manning's n was artificially too low.

• In consultation with CH, AB is to update model parametres and review all HEC-RAS models and determine whether any other adjustments need to be recommended.

Aquafor Beech

AB discussed potential increase in flooding at 6 crossings and specifically



# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

flood increases at Crossing 11 (Omagh Tributary). CH confirmed there will be zero tolerance for flood level increases within the Study Area.

- For the Crossing 11 HEC-RAS model AB will run model with preferred Manning's n only over the short reach affected by the proposed road. AB to develop a crossing alternative that does not increase flood levels within the Omagh Community.
- AB to review all flood level increases and adjust design to eliminate any increases.

Comments were raised by CH regarding drainage areas used in the analysis from Britannia Road. AB advised that these areas were from the background AMEC FSEMS report.

• CH to clarify concerns regarding drainage areas. Further discussion will be required if drainage areas are to change given the significant impact on the project wide hydraulic analysis already completed.

Conservation Halton

AB distributed a table detailing all proposed new culvert sizing and criteria at an ultimate 6 lane cross section, 47 metre right-of-way. AB to update table based on updated analysis.

Aquafor Beech

Prior to culvert sizing and criteria being finalize, AB and CH to confirm the following:

Conservation Halton/ Aquafor Beech

- The span of replacement structures is sufficient to be same or wider than existing;
- Where twin cells are proposed for smaller crossings, should the span be determined by the width of one cell or sum of both;
- Clarify what crossings should accommodate wildlife passages.

CH will provide additional comments regarding the following:

- · Opening Ratio requirements;
- Provide recommendation regarding culvert alignments of perpendicular with minimal lengthening vs. oblique with minimal realignment.

CH also requested that culvert sizing and criteria also include criteria to promote wildlife passage. The draft ESR will include recommendations for:

**Aquafor Beech** 

- · Open bottom culverts.
- Dry "benches" above the low-flow channel for dry weather access



# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

within single-span culverts.

 "Offset" inverts for twin cell culverts such that one is dry during low-flow.

CH stated their preference for native substrate. The draft ESR will include a commitment to review the appropriateness of stone sizing and material in consultation with CH at detailed design.

CH requested supplementary information on sampling methods for channel widths: Methods and results are documented in the Fluvial Geomorphology study, Section 3.2 and Table 2. Sampling results include 2 cross-sections upstream and downstream (where accessible), with the distance of the furthest cross-section samples upstream and downstream documented in the OSAP field reports (Terrestrial and Aquatic Resources Report - Appendix 7).

## 3. Storm Water Management (SWM)

AB presented the ultimate SWM design which will include outletting to the future development SWM ponds adjacent to Britannia Road within the Boyne Secondary Plan Area. As an interim condition, the Britannia Road run-off will outlet through the use of Oil Grit Separators. Outside of the Boyne Secondary Plan Area, runoff will be treated by a series of permanent Oil Grit Separators.

Comments were raised regarding the potential of creek realignment as part of the development process of the Boyne Secondary Plan between Tremaine Road to James Snow Parkway. The Environmental Study Report will include a section noting that as the FSEMS for Boyne is finalized, Halton Region will work in consultation with CH and the Boyne Land Owners Group to best accommodate the interim and ultimate SWM conditions adjacent to the Boyne Secondary Plan Area.

Aquafor Beech

#### 4. Natural Environment

AB provided an overview of the terrestrial and vegetation inventory throughout the corridor. Specifically noting 2 significant woodlots and 2 wetlands.

AB to provide ELC mapping and species list of Eastern Woodlot

Aguafor Beech



# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

(west of 407) and Woodlot west of Highway 25 to Kim Barrett for assessment.

 Further discussions will be required regarding tolerance of impact on the Eastern Woodlot due to road alignment. The impact between the woodlot and residential property will need to be reviewed and mitigated as required. Delcan to consider narrowing the ROW to minimize impact where practical and feasible. Delcan

- CH advised that MNR will likely target natural meadows rather than hay fields, for bobolink habitat. AB to check for natural meadows within study area and comment on potential impacts in report.
- CH recommended that MNR to be engaged early during detail design regarding bobolink habitat and should be noted accordingly in the ESR.
- Aquafor Beech to provide Giant Hogweed warning in ESR.
- CH commented that a permit may be required for SWM facilities draining to tributaries classified as Silver Shiner habitat. This will be noted in the ESR.
- Halton Region committed to Jefferson Salamander and Calling Amphibian Surveys in spring of 2013 and will be added to the draft ESR.

Halton Region

#### 5. Next Steps

- AB to confirm drainage areas with CH.
- AB to provide ELC mapping to CH.
- AB to update model with preferred Mannings n value.
- CH to provide comments to Halton Region by October 22<sup>nd</sup>.
- Schedule next meeting to discuss comments and provide updated modeling results.

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.



Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407





2596 Britannia Road West Burlington ON L7P 0G3 905.336.1158 Fax 905.336.7014 conservationhalton.ca

October 25, 2012

Ms Alicia Jakatis Region of Halton 1151 Bronte Road Oakville, ON L6M 3L1

Dear Ms Jakatis:

Re: Britannia Road - Tremaine to Highway 407

Class Environmental Assessment Technical Background Reports

CH File: MPR 558

Staff of Conservation Halton appreciate the opportunity to review the draft technical background reports in advance of the Region finalizing the above noted Environmental Assessment (EA).

We have reviewed the following information:

- Minutes of Meeting with Conservation Halton Britannia Road (Regional Road 6) Transportation Corridor Improvements, Tremaine Road (Regional Road 22) to Highway 407 Class Environmental Assessment Study, meeting date October 1, 2012;
- Britannia Road Transportation Corridor Improvements Tremaine Road to Highway 407 Supporting Technical Report: Hydraulic Analyses of Stream Crossings and Stormwater Management Alternatives Assessment- Draft Final Report, prepared by Aquafor Beech, dated August 2012;
- Britannia Road Transportation Corridor Improvements; Tremaine Road to Highway 407 Class EA Study – Environmental Study Report – Fluvial Geomorphology Study, prepared by Aquafor Beech, dated August 2012; and,
- Britannia Road Transportation Corridor Improvements: Tremaine Road to Highway 407 Class EA Study Terrestrial and Aquatic Resources, prepared by Aquafor Beech, dated August 2012.

#### Hydraulic Analyses of Stream Crossings and Stormwater Management Alternatives

Section 3.1 Flood Flows

Staff appreciate that flows for the full range of design storms from the 1:2-1:100 year and Regional Storm events have been presented in Table 2. At present staff have focused on the Catchment Drainage Area and Regional Storm flow and have not completed a detailed review of the 2-100 year storms. Staff have confirmed, however, that the Existing and Proposed Development 2-100 year flows presented in the FSEMS report [Reference Table 3.1: Pre-Development Land Use (No Development) Frequency Flows (m³/s) and Table 4.6: Proposed Land Use with Proposed SWM Criteria (m³/s)] are generally consistent with the values presented in Table 2. Staff appreciate that the more conservative of the existing vs. proposed flows were generally selected for the 2-100 year flows. As our review has indicated significant changes to the Regional Storm flows considered in several areas, staff have deferred a more detailed review of the flow analysis for the frequent storm return periods to subsequent submissions.



Please review the following significant drainage area/flow concerns associated with Table 2 and the appended hydraulic modeling. Please revise/refine as required:

- For outlets 1, 2, and 3, Table 2 of the study indicates a total drainage area capture of 163.3ha, however
  Conservation Halton's records indicate a total drainage area of 332ha. Staff completed a more
  detailed review of the information for this area, and flag the following:
  - For Outlet 1 The FSEMS for Boyne (Drawing 2 of 3) outlines a total drainage area of 137.6ha post development between Louis St. Laurent and Britannia Road, and as per Figure 3.4 of the SIS Area 8 Study (Urbantec 2009) completed for the drainage area north of Louis St. Laurent, an additional 29.4 ha of drainage area is directed to Outlet 1, resulting in a total drainage area of 167ha to Outlet 1.
  - For Outlet 2 The FSEMS outlines a total drainage area of 115.7ha post development between Louis St. Laurent and Britannia Road (Reference Drawing 2 of 3), and as per Figure 3.4 of the SIS Area 8 Study (Urbantec 2009) completed for the drainage area north of Louis St. Laurent, an additional 28.0 ha of drainage area is directed to Outlet 2, resulting in a total drainage area of 143.7ha.
  - For Outlet 3 The FSEMS combines the drainage area to this outlet with Outlet 2, however Conservation Halton information indicates that this drainage area previously received runoff from approximately 70ha. Additional details supporting the proposed 9.5ha existing conditions drainage area for catchment 3 is required, to ensure the culvert is appropriately sized in advance of future development.

The total drainage area indicated to Outlets 1, 2 and 3 between the FSEMS and SIS 8 is approximately 310ha under post development conditions. Given minor drainage shifts that have proceeded following upstream development, staff are satisfied that a post development drainage area of 167ha and 143.7ha will be sufficient for design purposes for Outlets 1, and 2 and 3 (combined). Staff also note that based on Table 4.6 of the FSEMS, the Regional Storm flow for the proposed condition is currently modeled at 21m³/s at Outlet 1 as opposed to the 17.4m³/s existing condition listed by Aquafor Beech in Table 2 and the 15.77 m³/s that appeared to have been considered in the modeling. For Outlet 2, Table 4.6 indicates that the proposed Regional Storm flow will be 18.6m³/s as opposed to the existing condition of 16.7m³/s identified in the tables and modeling for Outlet 2. While Conservation Halton has yet to endorse the FSEMS, staff recommend that the Region work towards the worst case existing condition flows for the 1:2 year to 1:100 year return events and post development conditions for the Regional Storm event for Outlets 1 and 2, and existing condition flows for Outlet 3.

- Outlet 4 Staff were unable to identify the source of the 18.9ha drainage area referenced for this catchment. Based on FSEMS Figures 1 and 2, the 16.93ha pre-development drainage area would appear to have the largest flow contribution to this structure. The indicated flow of 7.5m³/s considered in the analysis appears to be very conservative for the existing area identified in the FSEMS. Provided there are not other sizing considerations, this culvert may be further optimized through detailed design.
- Outlet 5 The FSEMS highlights a drainage area of 106.1ha between Louis St. Laurent and Britannia Road under the more conservative post development conditions (per Figure 2 of 3 of AMEC's March 2011 study). Based on DSEL's design brief for Stormwater Management Pond S47, an additional drainage area of 57.6ha contributes flow to this catchment north of Louis St. Laurent, resulting in a total drainage area of 163.7ha to Outlet 5. The total flow contribution to Node 5 listed in the table and

considered in the appended hydraulic modeling appears inconsistent with the FSEMS findings for other similarly sized catchments (i.e. at Node 1). Further, Table 4.6 (Proposed Conditions with SWM) of the FSEMS, indicates that the post-development regional flow is anticipated to be  $17.06 \text{m}^3/\text{s}$ .

- Outlet 5A The FSEMS outlines a total drainage area of 16.15ha to this outlet under existing conditions (reference Figure 1), and 9.12 ha under post-development. Given the uncertainty associated with the timing of future development, staff request consideration of sizing the culvert for Outlet 5a based on the larger drainage area associated with the existing conditions, unless it can be demonstrated that anticipated post development flow conditions will exceed the existing conditions flows.
- Outlet 6 The input file WEST 3 from the FSEMS appears to indicate a total drainage area of 222.0ha to Outlet 6, with a drainage area of 117.9ha upstream of Louis St. Laurent. For Node 6, the modeled existing condition flow of 16.00m³/s in the FSEMS appears to be disproportionately low, and is lower than the Proposed Condition Flow (reference Table 4.6) of 19.42m³/s.
- Outlet 7 While staff note that the drainage area listed is slightly larger than expected, the Regional Storm flow listed in Table 2 and considered in the hydraulic modeling appears to be off by an order of magnitude.
- Outlet 9 The drainage area listed in Table 4 does not appear to include the 35.31ha of external drainage area identified in the HSPF model West 2. Staff believe the total drainage area to Outlet 9 to be approximately 138ha, as per AMEC's modeling. We also note that based on Table 4.6 in the FSEMS, the proposed condition flow at Node 2.802 will be 18.75m³/s, which is considerably higher than the 11.7m³/s identified in Table 2.
- Outlet 11 Based on the FSEMS a drainage area of 237ha has been identified at this point. This includes the 12.56 ha drainage area identified at Outlet 10. Staff note that the FSEMS drainage area considered in the HSPF appeared to ignore any flow contribution north of Louis St. Laurent. This is in error, as Pond 3 (Hawthorne Village Phase 3) outlets to a siphon and contributes 37.9ha of drainage area to Outlet 11. Additional drainage area to the siphon from the woodlot and remnant parcel west of Thompson Road was also identified as draining to this feature. While staff are still working to pull together records to confirm the external drainage area north and east of the Pond 3 outlet, as well as details of the siphon design including peak flows, we are able to provide a 1:100 year flow of 1.81m³/s that was used to size the culvert under Hepburn Road through the woodlot upstream of the Pond 3 outfall (reference Stantec June 8, 2004 design brief CH File A/04/M/21). If requested, staff will pull additional information to confirm the total drainage area to this feature. Unfortunately, as this drainage impacts the Omagh Tributary, addressing the change in flows associated with this change in drainage area may not be deferred to detailed design.
- Outlets 14, 16, 17 and 18 Please provide additional detail (including catchment area plans, and all
  calculations) for the drainage area and flows determined for Outlets 14, 16, 17 and 18. The table
  below provides a summary of the drainage areas Conservation Halton has derived through GIS based
  on a 2002 TIN.

Table 1 - Comparison of Drainage Area

Node	Drainage Area (ha)					
	Table 2 (Aquafor Beech)	Conservation Halton				
14	38.5	107				
16	10,3	40				
17	227	344				
18	96	136				

Section 3.2 - Culvert/Bridge Capacity Estimates

Staff are not supportive of maintaining general model parameters consistent with up and downstream modeling in an updated model, should the up and downstream parameters not be deemed typical for the site. As discussed at the October 1, 2012 meeting, the proponent is required to complete localized updates to the model to reflect current/future conditions. There is not a requirement to update the entire model, however updates should extend a sufficient distance up and downstream to ensure that any hydraulic instabilities that may result from the change in parameters occur outside of the area of interest associated with this study. Localized changes to both the existing and proposed conditions may be required.

#### Section 3.2.2 – Proposed Structures

Staff would have no objection to the Region locally shifting drainage to eliminate several of the smaller non-regulated drainage features that would ultimately be eliminated with the future development in Phase 3 Milton, provided the future Permit drawings clearly show how drainage has been re-directed, and that such redirections do not negatively impact flooding and erosion on upstream properties, or if a temporary increase is noted, provided the upstream landowners provide their consent. This would need to be coordinated with the upstream landowners and should ideally take place as part of the Subwatershed Impact Studies prepared by the landowners in conjunction with the detailed design by the Region of Britannia Road.

#### Table 4

Table 4 indicates that for Crossing 3 there will be a decrease in effective opening area of the culvert from  $4.2\text{m}^2$  to  $3.66\text{m}^2$ . While the hydraulic criteria required as per the MTO may be met, there may be negative upstream flooding implications as compared to the existing conditions. Should a larger upstream drainage area be confirmed, staff will require a detailed evaluation of the proposed structure's hydraulic and geomorphologic impacts over the full range of storm events before staff may support this reduction in culvert size. This may be deferred to detailed design, subject to the EA including a commitment requiring the Region to submit a Permit application that demonstrates the proposed grading and drainage changes will not negatively impact flooding or erosion hazards under the full range of design storms.

The proposed crossing size at Node 6 is not consistent with the sizing used for the upstream crossing of this system at Louis St. Laurent. The upstream Louis St. Laurent Crossing was much wider at 10.2 m wide by 2.8 m high. It is important that the EA consider the design requirements of the upstream crossings to ensure consistency along the system. See additional comments under "Aquatic Assessment" below.

The minimum culvert width noted for Crossing 1 in Appendix G of the FSEMS was a 4.2m wide by 0.75m high culvert. This culvert would have a smaller open area, but larger width than the culvert currently proposed in Table 4. Staff request further discussion with respect to the requirements of the

FSEMS and Conceptual Fisheries Compensation Plan for Boyne and the culvert sizing associated with the Britannia Road EA. Any proposal to reduce culvert sizes will require detailed analysis and will need to be justified from both a hydraulic, fisheries and terrestrial movement perspective.

There are substantial differences between the existing and proposed road elevations shown in Table 4. Staff require confirmation that the analysis considered changes in the road profile at any adjacent road sags (i.e. major flow paths) which are not always co-incident with the culvert placement. Please modify the analysis if required, and include conceptual road plan and profile drawings with any subsequent submissions.

## Section 3.3 - Flood Impacts

Based on Table 5, crossings 2, 4, 5A, 7, and 15 will result in an increase in the regulatory storm floodplain or predicted Regional Storm water level, while crossings 7, 15 and 16 will result in flooding increases under the 1:50 and 1:100 year return events.

At Crossing 2, the proposed increase in road grade will result in an approximately 0.6m increase in the Regulatory Flood Plain. Given the flat local topography this change is not confined within the existing regulated limit. While this increase does not appear to impact any existing habitable residences, there may be other development implications. Therefore, please note that staff will require written acknowledgement and acceptance of the proposed floodplain change from all impacted landowners. This acknowledgement/acceptance may be deferred to detailed design, but must form part of the permit submission.

Based on the limited information available for Crossing 4, the water level increase has the potential to impact an existing habitable structure at 7151 Britannia Road. Given the limited upstream drainage area, and the limitations of the modeling completed, staff cannot confirm whether or not the adjacent existing structures may be impacted. Staff do not regulate the feature associated with the crossing, and therefore only recommend that the Region consider impacts to upstream properties through the detailed design process.

Table 7 indicates that Option 5B would result in an increase in the modeled Regional Storm flood elevations at cross-sections 34-36. If this increase impacts any existing habitable structures, Conservation Halton will be unable to support Option 5B. Please ensure a figure detailing the locations of the hydraulic cross sections for each of the options considered is provided as part of the final EA documentation submitted for review.

Appendix A - Staff note that for the PCSWMM study the Regional Storm flow was not modeled based on the full 36 hours of antecedent rainfall, rather a shortened 12 hour period depositing 24mm of rainfall was modeled. Please modify the model to account for the full 73mm of rainfall over the initial 36 hours of the storm.

#### Appendix B

Staff were unable to obtain a digital copy of the hydraulic modeling supporting the existing and proposed hydraulic structure capacities, as Aquafor Beech determined that since the models had been changed following issuance of the August 2012 document, a digital copy of the hydraulic model would only further confuse the comments. Staff require that a digital copy of the hydraulic modeling be included as part of the forthcoming draft ESR submission, and are willing to defer detailed review of the hydraulic modeling to that submission, provided there is an opportunity to finalize any changes required before the filing of the EA. Staff are also open to the receipt of a secondary hydraulics submission.

Please label the provided output relative to the structure naming convention adopted in the report.

As the submitted materials do not provide sufficient detail to support a conceptual design, (i.e. staff will require the submission of a preliminary plan and profile drawing along Britannia Road, a figure showing the location of all significant hydraulic cross sections, digital copies of the relevant hydraulic models, etc.) staff cannot confirm the sufficiency of the hydraulic sizing at this time. Further comments may be forthcoming following submission of the draft ESR.

The hydraulic design report does not clearly present the proposed grading changes (if any) along Britannia Road, which may have key impacts on the hydraulics. Staff will require that the EA commit to submitting a permit application that demonstrates the proposed grading and drainage changes will not negatively impact flooding or erosion hazards under the full range of design storms. Please note that Conservation Halton cannot support any works that would negatively impact the flooding or erosion on an existing habitable structure. Increases in flooding and/or erosion extending onto private property and not impacting an existing habitable structure will be considered on a case by case basis, and if necessary, may be permitted provided all impacted landowners provide written acknowledgement and consent to the change and there is no negative impact to safe access and egress.

# Fluvial Geomorphology Study

#### Table 2

It is suggested that bankfull channel measurements be collected at one pool, one riffle and one run feature both upstream and downstream of each road crossing structure. A conservative approach would be to size the crossing structure based on the largest bankfull measurement taken at each respective crossing.

The table notes the bankfull width for each crossing, and the photos in Appendix A appear to indicate site investigations spanned several days and different hydrologic conditions. Please provide a brief description on the timing of the field visits, and detail when the Top of Bank Width was defined, with respect to flow conditions.

For Crossings 14, 17, and 18, the proposed culvert sizes will not be sufficient to contain the average bankfull width documented in Table 2 of the Fluvial Geomorphology Report. Geomorphic input on the appropriateness of these culvert sizes, relative to maintaining natural channel function and the erosion risk to the structure is required. See additional comments below regarding the draft Conceptual Fisheries Compensation Plan requirements for watercourse crossings in the Boyne Secondary Plan Arca.

Table 4 - Staff note an error in Table 4 with respect to Crossing 16. Please revise.

#### Table 6

Table 6 indicates that the proposed conditions for 9 of the 19 culverts analyzed may have limited stability during some storm events, as the proposed velocity exceeds the estimated permissible velocity. Staff are particularly concerned with respect to Crossings 8, 10 (under option 5B), and 14, as these exceed the permissible velocities on a more frequent basis. Please provide additional discussion as to the impacts and mitigation measures associated with the velocity increases, and identify appropriate commitments to be addressed through the detailed design. Is it anticipated that larger culvert sizes will be required for all eight crossings listed in Table 6? Will permissible velocity estimates be refined? At this stage, staff need confirmation that at a conceptual level crossings have been sized to allow maintenance of the natural channel process.

#### Terrestrial and Aquatic Resources

For all intermittent watercourses within the study area, it is preferred that watercourses be realigned if necessary to facilitate the entry of the watercourse at a perpendicular angle to Britannia Road. This is suggested to reduce the length of the culverts underneath Britannia Road as much as possible. Staff recognize that this will require significant coordination between the Region, Town, Conservation Halton and the landowners north and south of Britannia Road. The landowners in the Boyne Secondary Plan Area are proposing on-line Regional Storm controls. This could have a significant impact on the crossing designs and will need to be discussed in detail.

Staff recommend that the report should include discussion as to how construction equipment will access the main Sixteen Mile Creek Valley, particularly as it relates to impacts on terrestrial features. Mapping of the 12 regionally significant plant species would be of assistance in this regard.

A comprehensive commitments section should be added to the report to provide clarity on which recommendations will be carried forward to detailed design.

Table 1 - The breeding bird surveys were conducted on consecutive days which increases the likelihood of some species being missed and makes it more difficult to confirm the breeding status of birds observed. As such, a conservative approach to determining breeding status would be appropriate. We also note the fall dates of the vegetation inventory would not have captured the full species diversity present in the study area. Additional spring/summer inventory work should be conducted at detailed design within the limits of disturbance to ensure that no species of conservation concern will be impacted by the works.

Section 3.3.4, Historic Records of Provincially Significant Fauna - It should be noted that, in addition to being provincially rare (S2), the habitat of Jefferson dominated polyploids (i.e. LJJ) is protected under the Endangered Species Act. Direction on additional survey requirements for Jefferson Salamander should be obtained from MNR. By copy of this letter, staff are providing our comments to Aurora McAllister, MNR Aurora District.

Section 3.3.6, Significant Wildlife Habitat, page 33 and Section 4.1.1.4, Significant Species and Habitat, page 37- It is staff's understanding that the habitat for Threatened species (e.g. Bobolink) would not also be considered under the significant wildlife habitat policies of the PPS.

Section 4.1.1.1, Flora and Vegetation Communities - This section lacks a discussion about the relative impacts of expanding to the north or to the south at the main branch of Sixteen Mile Creek. It should include a summary of the vegetation community and any significant features present, and make a recommendation as to which option would be preferred from a terrestrial habitat perspective.

Section 4.1.1.2, Tree Survey - Please clarify the statement, "There are six trees along the proposed alignment of Britannia Road that appear to be outside of the new proposed property line." How many of the 221 trees surveyed within the new property line will be removed?

Section 4.1.1.3. Wetlands - It is stated in the text that no wetland will be removed adjacent to the significant woodland because of the shift of the road alignment to the south, however the drawing appears to indicate that the sidewalk/trail will swing north across the meadow marsh, resulting in a loss of about 7-11 m of wetland along its length. Please clarify. It should also be noted that meadow marsh habitat in the vicinity of Crossings 2 and 3 will be lost.

Section 4.1.1.4, Significant Species and Habitat, Significant Woodlands, page 36 – this section states, "Intrusion into these significant woodlands to avoid encroaching on private property would need to be discussed with Conservation Halton at Detail Design." We note that this was discussed briefly at the October 1, 2012 meeting. At that time CH terrestrial ecology staff were not present and, as such, staff deferred comment in this regard until such time as those staff had reviewed the terrestrial assessment. As noted on October 1, 2012, staff appreciate that an Environmental Assessment is intended to balance the impacts to various environmental impacts including the natural environment and social environment however; based on the information contained within the report, there is insufficient data available to allow staff to determine what the anticipated impacts to the woodlands would be. Staff recommend that this be discussed in greater detail at the next agency meeting.

Section 4.3, Endangered Species Act Protection - Staff note that the two letters sent from MNR (July 5, 2011 to Brent Tegler and August 29, 2011 to Chris Lorenz) related to species at risk and natural areas reference different species. The August letter requests additional information on the proposal to allow MNR to determine whether an ESA permit would be required. Has this information been provided to MNR and if so, what was the outcome? The text in the report indicates that the need for ESA permits will be determined at detailed design. We strongly recommend that these matters be resolved at the earliest possible opportunity given that the approvals process under the ESA can be lengthy.

Section 4.5.1.1, Terrestrial Impacts - Please quantify the number of tree removals required.

Table 5 - Staff appreciate the thorough and comprehensive form of this table.

Section 5.1, Terrestrial Resources - All tree removals should be undertaken outside of the breeding bird season, not just those adjacent to hayfields. This commitment should be included in the ESR.

Section 5.2, Wildlife Crossing Structures - enhanced wildlife crossings should be implemented at Crossings 1, 2, 5, 6, 7 and 11, as identified in the Boyne FSEMS, and we also support the recommendation of Aquafor Beech for enhanced wildlife crossings at crossings 15, 17 and 18. We note that proposed culvert sizing is available in the Hydraulic Analyses of Stream Crossings and Stormwater Management Alternatives Assessment report. The Terrestrial and Aquatic Resources report should cross-reference these values, in consideration of the wetted width of the respective watercourses, to determine whether adequate freeboard will be available along the sides to allow for use by terrestrial wildlife.

Table 6 - outlines the fish collection records held by Conservation Halton and the results of fish collections performed by LGL Limited (2007; 2008), C. Portt and Associates (2008) and Aquafor Beech Ltd. (2011). Staff note the following:

- Conservation Halton's fish community database indicates that the following additional 14 fish species
  have been documented in the vicinity of Crossing # 7 and Britannia Road: Brown Trout, Mottled
  Sculpin, Fantail Darter, Rainbow Trout, Rosyface Shiner, River Chub, Stonecat, Rock Bass,
  Pumpkinseed, Bluntnose Minnow, Johnny Darter, Rainbow Smelt, Yellow Perch, Fathead Minnow.
- Conservation Halton's fish community database indicates that 19 additional fish species are
  documented to use the Lower Middle Branch of Sixteen Mile Creek that crosses under Britannia Road
  at Crossing # 15: Rainbow Trout, Chinook Salmon, Stonecat, Black Crappie, Golden Shiner,
  Longnose Dace, Fantail Darter, Silver Shiner, Northern Pike, Northern Hognose Sucker, Blacknose
  Dace, Rosyface Shiner, River Chub, Sea Lamprey, Brook Stickleback, Fathead Minnow, Largemouth
  Bass, Bluegill Sunfish.

Please add these fish species to the appropriate column in Table 6.

#### Section 5.2 Aquatic Resources

A number of the fish species in the study area are considered to be cold and cool water fish species. Regardless of this situation, timing windows are usually based on the timing of spawning of the fish species present in the study area. Please note the first bullet point in this section, which refers to the timing window applicable for the watercourses in the study area.

Staff request a commitment within the ESR to undertake all work in dry conditions and that no work will be undertaken in wet conditions within the watercourses in the study area for this project.

Appendix 6 - Please add a column to this table to indicate which trees will be removed and which will be retained.

Appendix 8 Watercourse Crossing Photo Documentation

Please ensure that each photograph in this section is labelled with respect to the direction in which the photo is being taken, its location upstream or downstream of Britannia Road and the culvert number that it has been taken at. Please use the same numerals used in Figure 1: Study Area Stream Crossings in the Hydraulic Analyses of Stream Crossings and SWM Alternatives Document.

As noted in previous meetings, there are a number of background documents that have been prepared by AMEC on behalf of the Town of Milton for the Boyne Survey. Although none of the documents have been endorsed by Conservation Halton yet, they contain important direction for works within the Secondary Plan Area, including watercourse crossings. With respect to watercourse crossing width requirements, Section 4.3 of the draft Conceptual Fisheries Compensation Plan for the Boyne Survey, prepared by AMEC, dated March 2011 provides detailed requirements that should be incorporated into any watercourse crossing. A portion of Section 4.3 is outlined below however, we recommend that a complete review of the draft CFCP and FSEMS be undertaken to ensure consistency:

#### 4.3.1 Stream Crossings (Preliminary Design Components - Road/Railway Crossings)

The estimated size of each hydraulic opening for the respective crossing has been based on the estimated minimum conveyance geometry to sustain natural channel form at each location and approximate 25 year flow rate. The final size determination is to be completed as part of future SIS's and site plan applications, based on a detailed assessment of hydrologic and hydraulic conditions, and required road/railway geometrics including conveyance of the Regulatory flood event, which will likely overtop most local roadways.

In addition, Table 4.8 in the draft CFCP identifies estimated hydraulic structures within the Boyne Survey.

#### Section 4.3.1 of the draft CFCP also notes the following:

Each of the road crossings should be designed and constructed to provide the following:

- (a) Natural substrate through open footing design or through the use of an embedded culvert invert to a depth of 0.5m preferred (minimum 0.3m);
- (b) Low flow channel through crossing (this may involve staggering the depth of culvert inverts i.e. multiple culvert crossings to promote low flow through a single culvert.);
- (c) Minimum span opening recommended to be approximately twice the proposed bankfull width in order to maintain natural channel form.

Finally, Section 4.3.1 of the draft CFCP also provides direction with respect to enhanced wildlife crossings. Please consult this document. Staff would be pleased to discuss any concerns/questions that the Study Team has with these recommendations.

Appendix 8, Fish Passage, page 67 - fish passage must be assured at all crossings, when the watercourse is considered fish habitat.

The no in-water work timing window for Crossings # 7 and # 15 is from Sept. 15 to July I of any year. The no in water work timing window that applies to the remainder of the watercourses is from April I and July I of any year.

#### **Figures**

It is unclear why tree numbers are provided on only one of the long drawings. Please clarify.

For future submissions, it would be helpful to number figures and provide more descriptive titles for ease of reference.

#### Detailed Design

At detailed design staff will require geomorphic input on the culvert sizing and design and channel realignment for each regulated watercourse. We also request that a commitment be made to the incorporation of single span open bottom crossings spanning 2 times the bankfull channel width, with the provision for wildlife passage, as per the draft Conceptual Fisheries Compensation Plan.

Please include a commitment to obtain a Permit under Ontario Regulation 162/06 for each section of roadway crossing through a regulated area – which is currently approximated as:

- Crossing 1 600 m length along Britannia Road From Tremaine Road Easterly.
- <sup>a</sup> Crossing 2 From the Railway to Bronte Road/First Line
- Crossing 5 From 830m west of Reg. Road 25 to 580m west of Reg. Road 25
- Crossing 6 From Reg. Road 25 to 270m west of Reg. Road 25
- Crossing 7 From 240 m west of Sixteen Mile Creek to 170 m East of Sixteen Mile Creek
- <sup>a</sup> Crossing 8 A 70 m width centred on the watercourse downstream
- Crossing 9 From Thompson Road to 250 m west of Thompson Road
- Crossing 10 Approximately 330 m length centred on the watercourse
- Crossing 11 From 60m west to 90 m east of Fourth Line
- Crossing 14 From 190 m west of Sixth Line to 120 m west of Sixth Line
- Crossing 15 From 320m west of Trafalgar Road to 40 m west of Trafalgar Road
- Crossing 16 a 30 m width centered on the watercourse
- Crossing 17 From 660 m west of Eight Line to 360 m east of Eighth Line
- Crossing 18 From 745 m west of the 407 to the end of the study area

As the regulated area varies across the differing alignments through Omagh, the Region and their consultants are asked to refer to Conservation Halton's approximate regulation limit mapping that has been provided to the Region via our data sharing agreement.

Staff also recommend pre-consultation with Conservation Halton with respect to detailed study components and requirements.

We trust the above is of assistance. If you require additional information, please contact the undersigned at extension 266.

Yours truly,

Jennifer Lawrence, MCIP, RPP Manager, Environmental Planning

cc: Mr. Martin Bateson, Town of Milton, email

Ms Barb Koopmans and Ms Bronwyn Parker, Town of Milton, email

Mr. Brian Hudson, Region of Halton, email Ms Karyn Poad, Region of Halton, email

Ms Melissa Green-Battison, Region of Halton, email

Ms Aurora McAllister, MNR- Aurora, email

jl/devl planning\ea\halton\britannia - tremaine to 407\technical background reports oct 2012.doc

CH Comment (October 25, 2012)	ABL Response (January, 2013)	CH Response
Terrestrial and Aquatic Resources		
<ol> <li>For all intermittent watercourses within the study area, it is preferred that watercourses be realigned if necessary to facilitate the entry of the watercourse at a perpendicular angle to Britannia Road. This is suggested to reduce the length of the culverts underneath Britannia Road as much as possible. Staff recognize that this will require significant coordination between the Region, Town, Conservation Halton and the landowners north and south of Britannia Road. The landowners in the Boyne Secondary Plan Area are proposing on-line Regional Storm controls. This could have a significant impact on the crossing designs and will need to be discussed in detail.</li> </ol>	This comment will be addressed in the Fluvial Geomorphology Report.	
<ol> <li>Staff recommend that the report should include discussion as to how construction equipment will access the main Sixteen Mile Creek Valley, particularly as it relates to impacts on terrestrial features. Mapping of the 12 regionally significant plant species would be of assistance in this regard.</li> </ol>	As this project is still in the conceptual stage, to minimize the disturbance of terrestrial features, Aquafor Beech has recommended that development of a construction access and staging plan be part of detailed design, when final design drawings/construction plans are complete. At this point, Aquafor Beech Limited believes it is premature to comment on construction access and staging when the design of the crossing structures and equipment required has not yet been finalized.	
3. A comprehensive commitments section should be added to the report to provide clarity on which recommendations will be carried forward to detailed design.	A Comprehensive Commitments Section has been added to Section 6.0 of the Terrestrial and Aquatic Resources Report.	
4. Table 1 - The breeding bird surveys were conducted on consecutive days which increases the likelihood of some species being missed and makes it more difficult to confirm the breeding status of birds observed. As such, a conservative approach to determining breeding status would be appropriate. We also note the fall dates of the vegetation inventory would not have captured the full species diversity present in the study area. Additional spring/summer inventory work should be conducted at detailed design within the limits of disturbance to ensure that no species of conservation concern will be impacted by the works.	Breeding evidence was assigned based on protocols outlined in the OBBA (2001). Breeding evidence as defined in the OBBA that is dependent upon surveys taking place a week or more apart is as follows:  • "permanent territory presumed through registration of territorial song on at least 2 days, a week or more apart, at the same place = Probable Breeding"  For the purpose of this EA, the breeding evidence of 'probable' was assigned based on the following:  - pair observed in their breeding season in suitable nesting habitat; or  - courtship feeding or copulation; or agitated behaviour or anxiety calls of an adult  Due to the single breeding bird survey, permanent territory presumed through registration of territorial song on at least 2 days, a week or more apart, at the same place, was NOT assessed as breeding evidence. Had there been a second breeding survey a week or more apart at the assme locations, some evidence of 'possible' breeding may have been assessed as probable. Therefore, a conservative approach to determining breeding status has already been applied. The text in Section 2.2.1. has been updated accordingly.  Section 2.2.1 has been updated to include the recommendation of additional spring/summer vegetation inventory work conducted at detailed design within the limits of disturbance.	
5. Section 3.3.4, Historic Records of Provincially Significant Fauna - It should be noted that, in addition to being provincially rare (S2), the habitat of Jefferson dominated polyploids (i.e. LJJ) is protected under the Endangered Species Act. Direction on additional survey requirements for Jefferson Salamander should be obtained from MNR. By copy of this letter, staff are providing our comments to Aurora McAllister, MNR Aurora District.	Aquafor Beech Limited will be completing Jefferson Salamander Surveys during the first spring rains of 2013. The ESR will be updated accordingly with respect to existing conditions and future requirements once the surveys are complete.	

CH Comment (October 25, 2012)	ABL Response (January, 2013)	CH Response
6. Section 3.3.6, Significant Wildlife Hobitot, page 33 and Section 4.1.1.4, Significant Species and Habitat, page 37- It is staff's understanding that the habitat for Threatened species (e.g. Bobolink) would not also be considered under the significant wildlife habitat policies of the PPS.  R F F F F F F F F F F F F F F F F F F	The habitat of Threatened species is not considered under the significant wildlife habitat policies of the PPS. As this is a Class Environmental Assessment, it is not subject to the provisions within the Provincial Policy Statement. The significant wildlife habitat within the study area was assessed to allow Aquafor Beech Limited to make informed recommendations as to the preferred alternative.  Section 3.3.6 has been revised to eliminate any confusion.	
7. Section 4.1.1.1, Flora and Vegetation Communities - This section lacks a discussion about the relative impacts of expanding to the north or to the south at the main branch of Sixteen Mile Creek. It should include a summary of the vegetation community and any significant features to present, and make a recommendation as to which option would be preferred from a terrestrial habitat perspective.	A discussion about the relative impacts of expanding to the north or to the south at the Main and East Branches of Sixteen Mile Creek has been added to Section 4.1.1.1. This discussion includes a summary of the vegetation community and any significant features present and makes a recommendation as to which option would be preferred.	
8. Section 4.1.1.2, Tree Survey - Please clarify the statement, "There are six trees along the proposed alignment of Britannia Road that appear to be outside of the new proposed property line." How many of the 221 trees surveyed within the new property line will be removed?	Please see Section 4.1.1.2 for clarification to this statement and ABL recommendations regarding trees to be removed and trees to be retained.	
9. Section 4.1.1.3, Wetlands - It is stated in the text that no wetland will be removed adjacent to the significant woodland because of the shift of the road alignment to the south, however the drawing appears to indicate that the sidewalk/trail will swing north across the meadow marsh, resulting in a loss of about 7-11 m of wetland along its length. Please clarify, It should also be noted that meadow marsh habitat in the vicinity of Crossings 2 and 3 will be lost.	Section 4.1.1.3 has been revised per CH comment 9 (Left). Section 4.1.1.3 has been revised to note the lost wetland in the vicinity of crossings 2 and 3.	
10. Section 4.1.1.4, Significant Species and Habitat, Significant Woodlands, page 36 — this section states, "Intrusion into these significant woodlands to avoid encroaching on private property would need to be discussed with Conservation Halton at Detail Design." We note that this was discussed briefly at the October 1, 2012 meeting. At that time CH terrestrial ecology staff were not present and, as such, staff deferred comment in this regard until such time as those staff had reviewed the terrestrial assessment. As noted on October 1, 2012, staff appreciate that an Environmental Assessment is intended to balance the impacts to various environmental impacts including the natural environment and social environment however; based on the information contained within the report, there is insufficient data available to allow staff to determine what the anticipated impacts to the woodlands would be. Staff recommend that this be discussed in greater detail at the next agency meeting.	Aquafor Beech Limited provided ELC data sheets to Conservation Halton on October 17, 2012 at their request for comment on this matter. Conservation Halton to review data sheets and terrestrial assessment and provide guidance as to the possibility of intruding into these woodlots to avoid encroaching on private property.	
11. Section 4.3, Endangered Species Act Protection - Staff note that the two letters sent from MNR (July 5, 2011 to Brent Tegler and August 29, A 2011 to Chris Lorenz) related to species at risk and natural areas reference different species. The August letter requests additional A information on the proposal to allow MNR to determine whether an ESA permit would be required. Has this information been provided to random MNR and if so, what was the outcome? The text in the report indicates that the need for ESA permits will be determined at detailed design. Per strongly recommend that these matters be resolved at the earliest possible opportunity given that the approvals process under the ESA dean be lengthy.	As this project is still at the conceptual stage, Aurora McAllister, Assistant Species at Risk Biologist at the MNR (Aurora District) has recommended that the Information Gathering Form (IGF) required for a permit application under the ESA be submitted when more documentation (design drawings, etc) become available. Aquafor Beech Limited has revised the text in Section 4.3 to recommend that the IGF and subsequent ESA permit applications be completed as early as possible in the design process.	
12. Section 4.5.1.1, Terrestrial Impacts - Please quantify the number of tree removals required.	The number of tree removals required has been quantified in Section 4.5.1.1	
13. <i>Table 5</i> - Staff appreciate the thorough and comprehensive form of this table.	Aquafor Beech Limited notes Conservation Halton's satisfaction with Table 5	
14. Section 5.1, Terrestrial Resources - All tree removals should be undertaken outside of the breeding bird season, not just those adjacent to hayfields. This commitment should be included in the ESR.	Aquafor Beech Limited has revised Section 5.1 accordingly.	

These fish species have been added to the appropriate column in Table 6.  Regarding the timing windows applicable for the watercourses in the study area, the first paragraph in Section 5.2 has been updated accordingly following discussions with both CH and the MNR.
Table 6.  Regarding the timing windows applicable for the watercourses study area, the first paragraph in Section 5.2 has been us accordingly following discussions with both CH and the MNR.
Golden Shiner, Longnose Dace, Fantail Darter, Sliver Shiner, Northern Pike, Northern Hognose Sucker, Blacknose Dace, Rosyface Shiner, River Chub, Sea Lamprey, Brook Stickleback, Fathead Minnow, Largemouth Bass, Bluegill Sunfish.  Please add these fish species to the appropriate column in Table 6.  17. Section 5.2 Aquatic Resources  A number of the fish species in the study area are considered to be cold and cool water fish species. Regardless of this situation, timing stu windows are usually based on the timing of spawning of the fish species present in the study area. Please note the first bullet point in this section, which refers to the timing window applicable for the watercourses in the study area.
Please add these fish species to the appropriate column in Table 6.  7. Section 5.2 Aquatic Resources A number of the fish species in the study area are considered to be cold and cool water fish species. Regardless of this situation, timing windows are usually based on the timing of spawning of the fish species in the study area. Please note the first bullet point in this section, which refers to the timing window applicable for the watercourses in the study area.
in the study area are considered to be cold and cool water fish species. Regardless of this situation, timing n the timing of spawning of the fish species present in the study area. Please note the first bullet point in this ming window applicable for the watercourses in the study area.
19. Appendix 6 - Please add a column to this table to indicate which trees will be removed and which will be retained.  Terrestrial and Aquatic Resources Report.

CH Comment (October 25, 2012)	ABL Response (January, 2013)	CH Response
21. As noted in previous meetings, there are a number of background documents that have been prepared by AMEC on behalf of the Town of Milton for the Boyne Survey. Although none of the documents have been endorsed by Conservation Halton yet, they contain important direction for works within the Secondary Plan Area, including watercourse crossings. With respect to watercourse crossing width requirements, Section 4.3 of the draft Conceptual Fisheries Compensation Plan for the Boyne Survey, prepared by AMEC, dated March 2011 provides detailed requirements that should be incorporated into any watercourse crossing. A portion of Section 4.3 is outlined below however, we recommend that a complete review of the draft CFCP and FSEMS be undertaken to ensure consistency:		
4.3.1 Stream Crossings (Preliminary Design Components – Road/Railway Crossings)		
The estimated size of each hydraulic opening for the respective crossing has been bosed on the estimated minimum conveyance geometry to sustain natural channel form at each location and approximate 25 year flow rate. The final size determination is to be completed as part of future SIS's and site plan applications, based on a detailed assessment of hydrologic and hydraulic conditions, and required road/railway geometrics including conveyance of the Regulatory flood event, which will likely overtop most local roadways.	Aquafor Beech Limited has reviewed the CFCP (AMEC 2011) and has incorporated recommendations within the Terrestrial and Aquatic Becourses ranner where amonomists These recommendations include	
In addition, Table 4.8 in the draft CFCP identifies estimated hydraulic structures within the Boyne Survey.	but are not limited to: a minimum span opening of 2x bankfull width, recommendations concerning Ethaned Wildlife Freeinas Gartino 4.3.1	
Section 4.3.1 of the draft CFCP also notes the following:	of the CFCP) and construction practices for watercourses (Section 4.2.2	
Each of the road crossings should be designed and constructed to provide the following:  (a) Natural substrate through open footing design or through the use of an embedded culvert invert to a depth of 0.5m preferred	of the CFCP).	
(b) Low flow channel through crossing (this may involve staggering the depth of culvert inverts i.e. multiple culvert crossings to promote low flow through a single culvert.);		
(c) Minimum span opening recommended to be approximately twice the proposed bankfull width in order to maintain natural channel form.		
Finally, Section 4.3.1 of the draft CFCP also provides direction with respect to enhanced wildlife crossings. Please consult this document. Staff would be pleased to discuss any concerns/questions that the Study Team has with these recommendations.	-:	
22. Appendix 8, Fish Passage, page 67 - fish passage must be assured at all crossings, when the watercourse is considered fish habitat.	Paragraph 3 in Section 5.2 states that fish passage must be assured at each crossing when the watercourse is considered direct fish habitat.	
23. The no in-water work timing window for Crossings # 7 and # 15 is from Sept. 15 to July 1 of any year. The no in water work timing window that applies to the remainder of the watercourses is from April 1 and July 1 of any year.	Paragraph 1 of Section 5.2 has been updated accordingly.	
Figures 24. It is unclear why tree numbers are provided on only one of the long drawings. Please clarify.	Aquafor Beech has provided tree numbers on Figure 3 (Long Drawing representing the eastern portion of Britannia Road).	
25. For future submissions, it would be helpful to number figures and provide more descriptive titles for ease of reference.	Aquafor Beech Limited has provided figure numbers and more descriptive titles for ease of reference.	

# Minutes of Meeting with Conservation Halton

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** Tuesday, January 22, 2013 1:00 p.m.

LOCATION: Auditorium, Conservation Halton

PRESENT: Melissa Green-Battiston Halton Region

Alicia Jakaitis Halton Region Delcan Corporation Nick Palomba

Delcan Corporation (Minutes) Andrew McGregor

Delcan Corporation Bob Bower Aquafor Beech Greg Frew Roger Phillips **Aquafor Beech** Aguafor Beech Tristan Knight

Jennifer Lawrence Conservation Halton Amy Mayes Conservation Halton Conservation Halton Samantha Mason Kim Barrett Conservation Halton

**Items Discussed** Action

### 1. Hydraulic Analysis

Aquafor Beech Limited (ABL) provided an overview with respect to CH's requirements for drainage areas, flows and span requirements to meet environmental criteria, flooding impacts, etc for each of the crossings. CH's requirements were outlined in their Oct. 25, 2012 letter and a subsequent meeting with CH Engineering staff. In terms of span requirements, a minimum span of two times the average bankfull width was applied for regulated watercourses.

ABL provided the updated results, including proposed new crossing sizes, in tabular format at the meeting. The summary results demonstrated that the proposed crossing structures would not increase flood levels and would meet the specified capacity criteria of 1 meter of freeboard for the 50-year event and flood-free for the Regional event.

The hydraulic results are to be reflected in the revised reports and preliminary design plans.

## Aguafor Beech / Delcan

#### 2. Fluvial Geomorphology

ABL advised that the recommendations for 2 x Bankfull Width was based on average bankfull width measurements from geomorphic field assessments and were confirmed with empirical models using drainage area. The final bankfull recommendations will be provided in the updated report.

ABL discussed the updated flow velocity and shear stress results for

**Aquafor Beech** 



# Minutes of Meeting with Conservation Halton

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

the stability analysis. ABL stated that updated hydraulic modeling shows reduced velocities and shear stress at both bridges (crossings #7 and #15) for all flows, except for Regional flood which show increases as expected due to fact that it is no longer overtopping the road under proposed conditions. ABL stated that there would be a localized increase in velocity at crossing #11, but that this was well within the an acceptable range.

For all other culverts, ABL stated that stability analysis was still ongoing, but that minor stability issues could be mitigated during detailed design via natural stone substrate. There was some discussion with respect to native vs natural substrate and bedload. ABL advised that the recommendation for *natural* stone substrate material within *open-bottom* culverts conforms with the recommendations of Conceptual Fisheries Compensation Plan (CFCP) for the Boyne Survey as quoted in CH's comments dated Oct 25, 2012.

CH raised the importance of avoiding damage to stream banks and bottoms. ABL confirmed that the intention is that no bed work and minimal to no bank work will be required at the two major watercourse crossings (#7 and #15).

ABL provided recommendations on the culvert alignments within the project limits. From comments provide on Oct 25, 2012, CH's preference is for 90° culvert alignments where feasible. ABL stated that in most cases, the optimal alignment would consist of a hybrid of two or more alignments (with one being 90°), which also consider minimizing channel realignments and other construction issues. ABL provided CH with illustrations containing their "Culvert Alignment Alternative Analysis", and a number of examples were discussed. CH noted that alignments might also need to consider new corridor alignments for developments on the north side of Britannia within the Boyne Survey area. Possible implications maybe discussed at future meeting, but ABL suggested that recommended culvert alignments should easily be accommodated within width of restored corridors and associated channel realignments (up to 60 m wide corridors noted by CH). Subsequent to this meeting, Halton Region has confirmed that every effort will be made to realign culverts to 90° for crossings adjacent to the Boyne Secondary Plan Area.

#### 3. Terrestrial / Aquatic

CH's comments on ABL's Terrestrial and Aquatic Resources Report, have been addressed in ABL's revised report.



# Minutes of Meeting with Conservation Halton

# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

ABL has sent the required permit applications for the Jefferson Salamander survey to the Ministry of Natural Resources (MNR). So far they've received 1 of 3 approvals to commence fieldwork.

Delcan

It was mentioned that CH's request for MNR submissions at the EA stage have been addressed by letter from MNR stating that they do not require a submission at this time.

### 4. Road Alignment / Woodlot Impact

CH advised that if impacts to the woodlot were proposed they would need a more detailed review of the woodlot (consisting of field work in the spring/summer) in order to assess the proper mitigation requirements.

Delcan

Delcan to follow up with CH regarding the review required to be undertaken as part of the study to determine what is required for EA process.

#### 5. Report Submissions to CH

ABL advised that the revised reports would be completed by February 8th, 2013. CH requires 2 hard copies of the Stormwater and fluvial geomorphology reports and 1 hardcopy of the Aquatic & Terrestrial report. CH also requested electronic versions of the reports via CD or FTP. CH will need 4 weeks to review the ESR.

Delcan

#### 6. Next Steps

- Set up meeting with CH to discuss comments on appendices and possible impacts to woodlots;
- Set up meeting with CH, Town and Amec to discuss SWM plan for Britannia Road.

Delcan

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** Tuesday, April 2, 2013 2:00 p.m.

**LOCATION:** Halton Region Offices – Aldershot Room

PRESENT: Tim Dennis Halton region

Maureen Vanravens
Melissa Green-Battiston
Alicia Jakaitis
Tony Finelli
James Stiver
Brian Huber
Halton Region
Halton Region
Halton Region
Halton Region
Halton Region

Amy Mayes Conservation Halton
Cory Harris Conservation Halton

Barb Koopmans Town of Milton Martin Bateson Town of Milton Paul Cripps Town of Milton

Ron Schechenberger AMEC

Greg Frew Aquafor Beech

Nick Palomba Delcan Corporation (Minutes)

# Items Discussed Action

#### 1. Introductions

Attendees introduced themselves. Nick provided the study background to the attendees.

#### 2. Study Overview

Alicia and Nick explained that the purpose of the meeting is to present the Britannia Road EA Stormwater Management (SWM) Strategy and discuss the works being undertaken as part of the Boyne Area by the Town.

They also presented an overview of the Britannia roadway project including the purpose of the study, proposed roadway cross section elements including active transportation and HOV/BRT lanes.

The roadway design plans were presented along with their implementation timelines.

#### **Overview of Existing Drainage**

Greg of Aquarfor Beech Limited (ABL) presented an overview of the existing area drainage and crossings within the project area.



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

Greg provided a summary of the recommended SWM Strategy for Britannia Road. Greg distributed reference drawings of the culvert locations along with analysis summary sheets which identified the various culvert flows and proposed structure sizing.

Strategy was developed based on criteria requested by Conservation Halton (CH).

- Regulated crossings were to be sized to allow for 2 times bank full width as well as not result in increase in flood levels upstream.
- Unregulated crossings were sized to meet the capacity requirements as well as freeboard and overtopping requirements from the Region.
- For the unregulated crossings adjacent to the Boyne Survey Secondary Plan area, temporary culverts can be avoided by providing roadside ditches to transfer water to permanent culverts at the regulated crossings.
- Within the Omagh area the temporary ditching along the north side would be brought into the Stormsewer as there is insufficient property for ditching in the area of the baseball diamond under the 6 lane configuration.
- Greg noted that the recently installed culvert at RR 25 is undersized according to the new CH's size requirements. He informed the study team that CH's would not be opposed to the EA recommending that a culvert twinning be investigated as detailed design proceeds.
- Ron stated that they expect some of the stream crossing locations to be revised slightly as the landuse planning continues. Town of Milton to send drawings to Alicia when prepared.

 Ron stated that the landowner in the southwest quadrant at Omagh is not a participating landowner, therefore the temporary flows in culvert crossing No. 10 may remain for an extended period. Town



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

- Ron suggested that re-alignment of watercourse #11 around the east side of Omagh might be given consideration.
- Amy stated that if a diversion was indeed to be recommended, the EA document will need to acknowledge this, and that a separate detailed study would be required for the re-aligned channel.
- Greg and Amy noted that the culvert at No. 11, if re-aligned, would still need to span 2 times bankfull width.
- Ron/Paul also suggested that the Region consider building the future culverts with deep footings as they may want to regrade and slightly deepen the channels to allow for easier SWM pond outletting.
- Ron noted that Aquafor has used the most up-to-date information available for Boyne. However, the SWM planning for Boyne is on-going and some SWM pond locations may be revised.
- Ron noted that the landowner group is looking at the option of putting Regional Storm storage within the valleys. One option is to design Britannia Road as a dam/embankment. An alternative is to build separate embankments upstream.
- Tim stated that the Region would prefer to not use Britannia Road as an embankment due to added liability and structural requirements.
- Cory noted that CH's preference is to avoid terrestrial/environmental impacts within the valley, and instead have the storage provided in off-line SWM ponds. The option of spilling out of the SWM ponds into adjacent park lands was also noted for extreme storms.
- Amy also noted that online (valley) storage would require MNR approval under the Lakes & Rivers Improvement Act.



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

Nick spoke to an online pond east of Thompson Road. ABL could not get access from the owner during their site investigation. Therefore they were not able to identify the specifics or purpose of the pond. The roadway plans, as shown, show a significant impact on this pond (a portion of the existing pond is located on the Region's road allowance). It was determined that this would be one of the property owners that the project team would contact for a meeting. CH advised that they do not support this type of pond and ask that it not be reinstated.

#### 3. Other Items

Town staff was requested to stay after formal meeting ended to review impacts of the proposed roadway corridor on several Town properties.

#### **Omagh**

Nick Presented the revised alignment plans for the Omagh bypass. The roadway alignment was shifted southerly to avoid taking property from the baseball diamond. The impact of this shift was an increase in the size of the remnant land parcels between existing Britannia Road and the bypass. Discussions with the property owners of the remnant parcels have not occurred yet.

Barb enquired as to whether AT facilities would be provided along existing Britannia Road in the Bypass area. Nick stated that they were not planned due to the property constraints and impacts. The AT facilities have been accommodated along both the north and south side of the bypass.

#### **Grade Separation**

Nick presented that the final grade separation plan at the CN track was to be an underpass crossing with retaining walls and a pumping station. The multiuse trail would be elevation through the grade



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

separate to minimize grade issues. This plan requires less property and was considered to be more compatible with the planned adjacent residential

### **Terra/School Properties**

Nick presented a plan which shows a signalized consolidated driveway at the Terra Greenhouse & Saint Nicholas School property. This configuration highlighted the possibility of a driveway connection to Drumquin Park across the school property. The Town stated that they would be supportive of exploring this further and said they would provide further comments post the meeting to the Region.

## **Boyne Community Centre**

The proposed roadway widening will reduce the amount of parking which currently exists. Town staff was asked to look at this site and provide feedback as to whether this parking should be replaced. Town staff stated that they would take this away and provide feedback post meeting to Alicia.

The meeting was adjourned at 4:30 pm.

cc: All attendees





2596 Britannia Road West Burlington ON L7P 0G3 905.336.1158 Fax 905.336.7014 Conservationhalton.ca

April 5, 2013

Ms Alicia Jakatis Region of Halton 1151 Bronte Road Oakville, ON L6M 3L1

Dear Ms Jakatis:

Re: Britannia Road - Tremaine to Highway 407

Class Environmental Assessment Technical Background Reports (2013)

CH File: MPR 558

Staff of Conservation Halton appreciate the opportunity to review the following technical background reports in advance of the Region finalizing the above noted Environmental Assessment (EA):

- Terrestrial and Aquatic Resources, prepared by Aquafor Beech Limited in association with North-South Environmental Inc., dated February 8, 2013:
- Hydraulic Analysis of Stream Crossings & Stormwater Management Alternatives Assessment, prepared by Aquafor Beech Ltd., dated February 8, 2013; and,
- Fluvial Geomorphology Study, prepared by Aquafor Beech Ltd., dated February 8, 2013.

For ease of future reference, we have numbered our comments:

### Terrestrial and Aquatic Resources Report

- 1. Staff appreciate the thorough and well organized response table provided as Appendix 11, as it greatly facilitated our review. We also note that a number of comments raised in our previous correspondence have been addressed in this submission.
- 2. Some general consideration should be given in the ESR to construction access and staging for the main Sixteen Mile Creek Valley if it could impact the preferred alternative. If access is generally considered to be similar in each alternative alignment, then staff are in agreement that the details can be established at detailed design.
- 3. Staff appreciate the additional discussion with respect to the relative natural heritage constraints north and south of the main Sixteen Mile Creek crossing. We trust that the recommendation to shift the alignment to the north will receive due consideration in the analysis of alternatives presented in the EA. It should also be noted that this area is part of the Sixteen Mile Creek Valley Environmentally Sensitive Area.



- 4. The document notes that 170 trees will be removed and that 16 trees with their driplines extending into the right-of-way will be assessed by a certified arborist at detailed design. The final ESR should identify whether/how these trees will be replaced.
- 5. Staff appreciate the additional discussion pertaining to wetland impacts. The final ESR should identify whether it would be possible to replace the habitat lost elsewhere.
- 6. Conservation Halton has reviewed the ELC data sheets provided and as discussed at the January 23, 2013 meeting, they do not provide the level of detail required to assess impacts on the significant woodlands. As reflected in the minutes from June 30, 2011, Conservation Halton agreed at the time to scope the extent of ELC work required in recognition of the following discussion points:
  - Between First Line and Regional Road 25 the proposed alignment shifts north to avoid impacts to a woodland block that abuts the southern edge of the existing Britannia Road alignment.
  - Immediately west of Highway 407 the proposed road alignment shifts south to avoid impacts to a woodland block that abuts the northern edge of the existing Britannia Road alignment.

We have since engaged in additional discussions with the Region on this issue and understand that efforts to avoid/minimize impacts on these features are ongoing. A site meeting has been scheduled for May 2 with the Region and their consulting team. Once the preferred alternative has been developed, staff will provide further confirmation of the extent of additional work required to assess impacts.

# Hydraulic Analysis of Stream Crossings and Stormwater Report

- 7. The hydraulic modeling provided in support of the southerly by-pass of Omagh indicates a 0.13m and 0.07m increase in the Regional Storm floodplain downstream of the new crossing 11 at cross-sections 22 and 23 respectively. Staff contacted Aquafor Beech to discuss this and understand that the increase reflects an inconsistent modification of the Manning's roughness between the existing and proposed models, and is not a result of the proposed road crossing. Aquafor Beech indicated that when the existing and proposed models were updated consistently there was no water level increase under proposed conditions at cross-sections 22 and 23. Staff request that the final report be updated accordingly. Also please confirm whether the red line shown on the Figure below Table 7 constitutes the regulatory floodplain. Given the proposed addition of a new crossing structure between existing cross sections 25 and 26, staff also request that cross sections 25.25 and 25.9 be added into the existing conditions model.
- 8. Staff noted a discrepancy between the proposed condition for Culvert 6. The Hydraulic report recommended replacement, but indicated that consideration could be given to extending the newly installed culvert at detailed design, should it be demonstrated not to have a hydraulic impact, while the geomorphic report indicated that this culvert should be extended. As noted in our February 21, 2013 email, for crossing 6, which has been

replaced through the Regional Road 25 widening, and is not sufficiently sized to meet the hydraulic or geomorphic requirements, staff prefer that the structure be replaced as opposed to extended, such that the Region's objective of maintaining flood free access may be achieved and the environmental goals of the Boyne background studies can be achieved. Further, the Boyne FSEMS did identify this culvert as an Enhanced Wildlife Crossing Location. As such, the EA should describe how the dimensions of the existing culvert does or does not achieve this objective. If it is not providing enhanced wildlife habitat connectivity, then the report should document what steps could be taken to provide adequate dimensions. At the April 2, 2013 agency meeting the Region indicated that they may be twinning the structure. This may assist in achieving the terrestrial wildlife corridor movement if designed properly.

#### Fluvial Geomorphology Study

- 9. Table 1 highlights whether or not drainage features are regulated by Conservation Halton. In some locations, the culvert crossings associated with Britannia Road forms a dividing line between regulated and unregulated features, and, as such, the terminology used in Table 1 may not always be consistent. Please note that permits will be required for all works within the regulated limits, which would include culvert installations for those features that are regulated south of Britannia Road, but not north of Britannia Road. The following is offered for clarification purposes:
  - The watercourses associated with Crossings 3 and 16 are regulated immediately downstream of Britannia Road and therefore, the crossing would be regulated, which is consistent with the watercourse status shown in Table 1.
  - o The watercourse associated with Crossing 8 is regulated immediately downstream of Britannia Road and therefore, the crossing would be regulated, which is <u>inconsistent</u> with the watercourse status shown in Table 1.
- 10. Section 5 considered several design alternatives for potential culvert replacement alignments. Staff appreciate the benefit of locating the replacement at an off-set to the existing alignment to allow for construction to occur in the dry without a dam and pump, particularly for larger drainage systems. Crossings 1-4, 9, 11 and 14 identify both non-perpendicular and perpendicular alignments to satisfy CH's request for perpendicular crossings. Staff could generally support either option and are willing to consider the recommended oblique angle particularly for Crossing 14 (to avoid impacts to existing residences), Crossing 11 (where the channel traverses through the right of way at an unusual angle), and Crossing 9 (due to the downstream on-line pond). Notwithstanding this consideration, it is our understanding, based on the discussion at the April 2, 2013 agency meeting, that the updated FSEMS for Boyne, which is to be released shortly, may be recommending realignment of certain watercourses for a short distance south of Britannia Road. If that is the case, then the crossings associated with those watercourses should be perpendicular.
- 11. Overall, staff are very pleased with quality and clarity of the submitted reports. The level of consideration that was incorporated into the conceptual analysis is not often evident at this scale of report, and staff feel that this will assist in an efficient review of the ultimate detailed design.

We trust the above is of assistance. If you require additional information please contact the undersigned at extension 266.

Yours truly,

Jennifer Lawrence, MCIP, RPP Manager, Environmental Planning

jl/des l planning cathalton/britannia road tremaine to 407 march 2013 terrestrial aquatic and engineering bkgmd reports doc

### Jakaitis, Alicia

From:

Ash Baron <baron.a@aquaforbeech.com>

Sent:

Monday, May 06, 2013 3:14 PM

To:

'Kim Barrett'

Cc:

n.palomba@delcan.com; 'Bob Bower'; Jakaitis, Alicia; Reinholt, Ron; 'Jennifer Lawrence'

Subject:

RE: Britannia Rd EA - Follow up from last week's site visit

Hi Kim,

Thank you for the quick reply.

Yes, the remaining two rounds of amphibian surveys will be completed.

Thank you for the information on waterfowl observed adjacent to the eastern woodland. I will make sure the data is incorporated into the ESR.

Kind regards, Ash

----

Ash Baron
Botanist
Aquafor Beech Ltd.
55 Regal Road, Unit 3
Guelph. Ontario
N1K 1B6
http://www.aquaforbeech.com



baron.a@aquaforbeech.com Ph: (519) 224-3740 ext.200

Fax: (519) 224-3750

From: Kim Barrett [mailto:kbarrett@hrca.on.ca]

**Sent:** May 6, 2013 3:02 PM

To: Ash Baron

Cc: n.palomba@delcan.com; Bob Bower; Jakaitis, Alicia; Reinholt, Ron; Jennifer Lawrence

Subject: RE: Britannia Rd EA - Follow up from last week's site visit

Hi Ash

Thanks for your note. I believe you have captured all the discussion points from our site visit last week and I look forward to receiving your assessment. Just wanted to confirm that you will also be completing the other two rounds of amphibian surveys, correct?

As a side note- I returned to the eastern woodland after our site visit ended to take some photographs of the extent of flooding in the adjacent fields. As I pulled over to the side of the road, I flushed a Blue-winged Teal. There were also a number of Mallards toward the back of the property.

Thanks, Kim

# Kim Barrett, M. Sc. | Senior Terrestrial Ecologist Conservation Halton

t: 905-336-1158 ext.229 | f: 905-336-6684 2596 Britannia Road West, Burlington ON L7P-0G3 www.conservationhalton.ca



**From:** Ash Baron [mailto:baron.a@aquaforbeech.com]

**Sent:** May-06-13 12:36 PM

To: Kim Barrett

Cc: n.palomba@delcan.com; 'Bob Bower'; 'Jakaitis, Alicia'; 'Reinholt, Ron'

Subject: Britannia Rd EA - Follow up from last week's site visit

Hello Kim,

Thank you for meeting on site last week. I wanted to follow up with you regarding the ecological study requirements resulting from the site visit on May 2<sup>nd</sup> 2013 with Halton Region, Conservation Halton, Delcan, and Aquafor Beech Limited.

The purpose of the site visit was to review the proposed alignment of Britannia Rd and the potential impacts on two woodlands abutting the road. The following items detail Conservation Halton's requirements for additional ecological investigations in support of the Britannia Road EA, as discussed on site:

- 1. Conduct an Ecological Land Classification (ELC) assessment for both the Western and Eastern woodlands;
- 2. Conduct a botanical inventory for both the Western and Eastern woodland (to be completed in early June);
  - o If access within either woodland is not permitted, both the botanical inventory and ELC assessment will be conducted from adjacent lands. Background information and observations made during the site visit on May 2<sup>nd</sup> will also be used to support the assessment.
- 3. Conduct one (1) forest bird count station survey using standard methods for forest bird monitoring within the Western woodland.
  - o The location of the forest bird count station will be located in the interior of the woodland. If access within the woodland is not permitted, the bird count station will be conducted from the roadside along the north edge of the woodlot or, preferably, from lands abutting the woodland to the east or west.

In addition, the Region has requested that both woodlands be subject to a Significant Woodland Assessment. This assessment will largely be a desktop exercise and will be included in the ESR document. It was requested that a woodland edge management plan be prepared at the detailed design phase.

Please note that to date Aquafor Beech Limited has completed one of the three required site visits for the amphibian monitoring (following the Marsh Monitoring Protocol). Amphibian call count stations are located at both the Western and Eastern woodlands.

Please advise as to the completeness and suitability of the above items. Once I hear back from you, I will be able to provide Halton Region with a fee estimate for the required studies.

Kind regards, Ash

----

Ash Baron
Botanist
Aquafor Beech Ltd.
55 Regal Road, Unit 3
Guelph, Ontario
N1K 1B6
http://www.aquaforbeech.com



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Fax: (519) 224-3750



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: (905) 825 8822

September 27, 2013

Katherine Menyes
Director – Watershed Management Services
Conservation Halton
2596 Britannia Road West
Burlington, Ontario
L7P 0G3

Dear: Ms. Menyes

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

The Class Environmental Assessment (EA) Study to address a wide range of options for transportation corridor improvements to satisfy future travel demands on Britannia Road from Highway 407 to Tremaine Road (Regional Road 22), in the Town of Milton is nearing completion. The Project Team has documented the study process and recommendations in the **DRAFT** Environmental Study Report (ESR).

A copy of the <u>DRAFT</u> ESR is enclosed for Conservation Halton's review and comments. For ease of distribution within your organization, a CD copy of the <u>DRAFT</u> ESR text has also been included. All comments on the Draft ESR must be provided to the undersigned by no later than <u>Friday Ocotber 25, 2013</u>. The ESR will be finalized in December 2013 and subsequently filed for the 30 day Public Review Record.

If you have any questions or require additional information, please do not hesitate to contact me at (905) 825-6000 extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

### **Andrew McGregor**

Subject:

FW: Britannia Road Class EA Study (Highway 407 to Tremaine Road)

**Attachments:** 

May 2 commitments.pdf; Britannia Rd EA - Terrestrial and Aquatic Ecology - (22 Oct

2013) (2).pdf; CH comment-response Table Oct 2013.pdf

From: Jakaitis, Alicia

Sent: Thursday, October 24, 2013 3:41 PM

To: 'Barb Veale'

Cc: Green-Battiston, Melissa

Subject: RE: Britannia Road Class EA Study (Highway 407 to Tremaine Road)

Hi Barb,

Attached is the updated comment/response table for the April 5, 2013 letter. Attached is also an updated Appendix B – Natural Environment, October 22, 2013. There is also an email attachment which is referred to in the comment/response table.

I do understand that we had requested comments be due back tomorrow and additional information is only available today. Please let me know if an additional 2 weeks – November 8, 2013 will allow for sufficient time to complete your draft ESR review. As mentioned previously, we have a commitment to Regional Council to file the ESR by the end of the year

Also, please let me know if you require anything further or if staff have any specific questions that I may assist with during the review of the draft ESR.

#### Alicia

#### Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca

Conservation Halton Comment (April 5, 2013)	ABL Response (October 2013)
Terrestrial and Aquatic Resources Report	
1. Staff appreciate the thorough and well organized response table provided as Appendix 11, as it greatly facilitated our reviews We also note that a number of comments raised in our previous correspondence have been addressed in this submission.	Comment noted.
2. Some general consideration should be given in the ESR to construction access and staging for the main Sixteen Mile Creek Valley if it could impact the preferred alternative. If access is generally considered to be similar in each alternative alignment, then staff are in agreement that the details can be established at detailed design.	Construction access will be generally similar in each alignment alternative. Please see Section 8.6.5 of the draft ESR.
3. Staff appreciate the additional discussion with respect to the relative natural heritage constraints north and south of the main Sixteen Mile Creek crossing. We trust that the recommendation to shift the alignment to the north will receive due consideration in the analysis of alternatives presented in the EA. it should also be noted that this area is part of the Sixteen Mile Creek Valley Environmentally Sensitive Area.	Comment acknowledged. Please see Section 9.3.1.1 of the draft ESR for discussion on impacts at the main Sixteen Mile Creek crossing.
4. The document notes that 170 trees will be removed and that 16 trees with their drip lines extending into the right-of-way will be assessed by a certified arborist at detailed design. The final ESR should identify whether/how these trees will be replaced.	Comment acknowledged. Please see Appendix B, Section 4.1.1.2, dated October 22, 2013.
5. Staff appreciate the additional discussion pertaining to wetland impacts. The final ESR should identify whether it would be possible to replace the habitat lost elsewhere.	Comment acknowledged. Please see Appendix B, Section 4.1.1.3, dated October 22, 2013.
<ul> <li>6. Conservation Halton has reviewed the ELC data sheets provided and as discussed at the January 23, 2013 meeting, they do riot provide the level of detail required to assess impacts on the significant woodlands. As reflected in the minutes from June 30, 2011, Conservation Halton agreed at the time to scope the extent of ELC work required in recognition of the following discussion points:</li> <li>Between First Line and Regional Road 25 the proposed alignment shifts north to avoid impacts to a woodland block that abuts the southern edge of the</li> </ul>	A site visit was held on May 2, 2013 with CH, Halton Region, Delcan and ABL staff. Additional work was confirmed by CH staff via email dated May 5, 2013. (Please see attached). Results from the additional field work can be found in Chapter 5 of the draft ESR and updated ELC sheets in Appendix B, Appendix 6.

×.	

- existing Britannia Road alignment.
- Immediately west of Highway 407 the proposed road alignment shifts south to avoid impacts to a woodland block that abuts the northern edge of the existing Britannia Road alignment.

We have since engaged in additional discussions with the Region on this issue and understand that efforts to avoid/minimize impacts on these features are ongoing. A site meeting has been scheduled for May 2 with the Region and their consulting team. Once the preferred alternative has been developed, staff will provide further confirmation of the extent of additional work required to assess impacts.

Hydraulic Analysis of Stream Crossings and Stormwater Report

- 7. The hydraulic modeling provided in support of the southerly by-pass of Omagh indicates a 0.13m and 0.07m increase in the Regional Storm floodplain downstream of the new crossing 11 at cross-sections 22 and 23 respectively. Staff contacted Aquafor Beech to discuss this and understand that the increase reflects an inconsistent modification of the Manning's roughness between the existing and proposed models, arid is not a result of the proposed road crossing. Aquafor Beech indicated that when the existing and proposed models were updated consistently there was no water level increase under proposed conditions at cross-sections 22 and 23. Staff request that the final report be updated accordingly. Also please confirm whether the red line shown on the Figure below Table 7 constitutes the regulatory floodplain. Given the proposed addition of a new crossing structure between existing cross sections 25 and 26, staff also request that cross sections 25.25 and 25.9 be added into the existing conditions model.
- 8. Staff noted a discrepancy between the proposed condition for Culvert 6. The Hydraulic report recommended replacement, but indicated that consideration could be given to extending the newly installed culvert at detailed design, should it be demonstrated not to have a hydraulic impact, while the geomorphic report indicated that this culvert should be extended. As noted in our February 21, 2013 email, for crossing 6, which has been replaced through the Regional Road 25

The requested modelling updates have been completed. As indicated in Appendix C, Table 7 of the updated Hydraulics report, the proposed crossing does not result in any Regional Storm flood elevation increases.

A legend has been added to the figure accompanying Table 7.

The Fluvial Geomorphology Study report,
Appendix D, Section 5 has been revised to note
that culvert replacement is recommended to
meet the hydraulic criteria under the EA study.
The Hydraulics report was also updated to
identify a third alternative for this crossing.
The third alternative involves the construction
of an additional barrel which would increase
the hydraulic capacity of the crossing as well as
improve terrestrial wildlife connectivity.

widening, and is not sufficiently sized to meet the hydraulic or geomorphic requirements, staff prefer that the structure be replaced as opposed to extended, such that the Region's objective of maintaining flood free access may be achieved and the environmental goals of the Boyne background studies can be achieved. Further, the Boyne FSEMS did identify this culvert as an Enhanced Wildlife Crossing Location, As such, the EA should describe how the dimensions of the existing culvert does or does not achieve this objective. If it is not providing enhanced wildlife habitat connectivity, then the report should document what steps could be taken to provide adequate dimensions. At the April 2, 2013 agency meeting the Region indicated that they may be twinning the structure. This may assist in achieving the terrestrial wildlife corridor movement if designed properly.

Fluvial Geomorphology Study

9. Table 1 highlights whether or not drainage features are regulated by Conservation Halton. In some locations, the culvert crossings associated with Britannia Road forms a dividing line between regulated and unregulated features, and, as such, the terminology used in Table 1 may not always be consistent. Please note that permits will be required for all works within the regulated limits, which would include culvert installations for those features that are regulated south of Britannia Road, but not north of Britannia Road, The following is offered for clarification purposes:

- The watercourses associated with Crossings 3 and 16 are regulated immediately downstream of Britannia Road and therefore, the crossing would be regulated, which is consistent with the watercourse status shown in Table 1.
- The watercourse associated with Crossing 8 is regulated immediately downstream of Britannia Road and therefore, the crossing would be regulated, which is inconsistent with the watercourse status shown in Table
   1.

The Fluvial Geomorphology Study report, Appendix D, Table 1 has been revised for Crossing 8.

10. Section 5 considered several design

Comment acknowledged. Please see Section

alternatives for potential culvert replacement alignments. Staff appreciate the benefit of locating the replacement at an off-set to the existing alignment to allow for construction to occur in the dry without a dam and pump, particularly for larger drainage systems. Crossings 1-4, 9, 11 and 14 identify both nonperpendicular and perpendicular alignments to satisfy CH's request for perpendicular crossings. Staff could generally support either option and are willing to consider the recommended oblique angle particularly for Crossing 14 (to avoid impacts to existing residences), Crossing 11 (where the channel traverses through the right of way at an unusual angle), and Crossing 9 (due to the downstream on-line pond). Notwithstanding this consideration, it is our understanding, based on the discussion at the April 2, 2013 agency meeting, that the updated FSEMS for Boyne, which is to be released shortly, may be recommending realignment of certain watercourses for a short distance south of Britannia Road. If that is the case, then the crossings associated with those watercourses should be perpendicular.

8.6.3 in the draft ESR.

11. Overall, staff are very pleased with quality and clarity of the submitted reports. The level of consideration that was incorporated into the conceptual analysis is not often evident at this scale of report, and staff feel that this will assist in an efficient review of the ultimate detailed design.

Comment noted.



November 8, 2013

Ms. Alicia Jakaitis Region of Halton 1151 Bronte Road Oakville, ON L6M 3L1 905,336,1158 Fax, 905,336,7014 2596 Bottannia Road West Burlington, Ontario 17P,0G3

conservationhalton.ca

Professional Services
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#### BY MAIL AND BY EMAIL

Dear Ms. Jakaitis

Ret

Britannia Road - Tremaine to Highway 407

Class Environmental Assessment Technical Background Reports (2013)

CH File: MPR 558

Conservation Halton staff appreciate the extended deadline for comments on the following report.

• Draft Environmental Study Report, Britannia Road Transportation Corridor Improvements, The Regional Municipality of Halton, prepared by Delcan Corporation and dated October 2013.

The following comments are offered.

#### **General Comments**

### Concerns Related to the Road Alignment

In June 2011 and again in December 2011, the study team indicated that western and eastern woodlands would be avoided by shifting the alignment of the road in these locations. On the basis of this information, Conservation Halton agreed to scope the extent of natural heritage inventory work required, particularly in relation to vegetation and amphibians. In late 2012/early 2013 it became apparent that the proposed design would, in fact, impact the two woodlands. A site walk was held on May 2, 2013 with Aquafor Beech, Delcan, the Region and Conservation Halton to determine what additional work would have to be done to evaluate impacts. This additional work was undertaken in 2013 and resulted in the discovery of a previously unknown population of Western Chorus Frogs, possible breeding of Eastern Wood-pewee and confirmed breeding of Barn Swallow all within or directly adjacent to the western woodland. Staff respectfully requests that the study team re-evaluate both the road alignment and design in this area to fully avoid impacts on the wetland-woodland complex and provide sufficient space to plant screening vegetation. We note that the north side of the road is an agricultural field.

#### Concerns Related to the Grade Separation

- 2. While CH staff should have anticipated the inclusion of a grade separation as part of the Britannia Road EA, a grade separation was not contemplated as part of the previously submitted hydraulic and geomorphic documents. Technical staff were unaware that a grade separation was being contemplated, and apologize that the below concerns were not flagged earlier in the process.
  - Conservation Halton's estimated floodplain model associated with Tributary 2 is very broad extending along the existing ditch line to the railline. While the width of the floodplain is expected to narrow considerably with the replacement of the existing culvert, staff are unable to predict how the proposed extent of the backwater will change with the modified grading associated with the construction of the road sag for the grade separation. To maintain flood-free access along Britannia Road, grading within the floodplain may be required to prevent floodwaters from spilling into the sag point at the grade separation. The Hydraulic and Stormwater Management Report should be updated as part of the EA to conceptually determine how grading and drainage modifications will impact the floodplain associated with Indian Creek Tributaries 1 and 2. The EA document should also contain an additional commitment requiring the completion of a detailed drainage and grading plan for the grade separation as well as a hydraulic analysis demonstrating that proposed grading changes result in no negative flooding and erosion impacts.
  - The additional geotechnical analysis described in Section 9.6 should be expanded to include a hydrogeotechnical component that:
    - o analyzes the impact the sag, foundation and pumping station may have on local groundwater conditions,
    - o identifies mitigation and monitoring strategies during and post construction,
    - o demonstrates that with mitigation in place, the proposed works will not negatively impact baseflows in Indian Creek,
    - o identifies four season groundwater elevations in the vicinity of the grade separation and at the adjacent tributaries northeast and southwest of the grade separation (crossings 1 and 2),
    - o determines the cone of influence of the grade separation, and
    - o determines the during (short term) and post (long term) construction effects of the grade separation and the pumping station on the adjacent watercourses. Will the grade separation affect the duration of flow in these watercourses?

Given the relatively low permeability of the area soils, and the separation distance between the rail line and the two adjacent Indian Creek tributaries, staff could support deferral of the hydrogeotechnical analysis to detailed design.

#### Riparian Plantings

3. It is suggested that a section be added to the ESR that considers opportunities for creating or enhancing some native riparian plantings adjacent to intermittent, ephemeral and permanently flowing watercourses with the ROW that adheres to the Tree-Canopy Replacement Policy on Regionally Owned Lands, as outlined in Regional Report No. LPS31-08 (see attached).

#### Specific Comments

- 4. Section 2.5, page 27 Future Traffic Conditions. This section references both the Boyne Secondary Plan and Milton Education Village, however no reference is provided to the Derry Green Secondary Plan. Will the development of the Derry Green Secondary Plan impact the EA analysis?
- Table 4-4, page 55 Natural Environment Evaluation Criteria Descriptions. Staff were pleased to see Natural Hazards and one of the Natural Environment Evaluation Criteria listed in Table 4-4. In future EA's, however, staff recommend that analysis of impacts with respect to this criteria be broadened from "Impacts to Natural Hazards", as is currently listed in Table 4-4 to a fuller consideration including:
  - Public safety implications (i.e., access limitations for public and emergency services due to flooding and erosion),
  - Opportunities to reduce or mitigate hazards to infrastructure,
  - Long term maintenance and operating costs, and
  - Approvability and construction feasibility. Note staff are not able to approve works which
    negatively impact the flooding or erosion hazard off site, and have a zero tolerance with
    respect to negative impacts experienced by existing habitable structures.
- 6. Figure 5-6, page 78 Study Area Stream Crossings. While Figure 5-6 and associated Figures contained in Appendices C and D are generally accurate, staff request four minor modifications:
  - Show crossings 3, 8, and 16 as regulated south of Britannia Road.
  - Show crossing 16 as unregulated north of Britannia Road.

Staff recognizes and appreciates that the reports have been updated to clearly reflect the regulated status of the watercourses upstream of Britannia Road, however we want to be sure that there is no confusion over which replacements will ultimately require permits. Please note that CH permits will be required to support road widening and culvert modification for all crossings shown, with the exception of 4, 5a, 10, 12, and 13. However, permits would not be required for the grading works associated with the optional redirection of flows within the unregulated portions of the channels north of Britannia Road, as per the Boyne Survey Secondary Plan.

- 7. Table 5-4, page 94 Results of the Fish Population Assessment for each Watercourse Crossing. Conservation Halton has recently collected fish community data in the main tributary of Sixteen Mile Creek both upstream and downstream of Britannia Road. Please contact Conservation Halton at your earliest convenience to obtain this information with respect to recommended updates. Please note that Silver Shiner were located at several locations sampled in the main branch of Sixteen Mile Creek, which flows under Britannia Road at crossing 7. Silver Shiner is currently under assessment and could be added to Schedule 1 of the federal Species at Risk Act (SARA) as early as March 2014. If this is the case, a permit may be required under that legislation with respect to crossings 7 and 15. It is also recommended that contact be made with the Aurora District Ontario Ministry of Natural Resources office with respect to any requirements for crossings 7 and 15 under the Endangered Species Act due to the presence of Silver Shiner.
- 8. Section 5.2.5.5, page 99 Significant Aquatic Species. Please provide an indication that a healthy population of Silver Shiner has also been sampled upstream of Britannia Road within the Main Branch of Sixteen Mile Creek (crossing 7).

- 9. Section. 5.3, page 101 Stormwater Management and Section 5.3.3, page 101 Draft Milton Urban Expansion Conceptual Fisheries Compensation Plan: Boyne Survey Area. This document recommends that thermal mitigation be incorporated into SWM facilities. It is recommended that thermal mitigation be provided for all stormwater originating from the proposed Britannia Road.
- 10. Section 5.4.2, page 105 Existing vs. Proposed Drainage Scenarios. This section notes that the watercourses at crossings 3 and 8 are unregulated. Note that these watercourses are regulated by Conservation Halton. Please update this information accordingly. It is suggested that a site visit to these watercourses be conducted at the initiation of the detailed design phase to confirm the fish habitat status of these watercourses.
- 11. Figure 8-21, page 186 Property and Easement Requirement Associated with CN Grade Separation. A hydrogeological study is requested for the proposed CN Grade Separation at the detailed design stage as per our general comment 2.
- 12. Figure 8-22, page 189 General Arrangement Drawing for Sixteen Mile Creek Main Branch Structure. A Hydrogeological Study is requested at the detailed design stage to determine what impacts from dewatering during construction and interruptions to baseflow contributions may occur during construction. This study should outline feasible mitigation measures to reduce interruption of groundwater to baseflow in the creek (if necessary) as well as potential impacts to the creek from dewatering during the construction stage of the project.
- 13. Figure 8-23, page 190 General Arrangement Drawing for Sixteen Mile Creek East Branch Structure. A Hydrogeological Study is requested at the detailed design stage to determine what impacts from dewatering during construction and interruptions to baseflow contributions may occur during construction. This study should outline feasible mitigation measures (if necessary) to reduce interruption of groundwater to baseflow in the creek as well as potential impacts to the creek from dewatering during the construction stage of the project.
- 14. Section 9.3.1.1, page 204 Flora and Vegetation Communities and Section 9.3.1.5, page 205 Significant Species & Habitat. There appear to be contradictory statements in the document regarding the extent (if any) of intrusion into the provincially rare hickory deciduous forest south of Britannia Road at the main Sixteen Mile Creek crossing. For example:
  - Page 204- "The provincially rare hickory deciduous forest along the eastern valley slope to the south is offset from the present Britannia Road alignment by about 20 metres, and is not expected to experience direct impacts from road expansion to the south."
  - Page 206- "Proposed improvements to Britannia Road will encroach approximately 10m into the dry-fresh hickory deciduous forest (FOD2-3) associated with the Main and East Branches of Sixteen Mile creek, which is considered Regionally Significant."

Please clarify.

15. Section 9.3.1.5, page 207 (last full paragraph) - Significant Species & Habitat. This paragraph states that breeding bird surveys found no evidence of breeding Barn Swallows and that "there are no anthropogenic structures with the potential to function as Barn Swallow nesting habitat present within the study area outside of Omagh". However, as noted in the paragraph that follows, Barn

Swallows were confirmed to be nesting in the culvert at crossing beside the western woodlot. Please reword the first paragraph to clarify this discrepancy.

- 16. Section 7.2, page 143 Technical Advisory Committee and Section 11, page 225 Additional Work, Permits & Monitoring. The references in these sections appear to indicate that one permit application will be required for the entire stretch of Britannia Road. While one submission may be made to address multiple works within the regulated area, ultimately a separate permit will be required for works within the regulated area associated with each watercourse crossing, which could include the construction of new stormwater management outfalls, culvert replacements, grading, and relocation of utilities. Please provide a detailed commitments tables in the final document.
- 17. Table 11-1, page 228 Permits and Approvals. Approval or registration (if applicable) under the Endangered Species Act will also be required in the event of any predicted impacts on the crossing 5 culvert, which provides nesting habitat. Also, the reference on page 230 under Conservation Halton is incorrect. The name of Ontario Regulation 162/06 is Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. A CH permit is required for any works (site alteration or development) with all area regulated under Ontario Regulation 162/06. This includes valleylands (erosion and flooding hazards), wetlands and lands within 120m of provincially significant wetlands and wetlands greater than or equal to 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, watercourses. It is suggested that the wording in the comment column be changed to indicate that permits are required "for any site alteration or development within an area regulated under Ontario Regulation 162/06."

#### Appendix B - Terrestrial and Aquatic Resources Report

For ease of reference, comments on Appendix B linked to our previous comments are cross-referenced to items in our April 5, 2013 letter as attached.

- 18. Comment 2 is addressed.
- 19. Comment 3 is addressed.
- 20. Comment 4 is addressed. Section 4.1.1.2, pages 49 50 Tree Survey. We note that tree replacement will be undertaken at a ratio of 3:1 and request that consideration be given at design stage to planning at least some of the trees in areas beyond the ROW in such a manner as to provide an ecological benefit to the natural features which are immediately adjacent.
- 21. Comment 5 is addressed. Section 4.1.1.3, page 50 Wetlands. We appreciate the Region's commitment to investigate opportunities for wetland compensation at detailed design and would request that these opportunities be located outside of the ROW if possible. Salt is toxic to many aquatic organisms, and wetlands directly adjacent to a six-lane road would be anticipated to function at a lower level than they would if located beyond the area of influence of the road. It is also generally undesirable to attract wildlife to roadside habitats, given the potential for road mortality.

22. Comment 6 remains outstanding. The western woodland meets the size criterion for designation as a Significant Woodland. The additional fieldwork noted possible breeding by the Eastern Woodpewee (nationally Special Concern), and confirmed breeding habitat in the adjacent marsh for a nationally Threatened species, the Western Chorus Frog. The woodland itself would provide terrestrial feeding and overwintering habitat for Western Chorus Frog during the remainder of the year, and the culvert immediately upstream of the marsh provides confirmed nesting habitat for another species at risk, Barn Swallow (nationally and provincially Threatened). The study team has concluded that the western woodland would be a good candidate for consideration as Significant Wildlife Habitat. The July 2013 version of the report (included in the original ESR circulation package) recommends three times that the road alignment be shifted north to avoid impacting this habitat complex. We note however that this recommendation has been removed from the October 2013 version of the document, and that the ESR continues to show encroachment. The preliminary design through this section appears to be a typical cross section with a central median (5m), bike lanes (1.8m each) boulevards (3m each) and multi-use paths (3.0m each) on both sides of the sixlane road. We request that the study team re-evaluate both the road alignment as per our general comment on page 1 of this letter, in addition to employing design measures to minimize the extent of the disturbance through this area.

### **New Comments**

- 23. Section 3.3.4, page 43 Historic Records of Provincially Significant Fauna. 'The text indicates that "Surveys for salamanders and vernal pools will be completed during the first spring rains of 2013. Afterwards, existing conditions will be reported and possible future study requirements will be recommended once the surveys are complete, to be undertaken as part of detail design." Were these surveys in fact completed in 2013 or is this a typographic error (2014)? As indicated on page 158 of the ESR, MNR has now confirmed that salamander surveys will not be required.
- 24. Table 4.1, page 62 Summary of the possible impacts of existing terrestrial and aquatic resources resulting from each design alternative. This table does not include all the terrestrial impacts described in Section 4.5.1.1 and should be revised.
- 25. Section 5.1.2, page 64 Protecting the Significant Woodlands from Human Encroachment. The October version of the report contains a new paragraph outlining mitigation measures to offset the proposed encroachment into the Western Woodland. It is unclear whether these measures are proposed for north or south of Britannia Road. Compensatory Western Chorus Frog habitat creation within the west branch of Sixteen Mile Creek through Boyne would be duplicative, as this is already a requirement of development applications as they are advanced for approvals. Compensation south of Britannia Road is problematic because it would require approval from the landowner. The proposed mitigation is also not supported on principle because the impact can and should be avoided altogether rather than mitigated. Staff do support the recommendation for dense planting of salt-tolerant conifers to screen the impacts of increased salt and light, however these plantings should be located outside the boundary of the wetland such that no disturbance to the existing natural features occurs.
- 26. Appendix 6, ELC Field Sheets. Please update status for Barn Swallow, Eastern Wood-pewee and Savannah Sparrow.

- 27. There is a note on several of the figures indicating that the "alignment may change during detailed design phase." We recommend that the selection of the preferred alternative be revisited at detailed design should the impacts to natural heritage features be greater than those described in the ESR.
- 28. Figure 1, Natural Heritage Features West of The Community of Omagh, Sheet 3 of 4. It is noted that the boulevard between the road and the sidewalk has been removed from the design for the portion of the road at crossing 7, which results in a narrower footprint in this area. This should be continued west and east to the limits of the natural features adjacent to the crossing to minimize impacts, particularly on the provincially rare FOD2-3.
- 29. Figure 3. Natural Heritage Features East of The Community of Omagh, Sheet 3 of 4 Similar to the comment above, boulevards should be removed through sections of the road that traverse natural vegetation communities.
- 30. Figure 3, Natural Heritage Features East of the Community of Omagh, Sheet 4 of 4 Part of the design overlay is cut off as it approaches the eastern woodland. Please provide a corrected figure.

### Appendix D – Fluvial Geomorphology Study – Section 5.0 Culvert Alignment Recommendations and (sub) Appendix C Culvert Alignment Recommendations

- 31. Conservation Halton thanks the Region and its consultants for their efforts to fully present the various options in this section of the ESR.
  - Crossing 1: Option 2 continues to be Conservation Halton's preferred option because its alignment conforms to the Boyne Secondary Plan.
  - Crossing 2: The recommended option (hybrid of options 3 and 4) is acceptable.
  - Crossing 3: The recommended option (hybrid of Options 1 and 4) is acceptable.
  - Crossing 4: The recommended option (hybrid of options 3 and 4) is acceptable.
  - Crossing 5: The option 3 culvert location is acceptable to Conservation Halton, however, on the
    upstream side of Britannia Road, the tie in should be moved further upstream to facilitate a
    smoother transition with the existing channel that will minimize or alleviate the need for any
    channel hardening.
  - Crossing 8: Option 3 is acceptable.
  - Crossing 9: The option involving the offsetting of the culvert to the west would be preferred to
    facilitate the use of a shorter culvert and to avoid the creation of a sharp bend on the south side
    of Britannia Road on private property; it is recognized this may require a more substantial
    channel realignment on the north side of the road.
  - Crossing 11: The hybrid of options 2 and 3 is preferred to minimize the length of the culvert and
    to create a more smooth transition from the watercourse into and out of the crossing structure
    that would minimize the need for hardening the watercourse to protect it from the risk of
    erosion.
  - Crossing 14: The recommended option is acceptable. It is preferred that the tie in point between the realigned channel and the existing channel be extended farther away from the downstream side of the road to reduce the sharpness of the bend required in the creek alignment.

- Crossing 16: Option 2 is acceptable.
- Crossing 17: The recommended option (hybrid of options 1 and 4) is acceptable.

### Appendix J - Preferred Design

- 32. A legend should be provided on all figures.
- 33. Efforts should be made to minimize the extent of the road footprint and ROW that extends into the areas regulated by Conservation Halton (e.g., wetlands at crossings 2 and 3 and west of the eastern woodland) as well as other natural vegetation communities.
- 34. Please confirm the proposed grading at the match point between the conceptual plan and profile drawing included in Appendix J (at approximately 183.2 and sloping down at 0.48%) and the match point identified in the Britannia Road EA study are consistent. Staff note that based on the Tremaine Road Drawing (sheet 09 of 79 of Regional Contract R-2675B-13, dated November 2013), the centerline elevation at the intersection appears to be approximately 183.8m.

We trust that the above comments are of assistance. If you require further information, please contact the undersigned at extension 273.

Yours truly,

Barbara Veale, PhD, MCIP, RPP

Barbara Veale

Manger, Planning and Regulation Services

Encl. 2

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Subject: Attachments: FW: CH Response Table Britannia

Britannia Road - CH response 26 Nov 2013-Figure 1 2 and 3.pdf; Response to Nov 8

2013 CH Letter - Dec 02 2013.pdf; Response to Nov 8 2013 CH Letter - With Track

Changes - Dec 02 2013.pdf

From: Jakaitis, Alicia [mailto:Alicia.Jakaitis@halton.ca]

Sent: Monday, December 09, 2013 9:08 AM

To: Barb Veale (byeale@hrca.on.ca)

Cc: amayes@hrca.on.ca; 'smason@hrca.on.ca'; 'kbarrett@hrca.on.ca'; 'Andrew McGregor'; n.palomba@delcan.com;

Green-Battiston, Melissa; frew.g@aguaforbeech.com; 'Ash Baron' (baron.a@aguaforbeech.com)

Subject: FW: CH Response Table Britannia

Hi Barb.

Further to our meeting on November 27<sup>th</sup>, please find the attached comment/response table to your letter dated November 8, 2013. A copy with track changes is also attached for ease of review for your team.

If you require anything please let me know, I would also appreciate if comments on the table could be sent to the Region by Friday December 20<sup>th</sup>.

Alicia

### Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca

This message, including any attachments, is privileged and intended only for the person(s) named above. This material may contain confidential or personal information which may be subject to the provisions of the Municipal Freedom of Information & Protection of Privacy Act. Any other distribution, copying or disclosure is strictly prohibited. If you are not the intended recipient or have received this message in error, please notify us immediately by telephone, fax or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

		(4)

	No.	4o. Conservation Halton Comment (November 8, 2013)	Region Response (November 26, 2013)
		culvert, staff are unable to predict how the proposed extent of the backwater will change with the modified grading associated with the construction of the road sag for the grade separation. To maintain flood-free access along Britannia Road, grading within the floodplain may be required to prevent floodwaters from spilling into the sag point at the grade separation. The Hydraulic and Stormwater Management Report should be updated as part of the EA to conceptually determine how grading and drainage modifications will impact the floodplain associated with Indian Creek Tributaries 1 and 2. The EA document should also contain an additional commitment requiring the completion of a detailed drainage and grading plan for the grade separation as well as a hydraulic analysis demonstrating that proposed grading changes result in no negative flooding and erosion impacts.	
		The additional geotechnical analysis described in Section 9.6 should be expanded to include a hydrogeotechnical component that:  o analyzes the impact the sag, foundation and pumping station may have on local groundwater conditions,  o identifies mitigation and monitoring strategies during and post construction,  o demonstrates that with mitigation in place, the proposed works will not negatively impact baseflows in Indian Creek,  o identifies four season groundwater elevations in the vicinity of the grade separation and at the adjacent tributaries northeast and southwest of the grade separation and at the adjacent tributaries northeast and determines the during (short term) and post (long term) construction effects of the grade separation and the pumping station on the adjacent watercourses. Will the grade separation and the duration of flow in these watercourses?	The additional geotechnical analysis to be completed during detailed design has been expanded to include the noted hydrogeotechnical components in Section 8.6.
		Given the relatively low permeability of the area soils, and the separation distance between the A commitmer rail line and the two adjacent Indian Creek tributaries, staff could support deferral of the added to Sec hydrogeotechnical analysis to detailed design.	A commitment to completing the noted hydrogeotechnical analysis during detail design has been added to Sections 8.6 and 10.1 of the ESR.
101	m	It is suggested that a section be added to the ESR that considers opportunities for creating or enhancing some native riparian plantings adjacent to intermittent, ephemeral and permanently flowing watercourses with the ROW that adheres to the Tree-Canopy Replacement Policy on Regionally Owned Lands, as outlined in Regional Report No. LPS31-08 (see attached).	The noted statement has been added to the main body of the report and the ESR.
41	Spec	Specific Comments	
4	4	Section 2.5, page 27 – Future Traffic Conditions. This section references both the Boyne Secondary Plan and Milton Education Village, however no reference is provided to the Derry Green Secondary Plan. Will the development of the Derry Green Secondary Plan impact the EA analysis?	The traffic forecasting and subsequent analysis completed as part of the Britannia Road EA was based on the Regional Travel Demand model for the 2031 horizon year. All committed developments within this horizon year were included in the Regional Model and, as such, the traffic generated by these areas would form part of the forecasts used in this EA.
<u>u</u>	ω	Table 4-4, page 55 – Natural Environment Evaluation Criteria Descriptions. Staff was pleased to see Natural Hazards and one of the Natural Environment Evaluation Criteria listed in Table 4-4. In future EA's, however, staff recommend that analysis of impacts with respect to this criteria be broadened from "Impacts to Natural Hazards", as is currently listed in Table 4-4 to a fuller consideration including:	oted.

No	Conservation Halton Comment (November 8, 2013)	Region Response (November 26, 2013)
	<ul> <li>Public safety implications (i.e., access limitations for public and emergency services due to flooding and erosion),</li> <li>Opportunities to reduce or mitigate hazards to infrastructure,</li> <li>Long term maintenance and operating costs, and</li> <li>Approvability and construction feasibility. Note - staff are not able to approve works which negatively impact the flooding or erosion hazard off site, and have a zero tolerance with respect to negative impacts experienced by existing habitable structures.</li> </ul>	
۵	- Study Area Stream Crossings. While Figure 5-6 and associated Figures dices C and D are generally accurate, staff request four minor sings 3, 8, and 16 as regulated south of Britannia Road. sing 16 as unregulated north of Britannia Road. appreciates that the reports have been updated to clearly reflect the ewatercourses upstream of Britannia Road, however we want to be sure sion over which replacements will ultimately require permits. Please note be required to support road widening and culvert modification for all not the exception of 4, 5a, 10, 12, and 13. However, permits would not be ding works associated with the optional redirection of flows within the of the channels north of Britannia Road, as per the Boyne Survey	Figure 5-6 in the ESR report and Figure 1 in the ABL report in the appendix have been revised to include the noted stream crossing figure updates. The revised figures will make it clear which features are regulated / unregulated on the upstream and downstream side of Britannia Road. Permit requirements have been noted in Section 10.2 of the ESR.
_	Table 5-4, page 94 - Results of the Fish Population Assessment for each Watercourse Crossing. Conservation Halton has recently collected fish community data in the main tributary of Sixteen Mile Creek both upstream and downstream of Britannia Road. Please contact Conservation Halton at your earliest convenience to obtain this information with respect to recommended updates. Please note that Silver Shiner were located at several locations sampled in the main branch of Sixteen Mile Creek, which flows under Britannia Road at crossing 7. Silver Shiner is currently under assessment and could be added to Schedule 1 of the federal Species at Risk Act (SARA) as early as March 2014. If this is the case, a permit may be required under that legislation with respect to crossings 7 and 15. It is also recommended that contact be made with the Aurora District Ontario Ministry of Natural Resources office with respect to any requirements for crossings 7 and 15 under the Endangered Species Act due to the presence of Silver Shiner.	The study team is in the process of obtaining the most up-to-date fisheries information for 16 Mile Creek from Conservation Halton.  Furthermore, the MNR will be contacted with regards to the presence of regulated Silver Shiner habitat. The MNR has previously been contacted with regards to Silver Shiner in the project study area, and have indicated that they wish to be involved at the detailed design phase only. The ESR will state that at detailed design a commitment will be made to adhere to the Endangered Species Act and, if applicable, the Species at Risk Act, as well as associated permits from the MNR and DFO, respectively.
œ	Section 5.2.5.5, page 99 - Significant Aquatic Species. Please provide an indication that a healthy population of Silver Shiner has also been sampled upstream of Britannia Road within the Main Branch of Sixteen Mile Creek (crossing 7).	The report will be updated to indicate the presence of Silver Shiner following the acquisition of updated fisheries information from Conservation Halton.
0	Section. 5.3, page 101 - Stormwater Management and Section 5.3.3, page 101 - Draft Milton Urban Expansion Conceptual Fisheries Compensation Plan: Boyne Survey Area. This document recommends that thermal mitigation be incorporated into SWM facilities. It is recommended that thermal mitigation be provided for all stormwater originating from the proposed Britannia Road.	Section 5.3.3 of the final ESR will be updated to include the recommendation that the Boyne SWM facilities, which will ultimately capture the adjacent Britannia Road runoff, include thermal mitigation measures.  For the section of the road which will not be serviced by the future Boyne ponds, oil-grit separators (OGS's) are recommended for water quality treatment. A recommendation will be added to the report that Low Impact Development (LID) methods which provide thermal benefits should also be considered in these areas, subject to feasibility and Region design standards, Priority would be given

2	No. Lonservation Haiton Comment (November 8, 2015)	Region Response (November 25, 2013) to those areas discharging to streams with more sensitive fisheries such as those containing Silver
		Sulner.
10	Section 5.4.2, page 105 - Existing vs. Proposed Drainage Scenarios. This section notes that the watercourses at crossings 3 and 8 are unregulated. Note that these watercourses are regulated by Conservation Halton. Please update this information accordingly. It is suggested that a site visit to these watercourses be conducted at the initiation of the detailed design phase to confirm the fish habitat status of these watercourses.	It is our understanding that the watercourses at crossings No. 3 and 8 are regulated south of Britannia Road, but unregulated north of Britannia Road (see also CH comment No. 6). The report text in Section 5.4.2 will be revised to make it clear that the proposed drainage modifications on these features are to take place upstream of Britannia Road.  A commitment to undertake a site visit during detailed design phase of the project to confirm the fish habitat status of these watercourses will be added to Section 10.1 of the ESR.
11	1 Figure 8-21, page 186 - Property and Easement Requirement Associated with CN Grade Separation. A hydrogeological study is requested for the proposed CN Grade Separation at the detailed design stage as per our general comment 2.	de See response #2. .he
12	Structure. A Hydrogeological Study is requested at the detailed design stage to determine what impacts from dewatering during construction and interruptions to baseflow contributions may occur during construction. This study should outline feasible mitigation measures to reduce interruption of groundwater to baseflow in the creek (if necessary) as well as potential impacts to the creek from dewatering during the construction stage of the project.	Ich A commitment to complezing the noted hydrogeological study has been added to Section 10.1 of the ESR.  Institution is a section 10.1 of the se
13	Structure. A Hydrogeological Study is requested at the detailed design stage to determine what impacts from dewatering during construction and interruptions to baseflow contributions may occur during construction. This study should outline feasible mitigation measures (if necessary) to reduce interruption of groundwater to baseflow in the creek as well as potential impacts to the creek from dewatering during the construction stage of the project.	ch A commitment to completing the noted hydrogeological study has been added to Section 10.1 of the ESR.  Ins (if ital)
11	Section 9.3.1.1, page 204 – Flora and Vegetation Communities and Section 9.3.1.5, page 205 – Significant Species & Habitat. There appear to be contradictory statements in the document regarding the extent (if any) of intrusion into the provincially rare hickory deciduous forest south of Britannia Road at the main Sixteen Mile Creek crossing. For example:  • Page 204- "The provincially rare hickory deciduous forest along the eastern valley slope to the south is offset from the present Britannia Road alignment by about 20 metres, and is not expected to experience direct impacts from road expansion to the south."  • Page 206- "Proposed improvements to Britannia Road will encroach approximately 10m into the dry-fresh hickory deciduous forest (FOD2-3) associated with the Main and East Brianches of Sixteen Mile creek, which is considered Regionally Significant."	The reference on Page 204 has been modified to confirm that there is an impact to the FOD2-3 nnt Hickory Deciduous forest. To clarify, to achieve the 47m ROW, a property widening of 9.8m is required on the south side within this area. The southerly limit of the multi-use trail extends 7.2 m into this area and includes a 2.5m boulevard. This boulevard area was referenced in comment #28 as a feature to be eliminated. This would reduce encroachment into the noted feature to 4.7m.  Compensation plantings will be planted within the ROW in this area.  See Figure 2.
15	Section 9.3.1.5, page 207 (last full paragraph) - Significant Species & Habitat. This paragraph states that breeding bird surveys found no evidence of breeding Barn Swallows and that "there are no anthropogenic structures with the potential to function as Barn Swallow nesting habitat present within the study area outside of Omagh". However, as noted in the paragraph that follows, Barn Swallows were confirmed to be nesting in the culvert at crossing beside the	ph Barn Swallow was noted during a field visit with CH, but not during breeding bird surveys. The ESR reports have been revised to reflect that Barn Swallows are nesting within the culvert at crossing #5 and that habitat is present within the study area.  Additional recommendations regarding culvert replacement details and timing will also be added to the report. Specifically, the existing concrete box culvert will be replaced with a wider and longer

western woodlet, Please reword the first paragraph to clarify, this discrepancy.  Section 7.2, page 143 - Technical Advisory Committee and Section 11, page 225 - Additional Section 10.2 of the ESR has been revised to include the originate that on a spination with the WINK will take by a piper 143 - Technical Advisory Committee accions appear to include that the section 10.2 of the ESR has been revised to include the noted districts on the separate permits at home required for works within the requisted area, ultimately a separate permits will be required for works within the requisted area, ultimately a separate permits will be required for works within the requisted area, ultimately a separate permits will be required for works within the requisted area submitted as a separate permits will be required for works within the requisted area works within the requisted a separate with a separate permits will be required for works within the requisted a separate permits and Approvale. Approval of the sport of the separate permits and Approvale Approval of the sport of the separate permits and Approvale regulated and a separate permits and Approvale regulated and a separate permits and Approvale regulated and a separate permits and Approvale of the separate permits and Approvale work of the separate permits and Approvale of the separate permits an	No.	Conservation Halton Comment (November 8, 2013)	Region Response (November 26, 2013)
Section 7.2, page 143 - Technical Advisory Committee and Section 11, page 225 - Additional Work, Permits & Monitoring. The references in these sections appear to indicate that one permit application will be required for the entire stretch of Britannia Road. While one submission may be made to address multiple works within the regulated area, ultimately a separate permit will be required for works within the regulated area associated with each watercourse crossing, which could include the construction of new stormwater management outfalls, culvert replacements, grading, and relocation of utilities. Please provide a detailed commitment tables in the final document.  Table 11-1, page 228 - Permits and Approvals. Approval or registration (if applicable) under the Endangered Species Act will also be required in the event of any predicted impacts on the crossing. Sculvert, which provides nesting habitat. Aso, the reference on page 230 under Conservation Halton is incorrect. The name of Ontario Regulation 162/06 is Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. A CH permit is required for any works (site alteration or development) with all area regulated under Ontario Regulation 120m of provincially significant wetlands and wetlands greater than or equal to 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, watercourses. It is suggested that the wording in the comment column be changed to indicate that tree engineer with a saddressed. Section 4.1.1.2, pages 49 - 50 - Tree Survey. We note that tree lesign stage to			concrete box culvert during a time when Barn Swallows are not using the nests (i.e. when the birds have migrated south). Consultation/registration with the MNR will take place at detailed design, at which point the specifics of culvert replacement will be determined.
Table 11-1, page 228 – Permits and Approvals. Approval or registration (if applicable) under the Endangered Species Act will also be required in the event of any predicted impacts on the crossing 5 culvert, which provides nesting habitat. Also, the reference on page 230 under Conservation Halton is incorrect. The name of Ontario Regulation 162/06 is <u>Development</u> , Interference with Wetlands and Alterations to Shorelines and Watercourses. A CH Permit is required for any works (site alteration or development) with all area regulated under Ontario Regulation 162/06. This includes valleylands (erosion and flooding hazards), wetlands and lands within 120m of provincially significant wetlands and wetlands greater than or equal to 2 hectares in size, and areas within 30m of wetlands less than 2 hectares in size, watercourses. It is suggested that the wording in the comment column be changed to indicate that permits are required "for any site alteration or development within an area regulated under Ontario Regulation 162/06."  Comment 2 is addressed.  Comment 2 is addressed.  Comment 3 is addressed.  Comment 4 is addressed. Section 4.1.1.2, pages 49 - 50 - Tree Survey. We note that tree replacement will be undertaken at a ratio of 3:1 and request that consideration be given at design stage to planning at least some of the trees in areas beyond the ROW in such a manner as to provide an ecological benefit to the natural features which are immediately adjacent.  Comment 5 is addressed. Section 4.1.1.3, pages 50 - Wetlands. We appreciate the Region's commitment to investigate opportunities for wetland compensation at detailed design and would request that these opportunities for wetland compensation at detailed design and would request that these opportunities for wetland compensation at detailed besign and would request that these opportunities for wetland compensation at detailed besign and would request that these opportunities for wetland compensation as ix-lane road mortality.	16		Section 10.2 of the ESR has been revised to include the noted clarification. All Commitments have been outline in the text of the report.
Comment 2 is addressed.  Comment 3 is addressed.  Comment 4 is addressed.  Comment 4 is addressed. Section 4.1.1.2, pages 49 - 50 - Tree Survey. We note that tree replacement will be undertaken at a ratio of 3:1 and request that consideration be given at design stage to planning at least some of the trees in areas beyond the ROW in such a manner as to provide an ecological benefit to the natural features which are immediately adjacent.  Comment 5 is addressed. Section 4.1.1.3, page 50 - Wetlands. We appreciate the Region's commitment to investigate opportunities for wetland compensation at detailed design and would request that these opportunities be located outside of the ROW if possible. Salt is toxic to many aquatic organisms, and wetlands directly adjacent to a six-lane road would be anticipated to function at a lower level than they would if located beyond the area of influence of the road. It is also generally undesirable to attract wildlife to roadside habitats, given the potential for road mortality.	17	or registration (if applicable) underent of any predicted impacts on the , the reference on page 230 under Regulation 162/06 is <u>Development</u> , and <u>Watercourses</u> . A CH permit is ith all area regulated under Ontario nd flooding hazards), wetlands and wetlands greater than or equal to 2 we bectares in size, watercourses. be changed to indicate that permits in an area regulated under Ontario	rable 11-1 of the ESR has been revised to include the noted clarifications.
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Comment 3 is addressed.  Comment 4 is addressed. Section 4.1.1.2, pages 49 - 50 - Tree Survey. We note that tree replacement will be undertaken at a ratio of 3:1 and request that consideration be given at design stage to planning at least some of the trees in areas beyond the ROW in such a manner as to provide an ecological benefit to the natural features which are immediately adjacent.  Comment 5 is addressed. Section 4.1.1.3, page 50 - Wetlands. We appreciate the Region's commitment to investigate opportunities for wetland compensation at detailed design and would request that these opportunities be located outside of the ROW if possible. Salt is toxic to many aquatic organisms, and wetlands directly adjacent to a six-lane road would be anticipated to function at a lower level than they would if located beyond the area of influence of the road. It is also generally undesirable to attract wildlife to roadside habitats, given the potential for road mortality.	18	Comment 2 is addressed.	Acknowledged
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	21	Comment 5 is addressed. Section 4.1.1.3, page 50 – Wetlands. We appreciate the Region's commitment to investigate opportunities for wetland compensation at detailed design and would request that these opportunities be located outside of the ROW if possible. Salt is toxic to many aquatic organisms, and wetlands directly adjacent to a six-lane road would be anticipated to function at a lower level than they would if located beyond the area of influence of the road. It is also generally undesirable to attract wildlife to roadside habitats, given the potential for road mortality.	See response #20. Please note that existing wetlands adjacent to Britannia Rd are already subject to salt impacts. In an effort to lessen impacts from salt, it is proposed that salt-tolerant evergreen trees be planted within the ROW in areas adjacent to wetlands.

Conservation Halton Comment (November 8, 2013)	Comment 6 remains outstanding. The western woodland meets the size criterion for Gesponses #1 and #15.  designation as a Significant Woodland. The additional fieldwork noted possible breeding by the Eastern Woodland. The additional fieldwork noted possible breeding habitat in the adjacent marsh for a nationally Threatened species, the Western Chorus Frog. The woodland is and the culver immediately upstream of the marsh provides confirmed nesting habitat for wastern Chorus Frog during the remainder of the year, and the culvert immediately upstream of the marsh provides confirmed nesting habitat for another species at risk, Barn Swallow (nationally and provincially Threatened). The study team has concluded that the western woodland would be a good son sideration as Significant Wildlife Habitat. The July 2013 version of the report (included in the original ESR critation package) recommendate from the October 2013 version of the document, and that the schement and the ESR continues to show encroachment. The preliminary design through this section appears to be a typical cross section with a central median (5m), bike lanes (1.8m each) boulevards (3.0m each) on both sides of the six-lane road. We request that the study team re-evaluate both the road alignment as per our general comment on page 1 of this letter, in addition to employing design measures to minimize the extent of the	Section 3.3.4, page 43 - Historic Records of Provincially Significant Fauna. The text indicates that "Surveys for salamanders and vernal pools will be completed during the first spring rains of 2013. Afterwards, existing conditions will be reported and possible future study requirements will be recommended once the surveys are complete, to be undertaken as part of detail design." Were these surveys in fact completed in 2013 or is this a typographic error (2014)? As indicated on page 158 of the ESR, MNR has now confirmed that salamander surveys will not be required.	Table 4.1, page 62 – Summary of the possible impacts of existing terrestrial and aquatic resources resulting from each design alternative. This table does not include all the terrestrial impacts described in Section 4.5.1.1 and should be revised.	Section 5.1.2, page 64 - Protecting the Significant Woodlands from Human Encroachment. The Corober version of the report contains a new paragraph outlining mitigation measures to offset the proposed encroachment into the Western Woodland. It is unclear whether these measures are proposed encroachment into the Western Woodland. It is unclear whether these measures are proposed encroachment into the Western Woodland. It is unclear whether these measures are proposed encroachment into the Western Woodland. It is unclear whether these measures are proposed encroachment into the Western Woodland. It is unclear whether these measures are proposed encroachment into the Western Woodland. It is unclear whether these planting mitigation measures to offset the proposed encroachment into the Western Woodland. It is unclear whether these planting of sold-tolerant confers to screen the impacts of increased such that an ignitive page of the service of the wetland into the west branch of Sixteen Mile Creek through Boyne would be duplicative, as this is already a requirement of development applications as they are advanced for approval from the landowner. The proposed mitigation is also not supported on principle because the impact of and should be avoided altogether rather than mitigated. Staff do support the recommendation for dense planting of salt-tolerant confers to screen the impacts of increased such that not disturbance to the existing a should be avoided altogether rather planting should be avoided altogether and the proposed mitigation is also not supported on principle because it would require approval from the proposed mitigation is also not supported on principle because the impact of the wetland that not support the report of the wetland that the proposed mitigation is also not supported on principle because the impact of the wetland that the right-of-way.
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Response to Nov. 8, 2013 Conservation Halton Letter

		(Charles of reduction) operated actions
NO	Conservation Haiton Comment (November 8, 2013)	region response (november 20, 2013)
26	Appendix 6, ELC Field Sheets. Please update status for Barn Swallow, Eastern Wood-pewee and Savannah Sparrow.	Field sheets are photocopied originals and will not be edited. The body of the report indicates the correct status of Species at Risk.
		Species lists within the document will be reviewed to ensure that the Federal and Provincial status of species at risk are correct.
27	There is a note on several of the figures indicating that the "alignment may change during detailed design phase." We recommend that the selection of the preferred alternative be revisited at detailed design should the impacts to natural heritage features be greater than those described in the ESR.	Clarification. The alignment will not be changed during detailed design and on minor refinements will be made if necessary.
58	Figure 1, Natural Heritage Features West of The Community of Omagh, Sheet 3 of 4. It is noted that the boulevard between the road and the sidewalk has been removed from the design for the portion of the road at crossing 7, which results in a narrower footprint in this area. This should be continued west and east to the limits of the natural features adjacent to the crossing to minimize impacts, particularly on the provincially rare FOD2-3.	The plans have been revised to extend the curb-face multi-use trail to the limits of the identified natural features as requested.  Refer to comment/response #14 & #33. See Figure 2.
59	Figure 3, Natural Heritage Features East of The Community of Omagh, Sheet 3 of 4 - Similar to the comment above, boulevards should be removed through sections of the road that traverse natural vegetation communities.	The boulevard on the south side will be reduced by 1.5 m, thereby reducing impacts and maintaining some separation of the trail from the roadway.  See response to #33 related to safety. See Figure 3.
30	Figure 3, Natural Heritage Features East of the Community of Omagh, Sheet 4 of 4 - Part of the design overlay is cut off as it approaches the eastern woodland. Please provide a corrected figure.	A corrected figure has been provided in the updated report.
App	Appendix D – Fluvial Geomorphology Study – Section 5.0 Culvert Alignment Recommendations and (sub) Appendix C Culvert Alignment Recommendations	and (sub) Appendix C Culvert Alignment Recommendations
31	Conservation Halton thanks the Region and its consultants for their efforts to fully present the various options in this section of the ESR.	The noted culvert alignment recommendations have been noted in the final report. These items will be given further consideration during detailed design.
	<ul> <li>Crossing 1: Option 2 continues to be Conservation Halton's preferred option because its alignment conforms to the Boyne Secondary Plan.</li> <li>Crossing 2: The recommended option (hybrid of options 3 and 4) is acceptable.</li> <li>Crossing 3: The recommended option (hybrid of options 1 and 4) is acceptable.</li> <li>Crossing 5: The option 3 culvert location is acceptable to Conservation Halton, however, on the upstream side of Britannia Road, the tie in should be moved further upstream to facilitate a smoother transition with the existing channel that will minimize or alleviate the need for any channel hardening.</li> <li>Crossing 8: Option 3 is acceptable.</li> <li>Crossing 9: The option involving the offsetting of the culvert to the west would be preferred to facilitate the use of a shorter culvert and to avoid the creation of a sharp bend on the south side of Britannia Road on private property; it is recognized this may require a more substantial channel realignment on the north side of the road.</li> <li>Crossing 11: The hybrid of options 2 and 3 is preferred to minimize the length of the culvert and to occaste a more smooth transition from the watercourse into and out of the crossing structure that would minimize the need for hardening the watercourse to protect it from the risk of erosion.</li> </ul>	

N.	Crossing 14: The recommended option is acceptable. It is preferred that the tie in point between the realigned channel and the existing channel be extended farther away from the downstream side of the road to reduce the sharpness of the bend required in the creek alignment.  Crossing 16: Option 2 is acceptable.  Crossing 16: Option 2 is acceptable.	Region Response (November 26, 2013)
App	Appendix J – Preferred Design	
32	A legend should be provided on all figures.	Requested modifications have been added to the roadway figures.
33	Efforts should be made to minimize the extent of the road footprint and ROW that extends into the areas regulated by Conservation Halton (e.g., wetlands at crossings 2 and 3 and west of the eastern woodland) as well as other natural vegetation communities.	West of Eastern Woodlot - Reducing the cross section would only consist of the elimination of the boulevard along the north side (1.5m). Although cubface multi-use trail does occur within the roadway corridor, it is not desirable from an active transportation safety perspective. These boulevard areas provide a buffer from the roadway for the trails users (safety) and serve as a utility corridor for elements such as street lighting, hydro, bell, etc. The elimination of this space would necessitate the relocation of these items behind the trail, thus resulting in the same overall footprint, but with reduced safety for trail users.  Wetlands at crossings 2 and 3 - To address CH's request would result in the multi-use trail continuing as curbface from the grade separation to Bronte Road (approx. 360m). Similar to the comment above, it should be recognized that utility accommodation is still required, and that there will be disruption beyond the edge of the multi-use trail during the construction process.  Other natural vegetation communities - Further to the comments above, the complete elimination or significant elimination of the boulevard areas is not recommended from an overall safety perspective. Since the space within the roadway corridor to accommodate utilizes is required, it is recommended that eliminating the boulevards be considered only areas of key natural heritage significance.  The riparian wetlands associated with crossings 2 and 3 are dominated by reed canary grass and do not contain sensitive natural heritage features. Species of conservation concern were not found in these riparian wetlands. Staff notes that downstream (south) of Britannia Road, crossing 2 contains seasonal fish habitat and crossing 3 contains simple contributing habitat.
34	Please confirm the proposed grading at the match point between the conceptual plan and profile drawing included in Appendix J (at approximately 183.2 and sloping down at 0.48%) and the match point identified in the Britannia Road EA study are consistent. Staff note that based on the Tremaine Road Drawing (sheet 09 of 79 of Regional Contract R-2675B-13, dated November 2013), the centerline elevation at the intersection appears to be approximately 183.8m.	The proposed centreline elevation on the Britannia Road plans has been adjusted to match the Tremaine Road Drawing (sheet 09 of 79 of Regional Contract R-2675B-13, dated November 2013).

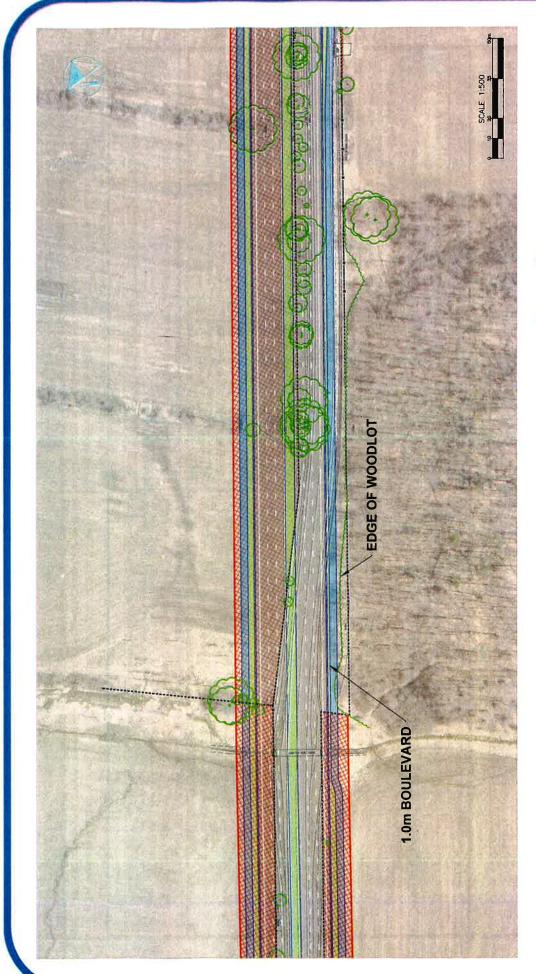


FIGURE 1 - REDUCED BOULEVARD AT WESTERN WOODLOT NOVEMBER 27, 2013





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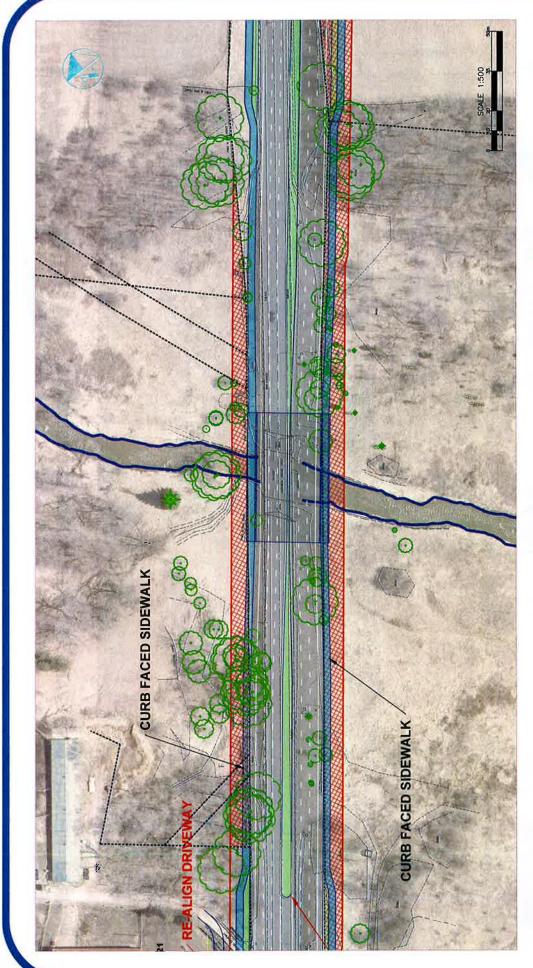


FIGURE 2 - CURB FACED SIDEWALK AT CROSSING #7 NOVEMBER 27, 2013



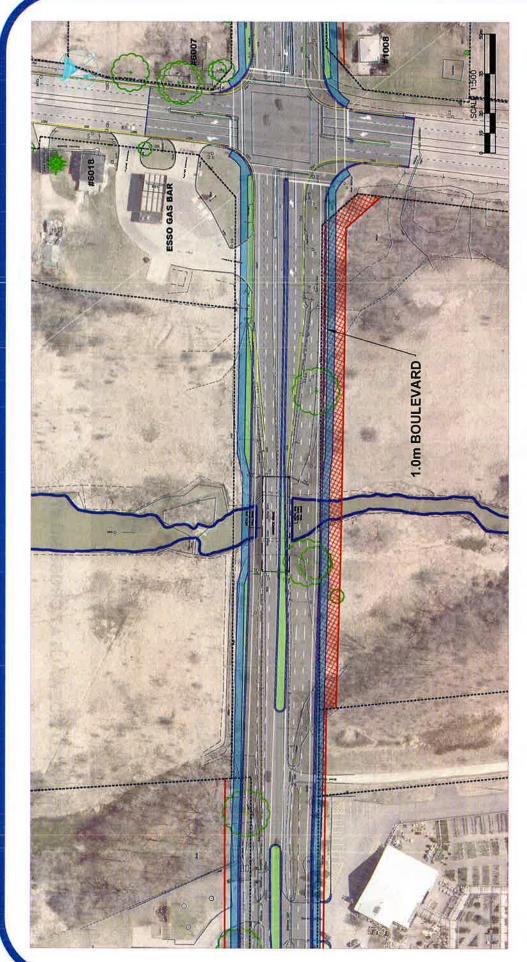


FIGURE 3 - REDUCED BOULEVARD AT WATERCOURSE CROSSING #15 NOVEMBER 27, 2013





### **Nick Palomba**

From: Amy Mayes <amayes@hrca.on.ca>

Sent: November-29-13 9:23 AM

To: Greg Frew

Cc: n.palomba@delcan.com; Melissa.Green-Battiston@halton.ca; Alicia.Jakaitis@halton.ca;

Barb Veale

**Subject:** RE: Water Surface Elevations - Watercourses 1 and 2

Hi Greg – This addresses the concern. Thanks for confirming the wall elevation, and I'm glad this issue dropped off the table.

### Amy Mayes, P.Eng.

Water Resources Engineer

### **Conservation Halton**

2596 Britannia Road West, Burlington, ON L7P 0G3 905.336.1158 ext. 302 | Fax 905.336.7014 | amayes@hrca.on.ca conservationhalton.ca

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From: Greg Frew [mailto:frew.g@aquaforbeech.com]

Sent: Thursday, November 28, 2013 6:22 PM

To: Amy Mayes

2c: n.palomba@delcan.com; Melissa.Green-Battiston@halton.ca; Alicia.Jakaitis@halton.ca; Barb Veale

Subject: RE: Water Surface Elevations - Watercourses 1 and 2

Hello Amy.

Thanks for providing CH's flood elevations from your current mapping. It is assumed that these elevations were developed from HEC-RAS modelling. Whereas the modelling undertaken for the Britannia EA for these crossings used the HY8 model. As such, the predicted flood elevations differ somewhat:

Crossing 1 Crossing 2

CH mapping – existing culverts: 183.94 185.06

ABL – existing culverts: 184.52 185.97

ABL – proposed culvert replacements: 184.42 185.40

As we discussed at yesterday's meeting, we have reviewed the conceptual design of the proposed grade separation with Delcan staff. The proposed design will include vertical retaining walls. The walls between Crossing 1 and the CN tracks will be constructed to a minimum elevation of 185.0m, and the wall between Crossing 2 and the CN tracks will be constructed to a minimum elevation of 186.0m. As shown on the attached sketch, these minimum wall elevations will be maintained over the entire lengths of the walls between the crossings and the CN tracks and are roughly 0.6m greater than any of the modelled flood elevations noted above. We trust that this information is sufficient to assure CH that the proposed design will prevent any spill of floodwaters into the grade separation.

Please contact Nick at Delcan or myself if you have any further questions about the design. Please note that I will be out of the office until December 9<sup>th</sup>.

Thanks,

### Greg.

Greg Frew, P.Eng.
Water Resources and Environmental Engineer
Aquafor Beech Limited

#6-202-2600 Skymark Avenue Mississauga, Ontario L4W 5B2 Tel. (905) 629-0099, ext. 276 Fax (905) 629-0089

email: frew.g@aquaforbeech.com

From: Amy Mayes [mailto:amayes@hrca.on.ca]

**Sent:** November 27, 2013 4:11 PM **To:** frew.q@aquaforbeech.com

Cc: n.palomba@delcan.com; Melissa.Green-Battiston@halton.ca; Alicia.Jakaitis@halton.ca; Barb Veale

Subject: Water Surface Elevations - Watercourses 1 and 2

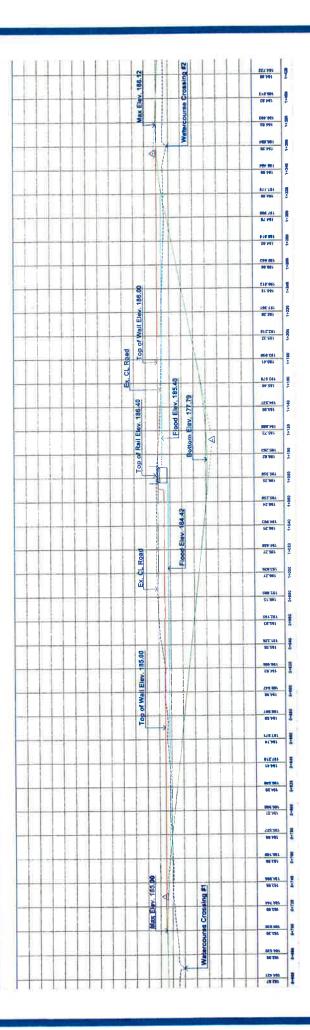
Hi Greg – Per Conservation Halton's current mapping, the water surface elevation at crossing 1 (the western crossing) is 183.95 masl, while the water surface elevation at the eastern crossing (crossing 2) is higher at 185.06 masl. I hope based on this you can quickly confirm that the proposed water level will not have the ability to spill into the grade separation.

### Amy Mayes, P.Eng.

Water Resources Engineer

Conservation Halton
2596 Britannia Road West, Burlington, ON L7P 0G3
905.336.1158 ext, 302 | Fax 905.336.7014 | amayes@hrca.on.ca

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# GRADE SEPARATION RETAINING WALL ELEVATION PROFILES NOVEMBER 28, 2013







905, 336, 1158 Fax, 905, 336, 7044 2596 Establish Rollo West Burfmatch, Ontene LZP 9C

TO EAR OCK

Trees a contesta and

conservationhaltonica

January 8, 2014

Ms. Alicia Jakatis Region of Halton 1151 Bronte Road Oakville, ON L6M 3L1

BY EMAIL

Dear Ms. Jakatis:

Re:

Britannia Road - Tremaine to Highway 407

Class Environmental Assessment Technical Background Reports (2013)

CH File: MPR 558

Conservation Halton staff has now had the opportunity to review:

 Draft Environmental Study Report, Britannia Road Transportation Corridor Improvements, The Regional Municipality of Halton, prepared by Delcan Corporation and dated October 2013 response to Nov 8 2013 CH letter - Dec 02 2013 and Britannia Road - CH response 26 Nov 2013-Figure 1 2 and 3

Based on our review of the changes noted in the response table dated December 2, 2013 and revised Figures 1, 2 and 3, CH staff is satisfied that all of the comments included in CH's letter dated November 8, 2013 have been adequately addressed.

Thank you for hosting a very focussed and productive meeting on November 27, 2013.

Yours very truly,

Barbara Veale, PHD, MCIP, RPP

Barbara Veale

Manager of Planning and Regulation Services

Pt\Planning\DEV'T PLG FILES\ENVIRONMENTAL ASSESSMENTS\Halton\Britannia Road - Tremaine to Hwy 407\CH Comments\_Britannia Road\_Jan 8\_2014.doc

Subject:

FW: Britannia Road - proposed rail overpass

From: Amy Mayes [mailto:amayes@hrca.on.ca]

**Sent:** August-18-14 6:31 PM

To: Greg Frew Cc: Barb Veale

Subject: RE: Britannia Road - proposed rail overpass

Hi Greg - I just saw Ash's e-mail and wasn't sure if I'd replied or not to your original message. My appologies if this is deja-vu but I can confirm that based on the sketch you provided, CH would not be looking for any further refinement to the hydraulic model to support the environmental assessment. Thanks for following up. Amy

From: Greg Frew < frew.g@aquaforbeech.com>

Sent: August-06-14 3:46 PM

To: Amy Mayes

Cc: Barb Veale: Ash Baron: Andrew McGregor Subject: Britannia Road - proposed rail overpass

Hi Amy.

As discussed, Halton Region is asking if Conservation Halton would have any concerns if the proposed railway crossing associated with the Britannia Road improvements were to change from an underpass (as was assumed in the initial EA work) to an overpass.

I'm forwarding a plan illustrating the grading footprint for the newly proposed rail overpass. As shown, the grading begins to taper well east of watercourse crossing No. 1 and just west of crossing No. 2. As a result, no additional culvert extensions are anticipated beyond what was assumed in the EA analyses (i.e. 47m ROW). I also added a few spot elevations that Delcan provided along the base of the proposed embankment slope.

Please advise if you feel any additional hydraulic analyses, beyond what was done for the EA, are required.

Thanks, Greg.

Greg Frew, P.Eng. Water Resources and Environmental Engineer **Aquafor Beech Limited** 

#6-202-2600 Skymark Avenue Mississauga, Ontario L4W 5B2 Tel. (905) 629-0099, ext. 276

Fax (905) 629-0089

email: frew.g@aquaforbeech.com

**Subject:** FW: Britannia Road EA - proposed rail overpass

From: Kim Barrett [mailto:kbarrett@hrca.on.ca]

Sent: September-05-14 3:02 PM

To: Ash Baron

Cc: Barb Veale; Amy Mayes

**Subject:** RE: Britannia Road EA - proposed rail overpass

Hi Ash

My apologies for the delay in getting back to you on this. I've had a read of your conclusions and recommendations, and they sound reasonable to me. Given the proposed watercourse configurations in Boyne, it would be ideal if wildlife passage could be accommodated on the east side of the railway. This would tie in nicely with the NHS.

Thanks, Kim

### Kim Barrett, M.Sc.

Senior Terrestrial Ecologist

### **Conservation Halton**

2596 Britannia Road West, Burlington, ON L7P 0G3 905.336.1158 ext. 2229 | Fax 905.336.6684 | kbarrett@hrca.on.ca conservationhalton.ca

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From: Ash Baron [mailto:baron.a@aguaforbeech.com]

**Sent:** September-03-14 12:07 PM

To: Kim Barrett

Subject: RE: Britannia Road EA - proposed rail overpass

Hi Kim,

Have you had the chance to look over the email I sent re: updates to the Britannia Road EA? The team is looking for CH's input before finalizing the document.

Thanks, Ash

From: Ash Baron [mailto:baron.a@aquaforbeech.com]

Sent: August-18-14 4:59 PM

To: 'Kim Barrett'

Cc: 'amayes@hrca.on.ca'; Andrew McGregor; 'bveale@hrca.on.ca'; <a href="mailto:frew.q@aguaforbeech.com">frew.q@aguaforbeech.com</a>

Subject: Britannia Road EA - proposed rail overpass

Hi Kim,

As a result of the newly-proposed CN rail overpass west of Bronte Road, the ESR needs to be revised. I have reviewed the Britannia Rd ESR to determine what, if any, potential impacts the newly-proposed CN Rail crossing will have on natural heritage resources in the area. I am looking for your comments/input into the findings listed below.

As you will see from the attached drawings, the overpass is located between Crossings #1 and #2. Please note that the extent of grading near wetlands and watercourses has not changed as a result of the proposed overpass. Affected areas include agricultural fields north and south of Britannia road between crossings #1 and #2, as well as the CN railway corridor.

A summary of my findings is as follows:

- The East tributary of Indian Creek is an intermittent watercourse and is considered a medium constraint feature.
   It is not anticipated that the overpass will result in additional potential impacts to the watercourse. Thus, related revisions to the ESR are not required.
- 2. The d/s end of West tributary of Indian Creek is an intermittent watercourse and the u/s end is considered to be complex contributing habitat. The tributary considered a medium constraint feature. It is not anticipated that the overpass will result in additional potential impacts to the watercourse. Thus, related revisions to the ESR are not required.
- 3. There are no significant species present in the East or West tributaries of Indian Creek.
- 4. Surveys at calling amphibian station 1, near crossing #1 resulted in observations of GRFR. Seeing as the extent of grading near wetlands and watercourses has not changed as a result of the proposed overpass, I see no need to revise the ESR to reflect impacts to amphibians at station #1.
- 5. Surveys at calling amphibian station 2, near crossing #2 resulted in observations of SPPE, NLFR, and GRTR. Seeing as the extent of grading near wetlands and watercourses has not changed as a result of the proposed overpass, I see no need to revise the ESR to reflect impacts to amphibians at station #2. I think that the SPPE is likely in the pond further south and not in the meadow marsh, as habitat in the pond appears more suitable.
- 6. Open-country species at Risk (e.g. BOBO and BARS) were not previously recorded in the area near the CN Rail crossing (Breeding Bird stations 1 & 2). The ESR mentions that BOBO may use natural meadows over less-preferable agricultural fields. An analysis of meadow habitats included the meadow marsh south of Britannia Rd at crossing 2; the conclusion was that if BOBO were use the meadow marsh as habitat, the removal of 7 m of habitat from the edge of Britannia Rd would not have a significant effect on BOBO. Accordingly, I see no need to revise the ESR in this regard.
- 7. The area-sensitive SASP was recorded as a "possibly breeding" at Breeding Bird stations 1 & 2. SASP is not a species of conservation concern nationally, provincially, or regionally. As this species often uses agricultural lands as habitat, it is my opinion that the construction of the overpass will potentially have an effect on SASP in the area. It is my opinion that the potential negative effects will be temporary (i.e. limited to the construction period) and can be mitigated through the use of locally native meadow species to revegetate the overpass slopes.
- 8. Some species of wildlife such as coyote, skunk, and raccoon use rail lines as movement corridors. I think is it reasonable to assume that these species are present within the study area and likely will be in the foreseeable future. Accordingly, I would like the revised ESR include the recommendation that the design of the overpass account for terrestrial wildlife movement.

I look forward to hearing from you. I am in and out of the office for fieldwork lately, but don't hesitate to call if you wish to discuss.

Kind regards, Ash

Ash Baron Botanist, ISA Certified Arborist Aquafor Beech Ltd. 55 Regal Road, Unit 3 Guelph, Ontario N1K 1B6

Southern Region Aurora District Office 50 Bloomington Road West Aurora, ON L4G 0L8



Ministry of Natural Resources Ministere des Richesses Naturelles

August 12, 2011

Chris Lorenz, Aquatic Biologist Aquafor Beech Limited 55 Regal Road, Unit 3 Guelph, Ontario N1K 1B6 Phone: (519) 224-3740 x 1301

Fax: (519) 224-3750

Email: lorenz.c@aguaforbeech.com

Re: Britannia Rd. Species at Risk

Dear Mr. Lorenz,

In your email dated August 8, 2011 you requested information on natural heritage features and element occurrences occurring on or adjacent to the above mentioned location.

There are a number of Species at Risk recorded from your study area (please refer to the labelled sites map):

- Site 1 There are no records of Species at Risk or natural heritage features in this study area.
- Site 2 There are no records of Species at Risk or natural heritage features in this study area.
- Site 3 There are historical records of Milksnake in this study area. There are no natural heritage features recorded for this study area.
- Site 4 There are historical records of Milksnake within this study area. There are no natural heritage features recorded for this study area.
- Site 5 There are no records of Species at Risk or natural heritage features in this study area.
- Site 6 There are no records of Species at Risk or natural heritage features in this study area.
- Site 7 There are historical records of Milksnake in this study area and historical records of Jefferson Salamander in the vicinity of the study area. Natural heritage features recorded include an Environmentally Significant Area and the Provincial Candidate Sixteen Mile Creek ANSI, which is adjacent to the study area.

Some of these species may receive protection under the *Endangered Species Act 2007* and thus, a permit may be required if the work you are proposing could cause harm to these species or their habitat. Please provide additional information on your proposal to our office, and we will assess it to determine whether a permit under the ESA 2007 is required for the works to proceed.

This species at risk information is highly sensitive and is not intended for any person or project unrelated to this undertaking. Please do not include any specific information in reports that will be available for public record. As you complete your fieldwork in these areas, please report all information related to any species at risk to the NHIC and to our office. This will assist with updating our database.

If you have any questions or comments, please do not hesitate to contact me at 905-713-7425.

Sincerely,

Melinda Thompson-Black

Melinda Thompson-Black Species at Risk Biologist Ontario Ministry of Natural Resources, Aurora District Southern Region Aurora District Office 50 Bloomington Road West Aurora, ON L4G 0L8



Ministry of Natural Resources Ministere des Richesses Naturelles

August 19, 2011

Chris Lorenz, Aquatic Biologist Aquafor Beech Limited 55 Regal Road, Unit 3 Guelph, Ontario N1K 1B6 Phone: (519) 224-3740 x 1301

Fax: (519) 224-3750

Email: lorenz.c@aquaforbeech.com

Re: Britannia Rd. Species at Risk

Dear Mr. Lorenz,

In your email dated August 8, 2011 you requested information on natural heritage features and element occurrences occurring on or adjacent to the above mentioned location.

There are a number of Species at Risk recorded from your study area. The MNR has records of Milksnake, as well as historical records of Snapping Turtle and Jefferson Salamander from your specified study area. In addition, we have records of Red-headed Woodpecker, Chimney Swift, Bobolink and Cerulean Warbler in the vicinity of your area. Some of these species may receive protection under the *Endangered Species Act 2007* and thus, a permit may be required if the work you are proposing could cause harm to these species or their habitat. Please provide additional information on your proposal to our office, and we will assess it to determine whether a permit under the ESA 2007 is required for the works to proceed.

Natural heritage features recorded for your area include the Provincial Candidate Sixteen Mile Creek ANSI, Provincial Candidate Britannia Wetlands ANSI, an Environmentally Significant Area and identified wetlands.

This species at risk information is highly sensitive and is not intended for any person or project unrelated to this undertaking. Please do not include any specific information in reports that will be available for public record. As you complete your fieldwork in these areas, please report all information related to any species at risk to the NHIC and to our office. This will assist with updating our database.

If you have any questions or comments, please do not hesitate to contact me at 905-713-7425.

Sincerely,

Welinda Thompson-Black

Melinda Thompson-Black

Species at Risk Biologist Ontario Ministry of Natural Resources, Aurora District

Subject:

FW: Britannia Rd EA

From: McAllister, Aurora (MNR) [mailto:Aurora.McAllister@ontario.ca]

Sent: November-02-12 12:01 PM

To: Brent Tegler

Cc: Alicia.Jakaitis@halton.ca; Thompson, Melinda (MNR)

Subject: RE: Britannia Rd EA

Hello Brent,

Further to MNR's previous correspondence in regards to this project, MNR is advising that the proposed widening of Britannia Road will likely impact an occupied reach of stream for Silver Shiner (specifically, the crossing of Sixteen Mile directly west of Trafalgar Road). This species was listed as "threatened" on the Species at Risk in Ontario list in January 2012. Both the species and its habitat are protected under the Endangered Species Act, 2007 (ESA). At the time of our most recently issued letter (April 2012), the District had not yet finalized the reach mapping for this species.

It is likely that a permit under clause 17(2)(c) of the ESA will be required for this project. However, MNR requests that an Information Gathering Form be filled out and submitted for this project at your earliest convenience prior to making our official determination. Please also submit any supporting documentation with respect to crossing design and mitigation along with the completed Information Gathering Form. The information gathering form can be accessed at the following link:

http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/FormDetail?OpenForm&ACT=RDR&TAB=PROFILE&SRCH =1&ENV=VWVE&TIT=0180&NO=018-0180E

We will endeavour to complete the screening and advise you of our decision within two weeks of the receipt of the requested materials.

Thank you,

Aurora McAllister Assistant Species at Risk Biologist Aurora District, Ministry of Natural Resources 50 Bloomington Road, Aurora, ON L4G 0L8

From: Brent Tegler [mailto:btegler@nsenvironmental.com]

**Sent:** April 11, 2012 3:30 PM

**To:** Bobak, Eva (MNR)

Cc: Melinda Thompson; McAllister, Aurora (MNR)

Subject: RE: Britannia Rd EA

Dear Eva.

Many thanks for your response to our letter.

Cheers, Brent.

Brent Tegler Ph.D.
Principal/Applied Ecologist
North-South Environmental Inc.
P.O. Box 518,
35 Crawford Crescent, Unit BU5,
Campbellville, Ontario, Canada

### **LOP 1B0**

Phone: 905-854-1112 Fax: 905-854-0001 Mobile: 226-820-6926

Email: btegler@nsenvironmental.com

From: Bobak, Eva (MNR) [mailto:Eva.Bobak@ontario.ca]

Sent: April-11-12 1:32 PM

To: Brent Tegler

Cc: Melinda Thompson; McAllister, Aurora (MNR)

Subject: RE: Britannia Rd EA

Hello Brent.

Please accept the attached letter in response to your SAR information request.

Thank you.

Eva Bobak
Ministry of Natural Resources
Aurora District Office
Tel 905.713.7398
Fax 905.713.7361
eva.bobak@ontario.ca

From: Brent Tegler [mailto:btegler@nsenvironmental.com]

Sent: March 14, 2012 11:39 AM

**To:** Melinda Thompson **Subject:** Britannia Rd EA

Dear Melinda.

As the status of some species has changed we would like to request updated information for the Britannia Rd EA.

Please refer to the attached letter of request.

Best regards, Brent.

Brent Tegler Ph.D.
Principal/Applied Ecologist
North-South Environmental Inc.
P.O. Box 518,
35 Crawford Crescent, Unit BU5,
Campbellville, Ontario, Canada
L0P 180

Phone: 905-854-1112 Fax: 905-854-0001 Mobile: 226-820-6926

Email: <u>btegler@nsenvironmental.com</u>

. rom:

McAllister, Aurora (MNR) <Aurora.McAllister@ontario.ca>

Sent:

Tuesday, December 11, 2012 3:20 PM

To:

'Chris Lorenz'

Cc:

ESA Aurora (MNR); a.mcgregor@delcan.com

Subject: Attachments: RE: Britannia Rd EA RSDGuidelines.pdf

Follow Up Flag:

Follow up

Flag Status:

Completed

Hi Chris.

Now that I know that the project is still at the conceptual stage, I agree that it would be better to wait to submit the IGF until more documentation (design drawings, etc.) are available.

In terms of MNR's recommendations for design, MNR supports CH's request for (at a minimum) single span open bottom crossings that span 2 times the bankfull channel width; particularly in regards to the crossing of Sixteen Mile west of Trafalgar Road (the occupied Silver Shiner reach). Additionally, a number of the Best Management Practises for minimizing impacts to Redside Dace presented in Section 4.2 of MNR's Draft Guidance for Development Activities in Redside Dace Protected Habitat (February 2011) are applicable to Silver Shiner. In order to ensure that impacts to Silver Shiner and their habitat are minimized to the greatest extent possible, MNR requests that the relevant Best Management Practises (e.g. for stream crossings, stormwater management, construction site preparation, etc.) be adopted with respect to the proposed widening works in (and adjacent to) Silver Shiner habitat.

ત?egards,

Aurora McAllister
Assistant Species at Risk Biologist
Aurora District, Ministry of Natural Resources
50 Bloomington Road, Aurora, ON L4G 0L8

From: Chris Lorenz [mailto:lorenz.c@aquaforbeech.com]

**Sent:** 16-Nov-12 4:48 PM **To:** McAllister, Aurora (MNR) **Subject:** FW: Britannia Rd EA

Hi Aurora,

I was hoping to clarify a few things with you regarding your email to Brent Tegler on November 2, 2012 (please see below). Regarding the widening of Britannia Rd, we are still at the conceptual stage and do not yet have any supporting documentation with respect to crossing designs and specific mitigation measures. We would be happy to provide the MNR with an Information Gathering Form, however, I am wondering if this is necessary given the current stage of development. Without design drawings or specific mitigation plans, will the MNR be able to provide guidance on the need for a 17(2)(c) permit with a completed Information Gathering Form, or would this be better left to a subsequent stage of development when this documentation is available?

Thanks Aurora, I appreciate your help with this matter.

Regards,

Chris

Chris Lorenz, M.Sc. **Aquatic Biologist** Aquafor Beech Limited 55 Regal Road, Unit 3 Guelph, Ontario N1K 1B6

Telephone: (519) 224-3746 Cell Phone: (519) 830-0236 Facsimile: (519) 224-3750 Lorenz.c@aquaforbeech.com



From: Brent Tegler [mailto:btegler@nsenvironmental.com]

Sent: November 5, 2012 1:32 PM

To: Chris Lorenz

Cc: Alicia.Jakaitis@halton.ca; Thompson, Melinda (MNR); McAllister, Aurora (MNR)

Subject: RE: Britannia Rd EA

Dear Chris.

As you were the lead on fisheries work related to the Britannia Road EA could you please ensure the information provided by MNR below is passed on to Delcan as the lead consultant undertaking the EA.

With thanks, Brent.

Brent Tegler Ph.D. Principal/Applied Ecologist North-South Environmental Inc. P.O. Box 518. 35 Crawford Crescent, Unit BU5, Campbellville, Ontario, Canada **LOP 1B0** 

Phone: 905-854-1112 Fax: 905-854-0001 Mobile: 226-820-6926

Email: <u>btegler@nsenvironmental.com</u>

From: McAllister, Aurora (MNR) [mailto:Aurora.McAllister@ontario.ca]

**Sent:** November-02-12 12:01 PM

To: Brent Tegler

Cc: Alicia.Jakaitis@halton.ca; Thompson, Melinda (MNR)

Subject: RE: Britannia Rd EA

Hello Brent,

Further to MNR's previous correspondence in regards to this project, MNR is advising that the proposed widening of Britannia Road will likely impact an occupied reach of stream for Silver Shiner (specifically, the crossing of Sixteen Mile directly west of Trafalgar Road). This species was listed as "threatened" on the Species at Risk in Ontario list in January 2012. Both the species and its habitat are protected under the Endangered Species Act, 2007 (ESA). At the time of our most recently issued letter (April 2012), the District had not yet finalized the reach mapping for this species.

It is likely that a permit under clause 17(2)(c) of the ESA will be required for this project. However, MNR requests that an Information Gathering Form be filled out and submitted for this project at your earliest convenience prior to making our official determination. Please also submit any supporting documentation with respect to crossing design and mitigation along with the completed Information Gathering Form. The information gathering form can be accessed at the following link:

http://www.forms.ssb.gov.on.ca/mbs/ssb/forms/ssbforms.nsf/FormDetail?OpenForm&ACT=RDR&TAB=PROFILE&SRCH =1&ENV=WWE&TIT=0180&NO=018-0180E

We will endeavour to complete the screening and advise you of our decision within two weeks of the receipt of the requested materials.

Thank you,

Aurora McAllister
Assistant Species at Risk Biologist
Aurora District, Ministry of Natural Resources
50 Bloomington Road, Aurora, ON L4G 0L8

From: Brent Tegler [mailto:btegler@nsenvironmental.com]

Sent: April 11, 2012 3:30 PM

**Io:** Bobak, Eva (MNR)

Cc: Melinda Thompson; McAllister, Aurora (MNR)

Subject: RE: Britannia Rd EA

Dear Eva.

Many thanks for your response to our letter.

Cheers, Brent.

Brent Tegler Ph.D.
Principal/Applied Ecologist
North-South Environmental Inc.
P.O. Box 518,
35 Crawford Crescent, Unit BU5,
Campbellville, Ontario, Canada
LOP 1B0

Phone: 905-854-1112 Fax: 905-854-0001 Mobile: 226-820-6926

Email: btegler@nsenvironmental.com

From: Bobak, Eva (MNR) [mailto:Eva.Bobak@ontario.ca]

**Sent:** April-11-12 1:32 PM

To: Brent Tegler

Cc: Melinda Thompson; McAllister, Aurora (MNR)

Subject: RE: Britannia Rd EA

#### Hello Brent,

Please accept the attached letter in response to your SAR information request.

Thank you.

Eva Bobak
Ministry of Natural Resources
Aurora District Office
Tel 905.713.7398
Fax 905.713.7361
eva.bobak@ontario.ca

From: Brent Tegler [mailto:btegler@nsenvironmental.com]

Sent: March 14, 2012 11:39 AM

**To:** Melinda Thompson **Subject:** Britannia Rd EA

Dear Melinda,

As the status of some species has changed we would like to request updated information for the Britannia Rd EA.

Please refer to the attached letter of request.

Best regards, Brent.

Brent Tegler Ph.D.
Principal/Applied Ecologist
North-South Environmental Inc.
P.O. Box 518,
35 Crawford Crescent, Unit BU5,
Campbellville, Ontario, Canada
L0P 1B0

Phone: 905-854-1112 Fax: 905-854-0001 Mobile: 226-820-6926

Email: <u>btegler@nsenvironmental.com</u>

#### **Andrew McGregor**

∂rom:

McAllister, Aurora (MNR) < Aurora.McAllister@ontario.ca>

Sent:

Monday, October 29, 2012 3:22 PM

To:

Chris Lorenz

Subject:

Silver Shiner - Coldwater timing window

Follow Up Flag:

Follow up

Flag Status:

Completed

Hi Chris,

Sorry for the delay in getting back to you.

Following an assessment of the work and its distance upstream from a Silver Shiner occupied reach of stream, MNR may apply the coldwater fisheries timing window to a project. This is the same approach that we take for Redside Dace. The September 15<sup>th</sup> cut-off is important because we want to ensure that disturbed areas adjacent to a watercourse are given adequate time to naturally stabilize prior to the end of the growing season. This will help prevent the migration of sediment/soils into the watercourse (and subsequently downstream into the occupied habitat) during the spring freshet.

Regards,

#### Aurora McAllister

Assistant Species at Risk Biologist Aurora District, Ministry of Natural Resources 50 Bloomington Road, Aurora, ON L4G 0L8

\*

# DRAFT

# Guidance for Development Activities in Redside Dace Protected Habitat

February 2011



Scale: Actual length of Redside Dace depicted is 7 centimetres.

# RECOMMENDED CITATION

Ministry of Natural Resources (MNR). 2011. DRAFT Guidance for Development Activities in Redside Dace Protected Habitat. Ontario Ministry of Natural Resources, Peterborough, Ontario. ii+42 pp.

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These guidelines will be periodically updated as required to reflect more current information. For the most current version of these guidelines, please refer to MNR's website at <a href="www.mnr.gov.on.ca">www.mnr.gov.on.ca</a>.

Cette publication hautement spécialisée Guidance for Development Activities in Redside Dace Protected Habitat n'est disponible qu'en Anglais en vertu du Règlement 411/97 qui en exempte l'application de la <u>Loi sur les services en français</u>. Pour obtenir de l'aide en français, veuillez communiquer avec Cathy Darevic au (705) 755-5580 au ministère des Richesses naturelles.

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#### **EXECUTIVE SUMMARY**

The Redside Dace (*Clinostomnus elongatus*) is a small colourful cyprinid (minnow family) that lives in small streams in the southern Great Lakes basin, the upper Mississippi drainage and the upper Susquehanna River drainage. In Canada, the Redside Dace is found only in southern Ontario where it most frequently occurs in streams flowing into western Lake Ontario. Based on observed declines and threats to remaining populations the species has been listed as Endangered under Ontario's *Endangered Species Act* (ESA 2007).

Redside Dace populations in Ontario are subject to numerous threats, the most notable being the loss of suitable habitat, which has likely been the major factor contributing to declines. The species is now primarily restricted to the headwaters (i.e., the source and most upstream sections) of many streams where it was once widespread. A large proportion of Redside Dace populations in Ontario are found around the Greater Toronto Area – a region that has been experiencing rapid urban growth over the past 20 years. Urban development has the potential to impact Redside Dace habitat through; 1) increasing the percentage of impervious surfaces, which effects runoff patterns, increases erosion and alters hydrologic regimes and may increase water temperatures; 2) site grading and excavation which may lead to increased sedimentation and erosion of the banks; and 3) loss of habitat, which may occur through loss of riparian vegetation, in-stream habitat features, wetland and groundwater sources.

This document is intended to provide guidance to proponents interested in developing lands in and adjacent to protected habitats of Redside Dace. While each development situation is unique and will need to be assessed on a case by case basis in consultation with the local Ministry of Natural Resources (MNR) district office, these guidelines are intended to assist by providing a description of Redside Dace habitat, the protection provided to the species and their habitat under the ESA, a description of when a permit is required under the ESA and the project review and permitting process, and guidance as to best management practices for development activities to avoid or mitigate impacts on Redside Dace and their habitat.

This document provides an overview of best management practices (BMPs) that have been based upon current requirements, guidelines and existing development practices in Ontario. These BMPs include the following:

- Comprehensive Planning for Subwatersheds Planning at a subwatershed level allows for the evaluation and assessment of potential cumulative effects of urbanization on Redside Dace and its habitat. Incorporation of these subwatershed plans, prior to the Secondary Planning stage will inform the planning process and help ensure that consideration is given for Redside Dace upfront, when there is greater flexibility and more opportunities for avoiding or minimizing impacts;
- 2) Stream Crossings development activities should attempt to minimize the number of stream crossings, and where required, minimize widths, target straight sections of the stream and areas that have been previously disturbed, minimize activity/footprint within regulated habitat, including spanning the meanderbelt, adherence to timing windows, incorporation of effective erosion and sediment control measures, and design in a manner that promotes fish passage;

- 3) Construction Site Preparation Construction activities may result in the removal of vegetative cover and grading of adjacent lands, which, can lead to increased sediment delivery and erosion to the stream and its banks. Site preparation should be completed in a manner that attempts to prevent suspended sediment concentrations from exceeding 25mg/L of background conditions in occupied reaches. In addition, site preparation and construction should follow an approved Erosion and Sediment Control Plans, including minimizing disturbed areas, stabilizing soils through erosion control blankets and revegetation efforts as soon as possible, and using multiple-barrier approach to sedimentation, effective sediment and erosion ponds and sediment traps, where applicable.
- 4) Stormwater Management untreated runoff of urban landscapes may impact Redside Dace habitat by altering hydrologic regimes, increasing water temperatures, and conveyance of chemicals and pollutants to watercourses. Stormwater management ponds should attempt to target outflows having water temperatures less than 24C, dissolved oxygen levels above 7 mg/L and having total suspended sediment levels less than 25mg/L above background conditions. Stormwater management should attempt to mimic pre-development hydrologic regimes by incorporating a 'treatment-train' approach and low-impact development designs.
- 5) Installation of Infrastructure the placement of infrastructure such as gas pipelines, storm and sanitary sewers, and hydro conduits near streams has the potential to impact Redside Dace habitat. Utilities near streams should be located either over or under streams to avoid potential for impact, and should be constructed in conjunction with new or replacement stream crossings. Methods such as directional drilling, and jack and boring are encouraged when soil conditions are appropriate.
- 6) Stream realignment and relocation While stream realignments or relocations are discouraged, in some situations they may be unavoidable. In these situations stream realignments and relocations should be based on an approved subwatershed plan and connect to existing Redside Dace streams, incorporate natural channel design concepts and habitat features consistent with Redside Dace habitat requirements (e.g., overhanging terrestrial vegetation, pool-riffle habitat, water temperatures and dissolved oxygen), and corridors consistent with regulation (e.g., meanderbelt and 30m riparian corridor).

#### 1.0 PURPOSE

To provide guidance to persons interested in developing areas in southern Ontario that have Redside Dace (*Clinostomus elongatus*) habitat. Redside Dace, which is an endangered species, and its habitat are protected under the *Endangered Species Act, 2007 (ESA)*. While each development situation, as described below, will need to be assessed on a case by case basis in consultation with the local Ministry of Natural Resources (MNR) district office, these guidelines are intended to assist by providing the following information:

- A description of Redside Dace, where they are located, and the habitat they require
- An explanation of the protection provided to Redside Dace and their habitat under the ESA
- A description of when a permit is required under the ESA, and the project review and permitting process under the ESA
- Best management practices for development activities to avoid or mitigate impacts on Redside Dace and their habitat.

#### 2.0 CONTEXT

## 2.1 Introduction to the Species and its Habitat

#### 2.1.1 Species Characteristics

The Redside Dace is a small colourful minnow (i.e., a cyprinid), with an average length of 7 cm, reaching a maximum of 12 cm. They are silvery in colour, with red sides and a purple sheen (see photograph on Cover Page). Typically Redside Dace have a life expectancy of 3 to 5 years (MNR 2010a).

Redside Dace have an unusually large mouth for a minnow. They are insectivorous fish (feed on insects) that rely on seeing their prey at the water's surface. Redside Dace spend most of their time in mixed-species schools in pools, at or near a mid-depth position in the water. They are specialized feeders, their primary food consisting of terrestrial (land-based) insects, especially adult flies. Redside Dace leap out of the water to obtain such prey. On occasion, they may also feed on aquatic insects.

Typically, the Redside Dace is sexually mature at two years, but spawning may not occur until its third year. Spawning occurs in late May/early June when water temperature reaches 16 to 18°C. This limited temperature range results in a short spawning period, and while females can produce from 400 to over 1500 eggs, survival to the adult stage is limited (MNR 2010a). These factors and other specialized spawning habits described below, may limit the ability of Redside Dace to rebound from low population levels (MNR 2010a).

#### 2.1.2 Habitat Preferences

In Ontario, Redside Dace generally inhabit slow moving sections of connected streams. They prefer streams that are usually less than 10 metres in width (i.e., 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> order size streams) that meander through meadows. Redside Dace are most commonly found in stream sections flowing through open meadows with scattered trees and shrubs. These streams are typically partially covered by overhanging vegetation, banks, submerged branches and logs. The overhanging vegetation is important both as a source of cover that shades the water and protects the Redside Dace from predators, and as habitat for the insects that Redside Dace eat.

The stream bottoms generally include gravel and/or sand or other coarse sediment which provides the spawning habitat.

Redside Dace require clear water in order to see their prey, and are sensitive to turbidity (i.e. the cloudiness of the water from particles suspended within it), although they have been found in some streams with moderate turbidity. Redside Dace are a cool water species, preferring temperatures less than 24°C and dissolved oxygen concentrations of at least 7 milligrams per litre (MNR 2010a). Although Redside Dace can leap several centimetres out of the water to catch flying insects, they can not jump over dams or other elevated structures in streams. Collectively these conditions limit the widespread dispersal of the species.

Redside Dace inhabit different sections of the stream, depending on whether they are of the age to breed, and if it is breeding season, as follows:

- Spawning habitat consists of faster flowing "riffles" or gravel bars (deposits of gravel in
- Non-breeding habitat is most often in the form of headwater streams, brooks or pools

Redside Dace commonly use nests of Creek Chub and/or Common Shiner, and synchronize their spawning with that of these two species. The Creek Chub or Common Shiner likely guard the Redside Dace eggs from predation, and keep the nest free of silt (MNR 2010a).

Existing knowledge of Redside Dace habitat is primarily based on studies conducted during the warm weather seasons. Knowledge of seasonal movements of Redside Dace can be summarized as follows:

- In spring, they move upstream to find suitable spawning habitat
- In late summer young Redside Dace move upstream from the areas where they hatch, along with the Creek Chub or Common Shiner
- Redside Dace often rely on groundwater-fed pools for refuge habitat during warm summer months
- Redside Dace have been observed moving downstream from the habitat they occupy during the summer to overwinter

Headwaters of streams are a key source of the habitat described above that Redside Dace require. It has been estimated that 90 percent of the flow of a river originates from the watershed's headwaters. Flows from headwaters, which includes groundwater discharge areas and wetlands, also supply important factors to Redside Dace including cool water, food and coarse sediment for spawning habitat.

2.1.3 Range

In Canada, Redside Dace are only found in southern Ontario and the Two Tree River on St. Joseph Island (see Figure 1). Most populations in southern Ontario occur in tributaries in the GTA (i.e. the City of Toronto, and the Regions of the municipalities of Durham, Halton, Peel and York) and the City of Hamilton, flowing into western Lake Ontario from Spencer Creek in the west, to Pringle Creek in the east. Populations are also known to occur in the following areas outside of the GTA:

- The Saugeen River system (Grey and Bruce Counties)
- Gully Creek and an unnamed creek south of Gully Creek (near Bayfield in Huron
- Irvine Creek in the Grand River watershed (near Fergus in Wellington County)
- Humber River system (extends in to Simcoe County)

Ontario currently has just under 5% of the global range of Redside Dace. Ontario populations have experienced a continuing decline over the last 50 years. Historically, Redside Dace was found in 24 watersheds in Ontario. In 1987, the species was considered provincially vulnerable and nationally to be of "special concern". In 2000, the species was designated as "threatened" in the province of Ontario based on it being present in approximately 20 locations. In 2009, the species was provincially designated as "endangered" based on its remaining presence in 16 watersheds.

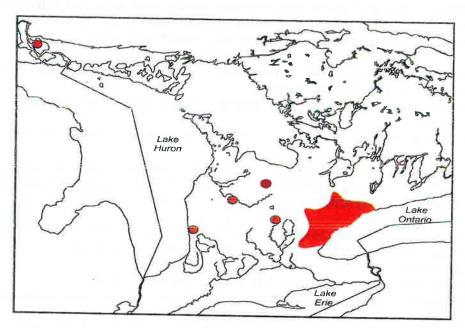


Figure 1. Distribution of Redside Dace (*Clinostomus elongatus*) in Ontario, 2001 (MNR 2010a).

Within these 16 remaining watersheds, Redside Dace populations have been lost from several tributaries flowing into western Lake Ontario and the length of stream occupied by several populations has been reduced. For example, in the Spencer Creek watershed, Redside Dace were found in several locations in a stream stretch of approximately 18 kilometres in the early 1970s. Intensive sampling from 1997 to 2001 at historical sites produced only a single specimen. Reductions in range and abundance have also occurred in other watersheds including the Lynde Creek, Don River, Duffins Creek, Kettleby Creek, Fourteen Mile Creek and Bronte Creek watersheds. Redside Dace currently occupy less than 4% of the total stream length in the GTA.

# 2.1.4 Urban Development – Threats and Opportunities

#### Threats to Redside Dace

Redside Dace populations in Ontario are subject to numerous threats that vary across its range. While additional research may be beneficial to fully understand the specific causes and effects for Redside Dace, the loss of suitable habitat is likely the major factor contributing to Redside Dace declines in Ontario (MNR 2010a). The species is now primarily restricted to the headwaters (i.e., the source and most upstream sections) of many streams where it was once

widespread. Figure 2 depicts the occurrence of Redside Dace in the GTA and the level of urbanization from 1969 to 1999.

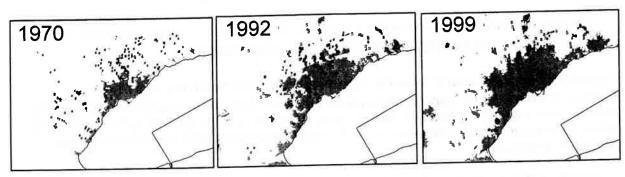


Figure 2. Distribution of Redside Dace in the GTA over time. Degree of urban area at the respective time period shown as grey shading. Closed circles represent sites where Redside Dace were captured; open circles represent sites of former Redside Dace occurrences when sampling occurred, but no Redside Dace were captured. Taken from COSEWIC (2007).

Development can impact Redside Dace habitat through:

- 1. Increasing the percentage of imperviousness (i.e., impenetrable) surface of the subwatershed which:
  - Reduces the ability of the ground to absorb rainwater resulting in reduced groundwater discharge to streams, which in turn results in reduced stream baseflows and increased water temperature
  - Increases the amount of surface runoff during rain storms (i.e., stormwater) causing streams to become wider and more unstable as erosion of the banks occurs; increased sediment enters the streams as result of the erosion of the banks
  - Increases stream water temperature through the addition of warmed rain water from hot surfaces
- 2. Site grading and excavation activities which can result in soil erosion which deposits silt (fine sediment) into streams:
  - Silt enters streams and reduces water clarity thereby affecting the ability of Redside Dace to see their prey
  - Excessive silt may result in the loss of habitat by covering up coarse substrate (e.g., gravel) areas required for spawning and filling in pool habitat areas; excessive silt can also suffocate Redside Dace eggs

#### 3. Loss of Habitat:

- Removal of riparian vegetation impacts the production of terrestrial insects; riparian vegetation is also an important source of cover in the small streams inhabited by Redside Dace
- Straightening or enclosure of streams eliminates habitat including pools and riffles
- In-stream barriers and weirs affect Redside Dace access to nursery and spawning areas located further upstream
- Loss of natural heritage features like wetlands and groundwater discharge areas affects the flow of water and food to downstream reaches of streams, and increases the temperatures of water flowing downstream

The above information has largely been summarized from the Recovery Strategy for Redside Dace (Clinostomus elongatus) in Ontario (MNR 2010a).

For further details and references for the above, please refer to this strategy available at: http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/287136.html

# Opportunities for Economic Benefits from Protection and Recovery Activities

Redside Dace require the same environmental conditions that can support high local property values: clean water from clear and cool streams. This presents an opportunity for developers and consumers to consider the economic returns that may be realized from Redside Dace protection and recovery.

Economic studies from across North America found that people are willing to pay more to live near clear and clean watercourses. A survey of thousands of residents within the Grand River watershed in the mid-1990s confirmed that residents are willing to pay an average of 9.6% more on their water bill in order to prevent development that would harm water quality enough to threaten fish, waterfowl, songbirds, and other species in marshes and woodlands. Similar results have been found within other watersheds, including in the St. Mary's watershed in Baltimore, Maryland where the effects of urban development have been the most widely studied over time. In this watershed, water quality is only affected by runoff from developed and paved areas, which have increased since a boom in development in the 1990s. During that time, economic analysis has revealed that even small changes in the environmental health of nearby streams can explain significant differences in property values. Each additional milligram of silt that clouds the water depressed the value of an average \$200,000 house by approximately \$1100, meaning that an additional 10 mg of silt in the water depressed property values by \$11,000. Further studies found that even if streams are not located within or next to a subdivision, their beneficial economic effects to property values can be measured within the local area.

Economists have also discovered that developers often have misconceptions regarding consumers' preferences for green spaces. Surveys have shown that consumers are willing to pay a premium for areas of high environmental health. A key finding from research on this issue is that local market research should be used rather than discussions with realtors and experiences from model-house showings, since this information usually reveals consumer preferences for the structural characteristics of the house, and not the natural environment.

Actions to support the recovery of Redside Dace have the added benefit of making streams clearer, calmer, and cooler. Upstream riverbank restoration could reduce the amount of sediment washing into streams, and thereby prevent the sediment from impacting Redside Dace's ability to find food and/or cover spawning habitat. Improvements to water quality have been shown to significantly improve property values. Recovery of Redside Dace could return economic benefits to local property owners in addition to providing them with improved environmental health.

Actions to protect Redside Dace and other species at risk, all contribute to the protection of biodiversity (i.e., the variety of living organisms that occur in an area). Maintaining natural biodiversity, and the interaction among species, is critical in maintaining natural ecosystem functions, many of which provide substantial benefits to society, including:

- Improved air quality
- Stabilization of climate (e.g., removing carbon from the atmosphere)
- Water purification

- Pollination
- Erosion control

Ontario's economy benefits from these functions including through:

- Reduced costs of water treatment
- Natural areas help to protect property from erosion and to store carbon to slow the rate of climate change
- Natural areas also provide places for recreation and renewal. Ecological research has revealed that biologically diverse ecosystems typically provide a greater flow of ecosystem services than non-diverse systems
- Biodiversity acts as insurance against some of the impacts of climatic change, since biologically diverse ecosystems are more resilient to change

These benefits are defined as nature's "ecosystem services." Ecosystem services are nature's benefits to humans that are not traded in the marketplace, so they do not have a market price. These priceless benefits have an economic value which can be revealed by various statistical and survey techniques known as ecosystem valuation. Recent research has revealed tens of billions of dollars in value from these ecosystem services across the Southern Ontario landscape.

The need to retain biodiversity is now recognized as an international priority. The impact of human activity globally, through increased industrialization and urbanization, is causing diversity to be lost at an accelerated rate. The United Nations General Assembly named 2010 as the International Year of Biodiversity to increase awareness of the importance of biodiversity and increase actions aimed at reducing the loss of biodiversity. Ontario has undertaken several actions, including passing the *ESA*, to protect its biodiversity.

#### 2.2 Redside Dace and the Endangered Species Act

In Ontario, species that may be at risk are reviewed by a team of experts known as the Committee on the Status of Species at Risk in Ontario (COSSARO). COSSARO is generally made up of people with expertise in certain scientific disciplines or Aboriginal Traditional Knowledge and are appointed by the Lieutenant Governor in Council. Once classified by COSSARO as "at risk", a species is added to the Species at Risk in Ontario (SARO) List.

For further information on COSSARO, please see: <a href="https://www.pas.gov.on.ca/scripts/en/BoardDetails.asp?boardD=141880">https://www.pas.gov.on.ca/scripts/en/BoardDetails.asp?boardD=141880</a>.

The Redside Dace was originally listed by COSSARO as a threatened species in 2000. Following re-assessment by COSSARO, the status of Redside Dace was changed from threatened to endangered on February 18, 2009 under the *ESA*. A species is classified as "endangered" if it lives in the wild in Ontario but is facing imminent extinction or extirpation. The Redside Dace was classified as endangered based on significant declines in most of the 24 Ontario watersheds where it was historically known to occur along with the ongoing threats to the species.

#### 2.2.1 Species Protection - Section 9 of the ESA

Generally, endangered, threatened and extirpated species on the SARO List are automatically afforded protection under the *ESA*. Section 9 of the *ESA* prohibits harmful actions such as killing, harming, harassment, possession, buying and selling of any of these species. As an endangered species, Section 9 of the *ESA* applies to Redside Dace.

## 2.2.2 Habitat Protection - Section 10 of the ESA

Section 10 of the *ESA* prohibits the damage or destruction of the habitat of all endangered and threatened species including Redside Dace. Under the *ESA*, "habitat" is defined as either:

- General Habitat (based on the general definition in clause 2(1)(b) of the Act) an area
  on which a species depends directly or indirectly to carry on its life processes including
  life processes such as reproduction, rearing, hibernation, migration or feeding or
- Regulated Habitat (as defined in clause 2(1)(a) of the Act) the area prescribed for a specific species in a habitat regulation

Only one definition will apply to a species at any given time. Therefore the habitat that is protected for any given species will either be the habitat based on the general definition in the Act or the habitat specifically prescribed for that species in a regulation.

#### **General Habitat**

General habitat protection provides immediate habitat protection to a species added to the SARO List as threatened or endangered. This can help allow for the continued persistence of the species until a more precise evaluation of the habitat needs of the species is completed and identified in a species-specific habitat regulation. Once a habitat regulation is in place, the habitat for that species is as described in that regulation.

Habitat protection based on the general definition described above applies to species listed as threatened or endangered and added to the SARO List after June 30, 2008, and to the species that were protected under the previous legislation (which are identified in Schedule 1 of the Act). From the time it was added to the SARO List as endangered in 2009, Redside Dace has received general habitat protection. The general definition of habitat applies until a Redside Dace habitat regulation comes into force.

#### Regulated Habitat

A habitat regulation prescribes an area as the habitat of the species. This can be done in several ways: by describing boundaries, features of an area, or describing the area in any other manner [S.55 (3)(a)]. The regulated area may be smaller or larger than the area described as general habitat [S.55(3)(c)]. The goal of species-specific habitat regulations is to protect habitat and help ensure the survival and recovery of endangered and threatened species.

The ESA requires that proposals for species-specific habitat regulations for newly listed species be published within two years of listing on the SARO List for endangered species, and within three years of listing for threatened species. A habitat regulation proposal for Redside Dace is therefore required by February 18, 2011, two years from the date that it was listed as endangered.

In keeping with these legislative requirements, the MNR has developed a proposed Draft Habitat Regulation for Redside Dace, which has been posted on the Environmental Registry for public comment on February 18, 2011. The Draft Habitat Regulation for Redside Dace can be found at: INSERT LINK ONCE AVAILABLE

**2.2.3 Recovery Strategy and Government Response Statement for Redside Dace** In February 2010, the recovery strategy for Redside Dace was finalized. Under the *ESA*, a recovery strategy provides advice to government on what is required to achieve recovery of a species. The recovery strategy outlines the habitat needs and the threats to the survival and recovery of the species. It provides recommendations on the objectives for protection and

recovery, the approaches to achieve those objectives, and the area that should be considered in the development of a habitat regulation.

For further details on the strategy, please see <u>A Recovery Strategy for Redside Dace in Ontario</u>, at: <a href="http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/287136.html">http://www.mnr.gov.on.ca/en/Business/Species/2ColumnSubPage/287136.html</a>

Within nine months of approving a recovery strategy, the Act requires the Minister to publish a statement summarizing the government's actions and priorities in response to the recovery strategy.

To review the Redside Dace Ontario Government Response Statement that was published in November, 2010, please see:

http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@species/documents/document/stdprod 069068.pdf

The recovery strategy, government response statement and species and habitat protection are all part of the government's approach to providing for protection and recovery of Redside Dace.

2.3 Other Approvals Required for Development Activities in Redside Dace Habitat
While these guidelines are specific to the requirements under the ESA, there are other
approvals related to development work conducted in Redside Dace habitat that may be
required. In Ontario, federal, provincial and municipal permits and approvals may be required
for projects in and around water, where fish habitat may be affected. These include, but are not
limited to the following:

#### Federal:

- Fisheries Act (e.g., prohibits harm to fish habitat)
- Navigable Waters Protection Act
- Species at Risk Act (e.g., fish and migratory birds listed under this Act throughout Canada, and other species at risk listed under this Act on federal lands) Note: Redside Dace is currently listed as Special Concern on Schedule 3 of this Act. As a species of Special Concern it is not afforded legal protection under SARA. In April 2007, COSEWIC assessed Redside Dace as Endangered, and it is currently being considered for listing under SARA.
- Canadian Environmental Assessment Act (e.g., federal Environmental Assessment process applies whenever a federal authority has decision making authority on a project)
- National Energy Board Act

#### Provincial:

- Lakes and Rivers Improvement Act (e.g., dams)
- Public Lands Act
- Crown Forest Sustainability Act
- Conservation Authorities Act (e.g., flood and erosion control, water course alteration)
- Fish and Wildlife Conservation Act (e.g., research permits)
- Ontario Water Resources Act (e.g., stormwater management)
- Environmental Assessment Act (e.g., process required for infrastructure projects by the public sector and certain regulated private sector organizations)
- Pesticides Act
- Aggregate Resources Act
- Environmental Protection Act
- Drainage Act

- Safe Drinking Water Act
- Nutrient Management Act
- Planning Act (e.g., provincial policy restrictions on development in significant habitat of endangered and threatened species and fish habitat)
- Planning legislation/regulations specific to certain geographic areas (e.g., Oak Ridges Moraine Act, Greenbelt Act, the Niagara Escarpment Planning and Development Act)
- Green Energy Act

#### Municipal:

Bylaws related to development (e.g., topsoil preservation bylaws)

For more details on the permitting and approval roles of agencies that have a regulatory responsibility for the review of proposed development projects in and around water, you can refer to the Fish Habitat Referral Protocol for Ontario at: <a href="http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@letsfish/documents/document/264">http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@letsfish/documents/document/264</a> 110.pdf

The Ontario and federal governments have established a protocol to streamline the approvals required under a few of the key Acts listed above. An Interim Protocol for the Review of Project Proposals that may Affect Species at Risk in Ontario has been prepared to provide a harmonized approach to the review and approval of projects associated with species at risk under the federal Fisheries Act and Species at Risk Act, as well as the provincial ESA. Under this protocol, the agency with the legislation that affords the greatest protection for the species will be designated as the lead (i.e., federal department such as Fisheries and Oceans Canada or the MNR). The lead will review proposals, and establish criteria that must be met for their legislation. Criteria designed to meet this legislation with the greatest protection, will also address the requirements of the other agency's legislation. For Redside Dace, where permits are required under the ESA, MNR is at this time the lead government agency as the ESA currently provides Redside Dace with the greatest protection.

It is the responsibility of the proponent planning any activities in Redside Dace habitat to obtain all necessary approvals and permissions (both under the ESA and/or any other applicable legislation) prior to the undertaking. Section 3.0 below provides a description of the project review and permitting process under the ESA. For more information on Ontario's provincial legislation, please see the E-laws website at: <a href="http://www.e-laws.gov.on.ca/index.html">http://www.e-laws.gov.on.ca/index.html</a>. For more information on Canada's federal legislation, please see the Department of Justice Canada's website at: <a href="http://laws.justice.gc.ca/en/">http://laws.justice.gc.ca/en/</a>.

#### 3.0 PROJECT REVIEW/PERMITTING PROCESS

Proponents are advised to discuss project plans with MNR district staff early in the project planning and design phase so that species and habitat protection measures can be considered at the outset and to avoid unanticipated delays. Redside Dace within Ontario are predominantly found in the GTA, within MNR's Aurora district. For MNR district contact information please see the References Section.

Each proposal will be considered on a case-by-case basis to determine whether or not a permit is required, with consideration for the broader subwatershed context. A permit is required for any activities that cannot avoid outcomes that are prohibited by the *ESA*, including those that are likely to kill, harm or harass Redside Dace, or damage or destroy its habitat. The Minister may decide to issue a permit, provided that the appropriate tests can be met (those for an

Overall Benefit permit are outlined in Phase 3 below). In some cases, it may be possible to avoid activities prohibited by the ESA, for example, by:

- Conducting activities at a different time of year (e.g., installing culverts in areas upstream of occupied reaches when these creeks are dry)
- Avoiding specific areas (e.g., moving upstream from occupied reaches to install a bridge)
- Using different techniques, such as directional drilling to install new infrastructure (e.g. pipelines, see Section 4.2.4 Best Management Practices: Installation of New Infrastructure).

Permits may also be required for activities occurring outside of Redside Dace habitat that have the potential to indirectly adversely affect the species' habitat. For example, construction, repair or redirection of storm water drains occurring outside of Redside Dace habitat that results in stormwater effluent flowing into protected habitat would likely require a permit.

There are four different types of permits that can be sought under Section 17 of the ESA. The permit type varies depending on the purpose of the activity:

ESA Permit Name	depending on the purpose of	Description
A	Human Health or Safety Permit	For activities necessary for the protection of human health or safety (e.g., repairing a failing pedestrian bridge that is at risk of collapsing, therefore posing a risk to human health and safety)
В	Protection or Recovery Permit	For activities that help protect or recover a species at risk (e.g., undertaking a stream restoration and enhancement project designed to improve overall riparian and aquatic habitat conditions within a portion of an occupied reach)
С	Overall Benefit Permit	For activities where the main purpose is not protection or recovery, but an overall benefit* for the species will be achieved within a reasonable time while minimizing adverse impacts (e.g., road widening activities that have the potential to adversely effect Redside Dace habitat)  * Overall benefit is more than 'no net loss' or an exchange of 'like for like' (see Figure 4).
D	Significant Social or Economic Benefit to Ontario Permit	For activities where the main purpose is not protection or recovery, but significant social or economic benefit to Ontario is provided (i.e., for limited circumstances and requires Cabinet approval)

Proponents are responsible for obtaining the appropriate permits prior to beginning the project. MNR district staff can support proponents in each step of the process as described below by:

- Confirming if Redside Dace and/or their habitat occur at or in the vicinity of the proposed site
- Providing advice on how to avoid harming or harassing Redside Dace and damaging or destroying its habitat
- Helping to determine whether specific activities will require authorizations under the

ESA and other approval authorities

Assisting proponents in the development of a permit proposal, including the development of mitigation and overall benefit plans, by providing species at risk expertise and applying knowledge of local habitat conditions

Examples of development activities that may require an Overall Benefit Permit under the ESA for Redside Dace include (but are not limited to):

 Site preparation (e.g. removing vegetation and/or topsoil, grading land, constructing, using and/or maintaining utilities, roads and septic systems)

Stormwater management

Removing or altering groundwater

 Activities relating to the construction and maintenance of water crossings (bridges, culverts), stream diversions and ponds

Relocation of streams

Road widening

# 3.1 The Project Review and Permitting Process

The project review and permitting approval process involves six phases:

Phase 1: Gathering information

Phase 2: Assessing the need for a permit

Phase 3: Permit assessment and content development

Phase 4: Consultation and permit drafting

Phase 5: Final permit and approval process

Phase 6: Implementing permit

The following section focuses on the project review process for Overall Benefit Permits because they are typically the most appropriate authorization for development projects. In some cases, other permits (e.g., Protection or Recovery Permits) may be required as a precursor to development projects. For further information on other permit types, please consult with your local MNR district office. A summary of the Overall Benefit Permit review and approval process is outlined in Figure 3.

The project review process is iterative and involves ongoing dialogue with the proponent, the MNR district office, affected stakeholders and other approval agencies. Each project review phase is described in more detail below and the roles and responsibilities of the MNR and proponents are summarized in the Project Review Summary (Section 3.4).

#### Phase 1: Gathering Information

Proponents are requested to discuss their proposed project with local MNR district staff and to provide the following documentation to support the determination about whether an ESA permit is required:

Proponent name and contact information

Land ownership (i.e. private, provincial, federal)

Project overview (i.e. a brief description of your project or activity)

Project details, including purpose, location, duration, timing and methodology

How it was determined that Redside Dace or its habitat was present

List of other species found on or near the site

List of other permits/approvals required

	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6
General Project Review Process	Gathering Information	Assessing the need for a permit	Permit assessment and content development	Consultation and permit drafting	Final permit and approval process	Implementing permit
Project Review Process for Overall Benefit Permits	Proponent gathers information about the project  Are Redside Dace or its habitat present?	Proponent  Will species or its habitat be impacted?  Can activities be modified to avoid adverse effects?  Confirm a permit is required	Consider alternatives  Design mitigation measures to minimize adverse effects  Develop actions to result in overall benefit	Complete consultation, if needed  Consider comments  Permit Revise plan and finalize draft permit conditions	Seek final approvals Proponent notified of decision Post Decision Notice on ER	Proponent undertakes project under conditions of permit

Figure 3. Overview of the Overall Benefit Permit Process. (EA: Environmental Assessment, ER: Environmental Registry)

# Phase 2: Assessing the Need for a Permit

During the second phase of the project review process, the MNR screens projects by considering a series of questions to determine the potential for adverse effect on Redside Dace or its habitat. Answers to the following questions will determine if a permit is required:

- a) Do Redside Dace occur within the given stream reach? Is Redside Dace habitat present?
- b) Are any phases of the proposed project likely to harm, harass, or kill individual Redside Dace? (Section 9 of the ESA)
- c) Will the proposed project damage or destroy Redside Dace habitat? (Section 10 of the ESA)
- d) Can the proposed project be modified to avoid all adverse effects on Redside Dace or its habitat? For example, could it be moved outside of Redside Dace habitat?

The first priority of the project review process is to determine whether it is possible to avoid activities prohibited by the ESA (i.e., avoid adverse effects on Redside Dace and its habitat) thereby eliminating the need for a permit under the ESA. MNR district staff will work with the proponent and provide advice about:

1. whether the project is unlikely to affect the species or its habitat and therefore not require a permit

- 2. whether and how the project can be modified to avoid all impacts (e.g., the project will not require a permit provided certain techniques are used, the work is conducted at a specific time of the year, and the work occurs in specified locations)
- 3. whether the project will require a permit to remain compliant with the ESA

Broad scale Redside Dace location information is available through the NHIC Biodiversity Explorer website: https://www.biodiversityexplorer.mnr.gov.on.ca/nhicWEB/mainSubmit.do and within recent Fisheries Management Plans. More detailed information regarding watershed range of the species is available through local district offices.

# Case Studies: Modifying a Project to Avoid Impacts to Redside Dace

Project 1: Installing a new watermain by digging an open-cut trench through existing occupied Redside Dace habitat.

Potential impacts: By digging a trench through the stream, the instream and riparian habitats would be disturbed. The impacts of an open-cut trench may include: i) altering the bed and banks of the stream (e.g. impacting spawning or feeding habitat); ii) removing potential food supply to the fish (i.e., Redside Dace feed on insects that live on the vegetation on the banks); iii) removal of bank vegetation/cover may result in increases in water temperature; iv) Construction of trenches may result in sediment entering the stream which may impact the water quality and clarity; and v) has the potential to directly harm Redside Dace during construction and/or fish removal/salvage activities.

How can the project be modified to avoid impact: Changing the method of installing the watermain so as not to enter the Redside Dace habitat will reduce the potential for adverse impacts. This can be done by conducting directional drilling that occurs beyond the 30 m of the riparian habitat of the stream and goes underneath the stream. Geotechnical studies are required to ensure that the location or drilling will not have indirect impacts on the stream such as draining its groundwater, and to ensure that this method is viable for that particular site (i.e., some sites contain subsurface conditions which would mean that directional drilling is unlikely to succeed such as large boulders). This should be discussed with your local MNR District Office.

Project 2: Installing a culvert in an area upstream of an occupied reach of Redside Dace.

Potential impacts: Installing a closed bottom culvert would require instream work which could impact the flow and function of the water to the occupied stream of the Redside Dace downstream.

How can the project be modified to avoid impact: Change the time of year for this project to July/August when this portion of the creek is generally dry so there would be no impact to the flow and function of the stream. Subwatershed studies for the area will usually document these conditions. In the event that the creek is flowing at this time, another alternative would be to use methods that pump or divert the water around the installation site to ensure that the stream flow is maintained.

The project proceeds to Phase 3 of the project review and permitting process, if it is determined that it is not feasible to avoid contravening the ESA.

# Phase 3: Overall Benefit Permit Assessment and Content Development

#### Tests for an Overall Benefit Permit

The legal requirements [ESA, clause 17 (2) (c)] for an Overall Benefit Permit include that the Minister must be of the opinion:

- that reasonable alternatives have been considered, including alternatives that would not adversely affect the species, and the best alternative has been adopted
- that reasonable steps to minimize adverse effects on individual members of the species are required by conditions of the permit
- that an overall benefit to the species will be achieved within a reasonable time through requirements imposed by conditions of the permit

Overall benefit is more than 'no net loss' or an exchange of 'like for like' (Figure 4). Actions deemed to provide an overall benefit to Redside Dace will typically be measurable (e.g., an appropriate length of the inhabited stream channel restored), outcome-oriented (i.e., focused on achieving a specific, predetermined goal) and linked to addressing threats identified for the species.

Overall benefit may include (but may not be limited to) the following changes relative to the initial condition of the species and/or habitat:

- An increase in the number of individuals of the species above the current level
- An increase in the extent of the species (e.g., increased proportion of the species' range occupied)
- Improved condition of existing populations
- An increase in the protection, quality and extent of a species' habitat
- Beneficial activities (such as reducing threats, monitoring project effectiveness, research, education and outreach) that alone do not result in any of the above benefits may contribute to an overall benefit plan for the species

To consider issuing an Overall Benefit Permit, MNR needs proponents to provide supporting documentation that:

- Describes in detail the proposed approach to achieve an overall benefit
- Describes the activities to be carried out to minimize adverse effects (i.e., mitigation measures)
- Demonstrates the consideration of <u>a range of reasonable alternatives</u>, including:
  - The rationale for selecting the preferred alternative as being the best alternative
  - The consideration of alternatives that avoid impacting the species (e.g., Can the activity be moved to a different location?)
  - The evaluation of alternatives that minimize the potential adverse effects. These
    evaluations may be part of the project's Environmental Assessment, provided that
    each alternative is considered from a perspective focused on its potential effects
    on Redside Dace

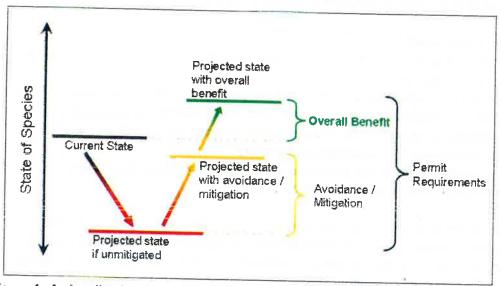


Figure 4. A visualization of what constitutes an overall benefit. Overall benefit is more than 'no net loss' or an exchange of 'like for like'. The gap between the projected state and the current state is dynamic and its location will vary according to how effectively the adverse effects can be mitigated, which in turn modifies what actions are necessary to achieve an overall benefit for the species.

Examples of project components that may be modified to minimize adverse effects include:

- Changes to the location of the proposed project (e.g., move the location of a bridge so that it is outside of the occupied reach of Redside Dace)
- Changes to project design (e.g., phasing grading of sites which assist in ensuring that sediment and erosion control is in place during construction; for further information on this and other Best Management Practices see Section 4.0 Best Management Practices below)

Examples of potential overall benefit actions for Redside Dace may include:

- Retrofitting of existing storm ponds and/or effluents to improve water quality
- Improving and/or securing habitat within the reach/subwatershed
- Decommissioning of artificial ponds connected to occupied streams to improve fish passage and/or water quality (e.g., temperature)
- Removing artificial barriers from streams to improve up/downstream fish movement
- Planting riparian vegetation to reduce bank erosion and create shaded stream conditions and insect habitat

In reviewing the documentation submitted, MNR considers the following:

- The location of the proposed project in relation to the Redside Dace habitat regulation.
   This information should be accompanied by a detailed description of the information source (e.g., MNR Redside Dace maps).
- Whether and how the tests for an Overall Benefit Permit are being met
- The degree of uncertainty and risk in the actions proposed to provide an overall benefit
- The proposed overall benefit relative to the magnitude and impact of the project
- The government's response statement to the Redside Dace recovery strategy which describes actions that the government and partners will take to protect Redside Dace

(as per the requirement to consider this statement prior to issuing a permit as described in ESA, subsection 17(3)). For the <u>Redside Dace Ontario Government</u> Response Statement please see:

http://www.mnr.gov.on.ca/stdprodconsume/groups/lr/@mnr/@species/documents/document/stdprod 069068.pdf

This information will be used by MNR to work with the proponent to begin compiling a draft Overall Benefit Permit. Opportunities to achieve an overall benefit to the species may be limited within particular stream reaches and sub-watersheds. In these cases, it may be necessary to consider the opportunities for providing an overall benefit to Redside Dace in habitats in other adjacent sub-watersheds (MNR district staff can provide assistance in this regard).

#### Phase 4 Consultation and Permit Drafting

The consultation and permit drafting phase involves ongoing dialogue between the MNR and the proponent. Following discussions between MNR and the proponent, MNR will assess other consultation activities that may be necessary (e.g., with the public, stakeholders, Aboriginal communities, local communities) depending on the particular situation. For example, a more consultation may be identified as an obligation under the Resource Stewardship and Facility Development Class Environmental Assessment. It is anticipated that proponents would be actively involved in these consultations, should they be necessary. Further information is provided in "A Class Environmental Assessment for MNR Resource Stewardship and Facility Development Projects" available on the Ministry of Natural Resources website at: <a href="http://www.mnr.gov.on.ca/en/Business/LUEPS/Publication/245473.html">http://www.mnr.gov.on.ca/en/Business/LUEPS/Publication/245473.html</a>, including details regarding consultation requirements (i.e., Appendix 3).

MNR considers the comments received during the consultation process and revises the proposal as required (e.g., in response to significant new information). Each draft permit will undergo a legal review.

#### Phase 5: Final Approval Process

During this phase of the project review, MNR staff submit the draft permit and supporting documentation to the Minister for a final decision regarding the issuance of a permit. The proponent is notified of the decision outcome by MNR district staff and the decision is made publicly available through the posting of a Decision Notice on the Environmental Registry.

#### Phase 6: Implementing Permit

If approved, the permit holder must adhere to the permit conditions to remain in compliance with the *ESA*, including, but not limited to, adherence to all aspects of Overall Benefit details, mitigation strategies and any other prescriptions (e.g., monitoring) or required documentation (e.g., photographs).

#### Case Study: Overall Benefit

**Project:** Road widening, including the removal of an existing 40 m steel pipe culvert in a reach of a stream occupied by Redside Dace and replacement with a new structure.

Alternatives: Design alternatives include: i) open span bridge; ii) new closed-bottom, corrugated steel pipe culvert (CSP); or iii) an open bottom culvert. These three options were considered, documented and presented for evaluation; however, technical constraints limit the potential for completely avoiding an adverse effect on Redside Dace regardless of the alternative chosen. It is geotechnically not feasible to build a bridge that arches above the unconfined (not defined) valley given the sandy soils and high groundwater in the area. A closed-bottom CSP culvert would require additional channel length (20m) to accommodate the road widening thereby covering existing habitat and may further limit fish passage. An open-bottom culvert can be incorporated that matches the existing culvert length and will not limit fish passage as would the CSP culvert. Therefore, the option of an open bottom culvert was chosen.

Adverse Effects: The construction of the preferred alternative (open-bottom culvert) will still result in some adverse impacts to Redside Dace habitat, including the temporary disturbance and damage of some habitat via construction activities to remove the existing culvert. In addition, there is the potential to harm or harass the species through de-watering of the construction area and fish salvage activities.

#### Mitigation:

- Flows are diverted around the construction area using dam-pump operations; a fish rescue plan is
  put in place within the construction area to remove and relocate the fish downstream.
- Insertion of a new open bottom culvert that spans the channel will restore the natural flow of the stream including that of potential groundwater inputs
- Retaining walls are used (compared to traditional embankment areas) to support the road which
  eliminated the need to lengthen the culvert over a further 20 m of the stream (i.e., the new culvert
  is the same length as the culvert being replaced)
- Work within the stream to remove the existing culvert is conducted within the construction timing window recommended for Redside Dace (i.e. July 1 to September 15<sup>th</sup> so as to avoid the spawning season and to stabilize the stream corridor before winter)
- Effective sediment and erosion control is in place to prevent sediment from entering the stream
- Maintain style of existing rural road for road expansion that has no curbs or drains to prevent stormwater runoff from the road into the stream

Overall Benefit: The incorporation of an open-bottom culvert will restore overall stream function, as the existing culvert was impairing natural channel processes including sediment transport and groundwater flow into the channel and limiting fish passage. In addition to the open-bottom culvert, Overall Benefit included the removal of an existing barrier (i.e., small dam) to Redside Dace movement located upstream of project site. Removal of the barrier upstream provided access to 1.5 km of good quality habitat located upstream. The increase in the extent of the species' habitat is expected to be sufficient to support an increase in the local population.

#### 3.2 Timelines for Seeking a Permit

Once permit conditions are determined, the process is generally completed within six months; however complex situations may take longer. Each project proposal will be unique. The duration of the project review process will depend on the project complexities, scale, proposed timing of development activities and the sensitivity of Redside Dace and its habitat to these activities. Examples of factors that may affect the timing the project review process include:

- The amount of time required to obtain preliminary information from proponents
- Timing considerations associated with gathering additional information, if needed
- Determining the probability and magnitude of potential impacts
- The complexity of discussions regarding mitigation and overall benefit plans
- Results of Environmental Assessment Act screening that outlines the consultation requirements necessary (i.e., the higher the category that a project screens to, the more consultation is needed)
- Drafting of the permit
- The feedback received from posting to the Environmental Registry

# 3.3 Checklist: Summary of What is Required for the Project Review Process

The type of information required by MNR to discuss your project will depend on the type of permit being sought. The information provided below refers to the information that the proponent is to provide to MNR (Phases 1-3) for acquisition of an Overall Benefit Permit.

# Phases 1 and 2: Gathering Information and Assessing the Need for a Permit

	Proponent information (contact information and primary contact)  Land ownership (i.e. private – including landowner name, provincial, federal)  Project details, including the purpose of the activity, project location(s), duration of the project, timing and methodology (i.e. how each phase of a multiple phase project will be carried out). The specific nature of these documents will vary based on the proposed undertaking.
	A detailed description of the source for Redside Dace and habitat information (e.g. MNR maps or advice given by MNR to the proponent about whether the stream reach is occupied by Redside Dace)
	A list of other species found on or near the site
	An explanation of possible impacts on a protected species or habitat throughout the entire project
	A list of other permits/approvals required
Phase	3: Permit Assessment and Content Development
	An analysis of a range of reasonable alternatives (including those that avoid adverse effects on Redside Dace)
	The rationale for the best alternative selected
	Recommended steps to minimize adverse effects (i.e. a mitigation plan)
	Proposed approach to achieve overall benefit to the species (i.e. an overall benefit plan)
	Permit proposal
	Consideration of Environmental Assessment obligations, approvals required by other legislation and consultation (if applicable)

#### 3.4 Project Review Summary

# Roles and Responsibilities – the Ministry of Natural Resources

#### The MNR will:

- Work with the proponent at the earliest possible stages of the land use planning process
- Determine whether Redside Dace or its habitat are known to occur on site
- Evaluate whether additional information is needed about the presence of Redside Dace or its habitat
- Assess proposals on a case-by-case basis with consideration of the broader subwatershed
- Consider the Government Response Statement for Redside Dace when evaluating mitigation and overall benefit actions described in the permit proposal
- Draft the legal terms of the permit
- Consider comments provided during the consultation process (if applicable) and revise permit as required
- Make a final decision whether to approve the permit and notify the proponent
- If approved, issue the permit
- Post decision notice on the Environmental Registry

#### Roles and Responsibilities - Proponents

In general, proponents are responsible for:

Ensuring they follow all relevant laws in addition to the ESA.

Consulting with MNR and other approval agencies as early in the process as possible to learn what permits may be needed and to aid in the coordination of these approvals

- Consulting with the local district MNR office about the location of the proposed project in relation to stream reaches occupied by Redside Dace. This could include conducting surveys only if MNR determines that insufficient data is available for the site and there is reason to believe that Redside Dace may be in the area
  - NOTE: a protection and recovery permit may be needed.

If a species at risk or protected habitat is likely to be impacted by the proposed activities and the proponent wishes to pursue an Overall Benefit permit to obtain authorization for the activity, the proponent will need to:

- Provide detailed information about the proposed activity and demonstrate that the appropriate species information has been considered (e.g., species presence and/or habitat features)
- Provide specific project information including:
  - Proponent name and contact information
  - o Land ownership (i.e. private, provincial, federal)
  - Project overview (i.e. a brief description of your project or activity)
  - Project details, including purpose, location, duration, timing and methodology
  - How it was determined that Redside Dace or its habitat was present
  - List of other species found on or near the site
  - List of other permits/approvals required
  - Analysis of a range of reasonable alternatives, including alternatives that would not adversely affect Redside Dace
  - Rationale for best alternative selected
  - Recommended steps to minimize adverse effects
  - Proposed approach to achieve overall benefit to the species
- Develop a detailed plan for how to achieve an overall benefit for the species with support from MNR and provide the supporting documentation

# 4.0 BEST MANAGEMENT PRACTICES

The following Best Management Practices (BMPs) have been developed to provide guidance to development activities and have been based upon current requirements, guidelines and existing development practices in Ontario. For each BMP, links to current guidelines or other key reference documents are provided. In the Project Review and Permitting section (Section 3.0), MNR district offices will be reviewing applications for consistency with the following BMPs.

4.1 Planning Development Activities: Comprehensive Planning for Subwatersheds

As described above, Redside Dace inhabit and move through subwatersheds of larger river systems. Through planning at a subwatershed level, the entire areas that Redside Dace inhabit can be fully evaluated and assessed for potential cumulative effects of urbanization on this species. Utilizing these subwatershed plans to inform the planning process will help ensure that consideration is given for Redside Dace upfront, when there is greater flexibility and more opportunities for avoiding or minimizing impacts (e.g., moving or redesigning projects and ensuring that projects timing conforms with the recommended construction timing window). Examining the impact of multiple potential projects on this comprehensive scale upfront can save time and money for all involved. The following BMPs are therefore recommended for planning:

Municipalities should ensure that subwatershed plans that include consideration for Redside Dace are developed early on in the planning process, and prior to any decisions being made that could impact their habitat. These subwatershed plans should therefore be completed prior to the Secondary Planning stage, so that Redside Dace requirements are fully incorporated into planning for areas (e.g., secondary, subdivision and site plans) and appropriate direction is provided for all development.

The development of subwatershed plans are generally led by the local Conservation Authority or municipality, with input and advice from the MNR and other planning agencies. By developing this clear direction early on in the planning process, municipalities will ensure that all developers within areas are provided with consistent direction that may streamline their approvals, and that several requirements of the Provincial Policy Statement (PPS) are met, including those pertaining to Redside Dace as follows:

#### 2.1 Natural Heritage ...

- 2.1.3. Development and site alteration shall not be permitted in: a) significant habitat of endangered species and threatened species (as defined in the PPS and approved by MNR)
- 2.1.5. Development and site alteration shall not be permitted in fish habitat except in accordance with provincial and federal requirements....
- 2.2.1 Planning authorities shall protect, improve or restore the quality and quantity of water bv:
- c) Identifying surface water features, ground water features, hydrologic functions and natural heritage features and areas which are necessary for the ecological and hydrological integrity of the watershed....
- g) ensuring stormwater management practices minimize stormwater volumes and contaminant loads, and maintain or increase the extent of vegetative and pervious surfaces.

For a complete copy of the Provincial Policy Statement 2005, see the Ministry of Municipal Affairs and Housing's website at: http://www.mah.gov.on.ca/Page215.aspx

For technical guidance on implementing the natural heritage policies of the PPS including the relationship of the PPS to the ESA, please see the second edition of the Natural Heritage Reference Manual, available on MNR's website at:

http://www.mnr.gov.on.ca/en/Business/LUEPS/Publication/249081.html

Subwatershed plans are typically divided into three phases within the planning process:

#### Phase 1 - Characterization

- Characterize the existing subwatershed area in terms of the natural heritage features and linkages including the following that pertain to Redside Dace:
  - o Natural cover and impervious or impenetrable cover
  - o Groundwater discharge and recharge zones
  - Vegetative cover (i.e., riparian habitat)

- Wetlands and headwater stream network
- o Fisheries
- Current water balance or water budget (i.e., the way in which precipitation falling in an area is dispersed among evaporation, transpiration from plants into the air, infiltration and runoff) and water quality

#### Phase 2 - Analysis

- Set the vision, goals and objectives for priorities that may include natural heritage, water management and land management planning goals (e.g., protect and enhance the environment, community involvement)
- Set targets for water infiltration, stormwater management, fish community and natural heritage features (e.g., targets for water infiltration and stormwater management for the selected storm ranges, maximum percentage of impervious/impenetrable cover, maximum temperature increases based on needs of the fish, maximum total suspended solids, preservation and/or increase of wetlands to support Redside Dace, realignment of streams, etc.)
- Forecast possible development scenarios and implications to water balance and water quality. Subwatershed based impact analyses are closely tied with understanding the cumulative effects of predicted land use changes.
- Make adjustments to planned land uses to achieve targets for water infiltration, stormwater management, etc.

#### Phase 3 – Implementation

- Subwatershed plans when implemented:
  - o Recommend a Natural Heritage System
  - o Provide recommendations for impact mitigation and adaptive management
  - Provide policy direction to the planning process (i.e., secondary, subdivision and site plans)
  - Provide comprehensive monitoring program recommendations

The following checklist identifies content that subwatershed plans should identify to protect Redside Dace.

Subwatershed plans should identify the following items to protect Redside Dace: ☐ The protected habitats of Redside Dace (i.e., habitat as outlined above in the Redside Dace habitat regulation) ☐ The water management targets that need to be achieved in order to protect and rehabilitate the local subwatershed population including for example: Stormwater management targets designed to help mitigate the impacts of development (i.e., impervious cover) on water balance Recommended stream temperatures o Recommended water quality parameters (e.g., concentration of total suspended solids) ☐ Approaches to meeting targets, goals and objectives including for example: Designating areas and low impact development approaches for stormwater management Minimizing the number of stream crossings (i.e., bridges, culverts, etc.) and directing the location and design of these crossings Identification of trail locations (i.e., proximity and impact on streams) Identification of wetland and stream restoration areas o Direction for Erosion and Sediment Control Plans/Environmental Control Plans and the development of related bylaws (e.g., Topsoil bylaws to regulate/prohibit the removal of topsoil) o Location and design of infrastructure (e.g., watermains, pipelines, etc.) o Enhancement opportunities via the removal or mitigation of existing impacts on Redside Dace (e.g., barriers, online ponds, etc.) See Section 4.2 Best Management Practices for specific sediment, temperature, water balance, water quality targets for Redside Dace, as well as preferred construction practices.

Subwatershed planning, and the development of water related targets to be considered before official plan documents are formulated, have been recommended as a BMP since the early 1990s. This was documented by the Ministries of Environment, Energy and Natural Resources in the Subwatershed Planning document which is available on MNR's website at: http://www.mnr.gov.on.ca/en/Business/Water/Publication/MNR E002320P.html

The value of subwatershed planning and the need to consider the cumulative effects of stormwater management is described in the Ministry of Environment's Stormwater Management Planning and Design Manual, 2003 which is available at: http://www.ene.gov.on.ca/envision/gp/4329eindex.htm

For further information on subwatershed planning consult with your local conservation authority or municipality. Some conservation authorities, including Credit Valley Conservation, have subwatershed plans posted on their website. For a list of conservation authorities, please see Conservation Ontario's website:

http://www.conservation-ontario.on.ca/

For a list of municipalities and information on the municipal planning process, please see the Ministry of Municipal Affairs and Housing website at: http://www.mah.gov.on.ca/Page1591.aspx 4.2. Conducting Development Activities

This section contains the BMPs for the following development activities:

- Stream Crossings
- Erosion and Sediment Control During Construction
- Stormwater Management
- Installation of New Infrastructure
- Stream Realignments and Relocations

This list of BMPs is not intended to be an exhaustive list, but rather to cover the major construction activities that most commonly have an impact on Redside Dace and their habitat. Development of urban areas will typically involve all of these activities, while development in rural areas will typically only involve select activities including stream crossings and installation of infrastructure. These BMPs have been developed using habitat conditions that Redside Dace requires as described in the Context section, including water temperature and water clarity. The degree to which habitat conditions can be maintained will determine the relative impact on Redside Dace and their habitat. The BMPs listed for each activity are intended to act as suggested methods or techniques that can be implemented to protect habitat conditions for Redside Dace.

By following these suggested BMPs, the permitting process may become more streamlined as less discussion about possible construction methods and their impacts will be required with MNR staff. If there are other methods available for meeting these conditions, proponents are encouraged to discuss them with their local MNR district office early on in the process. In some cases, adherence to the suggested BMPs will preclude the need for a permit, whereas, in other situations, the BMPs will further assist in avoidance/mitigation activities.

As described in the Project Review and Permitting Process (Section 3.0), MNR will provide advice on whether or not a permit is required based on the specifics of proposed projects. If a permit is required, the avoidance/mitigation and overall benefit activities will be determined and documented in a permit issued under the *ESA*.

4.2.1 Stream Crossings (i.e., Bridges, Culverts, etc.)

Roads constructed across or adjacent to streams can have significant impacts on the overall health of the stream and Redside Dace habitat. For example, the removal of riparian vegetation and the discharge of sediment into streams during construction can impact Redside Dace habitat by covering up important spawning areas, filling in pools and reducing the ability of the species to find food. Bridges and culverts can have varying impacts on the habitat of Redside Dace, depending on their location, design, size and placement in the streams, and method of construction. For example, some designs may restrict flows, prevent light penetration, and/or limit fish passage. The following BMPs are therefore suggested for stream crossings to assist in minimizing the impacts on Redside Dace habitat.

For all direct Redside Dace habitat, crossings should be designed to avoid/mitigate impacts by adhering to the following:

- The proposed road networks for new crossings should be designed to minimize the number of stream crossings (e.g., stream crossings should generally be limited to 1 per kilometre of stream).
- The location of new stream crossings should be chosen to:
  - Minimize the width of the crossings
  - Cross over straight sections of the stream where there is less likelihood for bank erosion
  - Cross at areas that have already been disturbed and avoid initiating disturbances in new areas of the stream
- Construction methods used should attempt to minimize the amount of activity in protected habitat (i.e., including the stream meander belt and riparian habitat) and incorporate the following, to maintain the natural flow and functions of streams:
  - For new/replacement crossings in confined valleys (i.e., defined valleys), stream crossings should be bridges that span the valley with any piers required placed outside of the meander belt of the stream (Figure 5). Bridges should be high enough to maintain light penetration to the stream.
  - For new/replacement crossings in unconfined valleys (i.e., undefined valleys), stream crossings should be open bottom culverts designed to span the meander belt of the stream. The length of the culvert should be minimized by using retaining walls vs longer culverts to minimize disruption to riparian habitat.
  - For extension of existing structures, the footprint of the structure should be minimized by using retaining walls to minimize disruption to riparian habitat. Replacement of the existing structure should be considered as an alternative through the planning process.
  - Developing a plan for managing the stormwater runoff from road crossings and where possible preventing it from entering the stream. For example, by retaining rural road structures for the crossings, which do not have curbs or drains, stormwater will not be discharged directly into the stream. For further information on stormwater management BMPs, please refer to Section 4.2.3.
  - In addition to the BMPs listed above, any construction activity that must occur
    in the stream should also incorporate the BMPs outlined for indirect habitats
    (i.e., upstream areas) below. This includes restoring any temporary
    disturbances within the riparian habitat (i.e., 30 m on each side of the
    meander belt) by planting native species.

- For proposed road crossings in all indirect Redside Dace habitat, there is more flexibility in the location and design of the crossings, as the impact on the habitat is lessened. If the form and/or function of these supporting features is maintained, a permit may be avoided. This can be achieved through the following:
  - o In-water work should only be conducted during the recommended construction timing window of July 1 to Sept 15. This will ensure that Redside Dace their habitats downstream are protected during the sensitive spawning period, as well as ensuring that the stream has stabilized and the riparian habitat is established before the winter months. Once construction is completed, the riparian habitat must be restored using native materials
  - Construction should be undertaken during periods when the channel is dry or with minimal flow. If undertaken during a period when the channel is dry then the project can avoid the need for the next two best management practices
  - o The length of time required for in-water work should be kept to a minimum
  - Watercourses should not be blocked or flows impeded sufficiently to limit fish movement (i.e., pumping or diversion of flows around the work site can be used to avoid blocking flow during construction)
  - Appropriate sediment controls should be in place and measures taken to prevent sediment from exceeding 25 mg/l above background level during construction (see Section 4.2.2 BMPs: Construction Site Preparation)
  - Exposed soil should be graded to a stable angle and revegetated in a manner that prevents erosion
  - Closed-bottom culverts should be installed so that the invert is embedded a minimum of 10% (of the culvert diameter) below the stream bed. This will facilitate fish passage by ensuring that the culvert is not perched during periods of low flow
  - Slopes of culverts should mimic the natural stream bed
  - Materials moved during construction activities should not be stockpiled where they can adversely affect drainage patterns

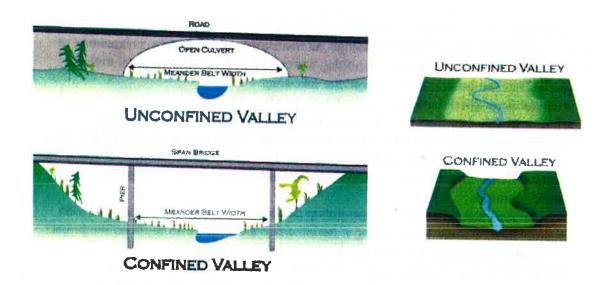


Figure 5. Examples of road crossings with respect to confined and unconfined valleys.

The MNR works closely with local Conservation Authorities on stream crossing proposals. Local Conservation Authorities review stream crossing proposals in order to issue permits under their Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. Conservation Authorities also generally conduct screening on behalf of the Fisheries and Oceans Canada (DFO) under the federal *Fisheries Act* to determine if projects will have a harmful alteration, disruption or destruction (HADD) of fish habitat. If it is determined that there is a HADD, MNR will also work closely with the DFO (see Section 2.3 for further information on an Interim Protocol established).

For an example of criteria that the Conservation Authorities will be looking for please see <u>Watercourse Crossing Design and Submission Requirements</u> on the Toronto and Region Conservation Authority's website at:

http://www.trca.on.ca/dotAsset/40041.pdf

#### 4.2.2 Construction Site Preparation

While some soil erosion occurs naturally as a result of rain, wind and water dispersing soil, a good vegetative cover can prevent significant soil erosion. The substantial benefits of vegetative cover to control soil erosion are often lost during land development. For example, when trees and plants are removed, natural drainage pathways are altered and stable topsoil aggregates are stripped away as part of the grading process. Studies have shown that suspended solid concentrations in untreated runoff originating from construction sites can be up to 30 times greater than in vegetated residential areas (SWAMP, 2005; TRCA and U of G, 2006; TRCA 2006).

The damaging effects of excess sediment discharges on fish and aquatic life are well documented, and may impact Redside Dace through:

- Impairment to respiratory functions
- Lower tolerance to toxins or disease

- Decreased reproductive success due to siltation of nests and impacts on spawning sites
- Reduced vision, which inhibits their ability to find food
- Sediment accumulation on the banks of the stream may restrict light penetration and impede plant growth, which in turn reduces riparian cover and habitat for their prey (i.e., terrestrial insects)

Redside Dace are a sensitive species that require clean and clear water that allows them to detect their prey in. Studies have shown that anything above 25 mg/L will begin to impact fish, as summarized in Figure 6. The degree of impact increases as the amount and duration of total suspended solids that fish are exposed to increases. As these two factors increase, impacts intensify as follows:

- Minor impacts which result in behavioral changes (e.g., avoiding areas, changes in breathing patterns)
- Moderate impacts which have serious health implications including elevated stress and exposure to bacterial infection
- Major impacts causing destruction to habitat and/or death to fish and their eggs.

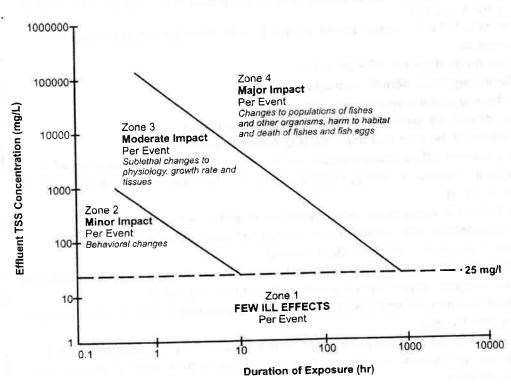


Figure 6: Relationship between sediment concentration and duration of exposure on fish health and habitat (Newcombe 1986)

Construction should therefore be designed with a comprehensive or treatment train approach to preventing and controlling sediment release, from the source and through conveyance to the streams. Adopting a comprehensive approach offers many efficiencies, including avoiding

costly cleanup efforts if the entire train of sediment is not considered. The following controls are suggested BMPs to use during construction to prevent erosion and reduce or eliminate increased sediment flowing into streams.

The discharge of water from urban development construction areas into Redside Dace habitat should not exceed 25 mg/l of total suspended solids (TSS) above the background stream level of total suspended solids in baseflow conditions. This is consistent with the level recommended by the Canadian Aquatic Water Quality Guidelines for the Protection of Aquatic Life for Total Particulate Matter. These guidelines recommend different parameters for high flow conditions and for measuring using Nephelometric Turbidity Units (NTUs) which are listed in Appendix A. Should proponents be able to control sediment and erosion on site without connection to adjacent Redside Dace habitat, they can avoid the need for a permit. If projects are to enter Redside Dace habitat (e.g., by connecting sediment and erosion control ponds to Redside Dace habitat) there is the potential to have significant negative impacts on Redside Dace habitat which would require a permit.

Erosion and Sediment Control Plans are often required by Conservation Authorities for permits under their Regulation for *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses* and screening for federal *Fisheries Act* requirements. Erosion and Sediment Control Plans should be designed to meet the above objectives by incorporating measures such as the following:

- Erosion should be prevented by limiting the size of disturbed areas through such measures as:
  - o Phasing grading and infrastructure
  - o Minimizing nonessential clearing and grading
  - Retaining existing vegetation
- Erosion should be minimized through measures including:
  - o Minimizing the time that any area is exposed to erosion.
  - Any surface left exposed should have the soil stabilized (e.g., erosion control blankets, lockdown netting, seeding, spraying, utilization of methods to roughen the surface)
  - Minimize the slope length and gradient of disturbed areas
  - Store/stockpile soil outside of direct Redside Dace habitat and at least 30 m away from indirect Redside Dace habitat
- Sediment from the construction site should be captured through measures including:
  - A multi-barrier approach to prevent sediment entering the stream
  - Effective sediment and erosion ponds (i.e., appropriate structure, size and type required for site)
  - Methods to trap sediment (i.e., filter berms, sediment traps, vegetation, etc.)
  - Monitor and maintain sediment and erosion controls at all times to ensure they are effective

For further information on sediment and erosion control, consult the following: Greater Golden Horseshoe Area Conservation Authorities Erosion and Sediment Control Guideline for Urban Construction which can be found at: http://www.sustainabletechnologies.ca/portal/alias Rainbow/lang en-US/tabID 432/DesktopDefault.aspx

For an example of criteria that the Conservation Authorities will be looking for please see Erosion and Sediment Control Design and Submission Requirements on the Toronto and Region Conservation Authority's website at:

# http://www.trca.on.ca/dotAsset/40051.pdf

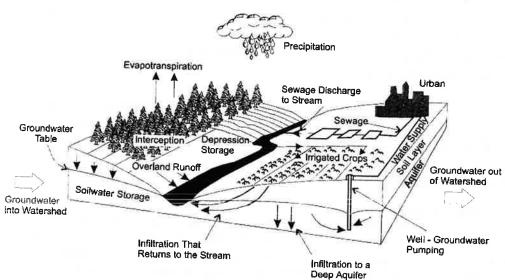
## 4.2.3 Stormwater Management

As land changes from being used for agriculture purposes to urban uses, farmland is replaced by impervious or impenetrable surfaces (i.e., pavement for roads, buildings, etc.). This can result in increased rainfall entering a stream, as there is less land to absorb the runoff. Rainfall from urban areas is generally referred to as stormwater. In some cases, urbanization has caused a 3 -5 fold increase in the amount of stormwater entering a stream, with a corresponding reduction in infiltration into the ground.

This results in dramatic changes to the habitat that Redside Dace require, including, but not limited to, increasing water temperatures, alteration of natural flow regimes and increased runoff and reduced infiltration. For example, untreated stormwater from pavement is much warmer and often carries pollutants (e.g., oil, chemicals). When deposited into Redside Dace streams, this stormwater can render the water too warm and change the water quality sufficiently to impact their survival. Untreated stormwater can also impact the flow and stability of water levels and have damaging impacts including reducing or eliminating spawning habitat and filling in pools, and altering the riparian habitat as the streams widen and overflow.

Stormwater management has evolved since the mid 1980s and there has been increased emphasis on capturing more rainfall at the source rather than relying on end-of-pipe solutions. Modern stormwater guidelines adopt a comprehensive "treatment train" approach which means that stormwater runoff is treated at source, during conveyance and at the end of the pipe. This comprehensive approach can provide a more effective reduction of runoff and pollutants from stormwater than end-of-pipe facilities alone. It is now recognized that end-of-pipe facilities on their own will not match the characteristics of the distributed infiltration from a natural hydrological cycle, which occurred under pre-development conditions.

The natural hydrological cycle of streams (as illustrated below in Figure 7) includes infiltration to the stream, effects on groundwater, evapotranspiration from nearby vegetation, etc. and can be maintained to the greatest extent possible by maximizing infiltration controls at the source or lot level. Some initial studies conducted by the United States Environmental Protection Agency on sites in Canada and the U.S. have shown that employing such approaches reduces the costs of stormwater management as less land is required to implement end-of-pipe solutions. Other potential benefits identified were enhanced property values and improved quality of life for residents as stormwater management is integrated into amenities in residential areas such as parks and wetlands.



Source : After, M, L, Davis, D. A. Cornwell, Introduction to Environmental Engineering, 1991,

Definitions:

Overland runoff - water that travels over the ground surface to a channel Streamflow - movement of water via channels Groundwater flow - movement of water through the subsurface Infiltration – penetration of water through the ground surface Groundwater recharge – water that reaches saturated zone

Figure 7 - The Hydrological Cycle (taken from CVC/TRCA 2010)

# The following represent BMPs for stormwater management.

As described in the previous BMP Section regarding Construction Site Preparation, the discharge of water from urban development stormwater management facilities into Redside Dace habitat should not exceed 25 mg/l of total suspended solids (TSS) above the background stream level of total suspended solids. Should proponents be able to control stormwater without connection to Redside Dace habitat, they can avoid the need for a permit. However a permit would be required if direct connections are made between stormwater management ponds and Redside Dace habitats due to the potential for negative impacts (e.g., sediment release, increased water temperatures).

Discharge temperatures for stormwater management facilities connected to Redside Dace streams should be below 24°C and have dissolved oxygen concentrations of at least seven milligrams per litre. These thresholds represent the maximum (temperature) and preferred (oxygen) conditions for Redside Dace (MNR 2010a).

Post development water balance (i.e., the hydrological cycle of the water including the flow and levels of surface and ground water) should match predevelopment water balance in order to protect the natural hydrological functions of Redside Dace streams. Therefore, there should be no storm run-off from rainfall events in the range of 5 – 15mm (however, this may depend on the recommendations set forth in the subwatershed plan and on soil permeability).

To maximize the absorption of nutrients and other contaminants and prevent them from entering streams, stormwater management facilities adjacent to Redside Dace habitat should be designed as hybrid extended detention wetlands/wet ponds. These facilities are more effective than traditional ponds at removing pollutants harmful to Redside Dace including nitrates, phosphorous and copper.

The above objectives can be achieved by utilizing a low impact development strategy for stormwater management that treats stormwater as close to the source as possible and focuses on runoff prevention. This includes such measures as:

- Site design strategies to minimize runoff which involves:
  - o conserving natural features that absorb rainfall (e.g., wetlands, stream buffers, forested areas, permeable soil, etc.)
  - locating and designing buildings/infrastructure to reduce impact (e.g., clustering development in less sensitive areas, reducing footprints of buildings and roadways)
- Evaporation and infiltration practices (e.g., using native vegetation/trees, green roofs, soak aways pits, infiltration trenches, permeable pavement)
- Rainwater harvesting (e.g., rain barrels, cisterns)
- Runoff conveyance (e.g., perforated pipe systems or grass channels which treat and infiltrate runoff as it is being transported)
- Runoff storage (e.g., woodland restoration, constructed wetlands which capture and then release water as evaporation into the air)

Several of these low impact development measures may be required, which will vary depending on site specific factors including the soil, geology and groundwater level. These measures will reduce the amount of effort required to implement effective end-of-the-pipe solutions.

Municipalities routinely review stormwater management plans, often with the assistance of Conservation Authorities. The Ministry of Environment issues Certificate of Approvals and permits to take water for stormwater management facilities under the Ontario Water Resources Act.

For further information on Low Impact Design and Stormwater Management, consult the following:

Low Impact Development Stormwater Management Planning and Design Guide by the Credit Valley and Toronto Region Conservation Authorities.

http://www.sustainabletechnologies.ca/Portals/ Rainbow/Documents/LID%20SWM%20Guide% 20-%20v1.0 2010 1 no%20appendices.pdf

Ministry of Environment's Stormwater Planning and Design Manual at: <a href="http://www.ene.gov.on.ca/envision/gp/4329eindex.htm">http://www.ene.gov.on.ca/envision/gp/4329eindex.htm</a>

# 4.2.4 Installation of New Infrastructure (e.g., pipelines, watermains, sewers, hydro conduits, etc.)

The placement of infrastructure such as gas pipelines, storm and sanitary sewers, and hydro conduits near streams has the potential to impact Redside Dace habitat. For example, open cut installations which excavate trenches into the stream bed often impact habitat by discharging sediment into the stream and disrupting the riparian habitat along the stream banks. Other technologies are available that allow for the installation of the infrastructure that avoid or minimize impacts to the stream or stream corridor. These methods are now commonly used by utility companies and developers. The following are BMPs for the installation of new infrastructure:

Utilities near streams should be located either over or under streams to avoid impact to Redside Dace habitat. By implementing these BMPs and avoiding impact to Redside Dace stream corridors, proponents can avoid the need for a permit.

Utilities should be planned to be built in conjunction with new or replacement road crossings as part of the planning process. When utilities need to be added after road crossings have been built or replaced or installed in areas outside of right-of-ways, they should be:

- Installed below the streams using trenchless techniques such as directional drilling and jack and boring (i.e., tunneling). Site-based geotechnical studies are required to support the techniques, to ensure that the location for drilling will not have indirect impacts on the stream such as draining its groundwater, and to ensure that the method is viable for that particular site (i.e., some sites have subsurface conditions, such as large boulders, which could mean that directional drilling has a high risk of failure or frac-out). These projects should be discussed with your local MNR district office. MNR works closely with the local Conservation Authority on these proposals. Generally, emergency frac-out response and contingency plans will be required by Conservation Authorities to obtain a permit under their Regulation of Development, Interference with Wetlands and Alterations to Shorelines and Watercourses. These plans are also required by the Fisheries and Oceans Canada to comply with the Fisheries Act as outlined in their High-Pressure Directional Drilling Operational Statement available at: http://www.dfo-mpo.gc.ca/regions/central/habitat/oseo/provinces-territories-territoires/nt/os-eo09-eng.htm.
- Placed underneath existing road crossings (i.e., attached underneath the existing bridge) and above the streams, presuming the owner of the structure provides consent.

4.2.5 Stream Realignments and Relocations

Historically, some Redside Dace streams, like sections of Highland Creek in Toronto, were straightened into concrete lined channels, engineered storm channels or enclosed in large pipes through urbanization. In other areas, the improvement of land for agricultural purposes resulted in the straightening of streams into agricultural ditches or drains. As our understanding of stream functions has improved, the management of streams has shifted to maintaining natural channels to maintain the natural flow and functions of streams, thereby minimizing the impact on fish species including Redside Dace.

As planning for urban development is undertaken, there are opportunities to improve and increase Redside Dace habitat by:

- realigning previously straightened streams to restore their natural forms and functions
- relocating degraded streams to locations that are better linked to supporting features such as wetlands and areas of groundwater discharge

The following BMPs for stream realignments and relocations have been taken from the Adaptive Management of Stream Corridors in Ontario guide produced by MNR and many partners.

The relocation or realignment of degraded stream reaches should be based on an approved subwatershed plan as described earlier in these guidelines.

The design and function of the new streams should be based on the planning and design processes outlined in the <u>Adaptive Management of Stream Corridors in Ontario</u> document and the habitat requirements of Redside Dace, which includes:

- Connection to adjacent occupied Redside Dace reaches
- Stream conditions that Redside Dace require including:
  - Stream corridors consistent with the Redside Dace habitat regulation (i.e., meander belt plus 30 metres of appropriate riparian habitat)
  - Channel design to emulate the natural meandering of the stream required for Redside Dace
  - Habitat that the Redside Dace require (e.g., overhanging vegetation, pool and riffle habitat, etc.)

MNR is available for providing advice on these conditions which are outlined in the <u>Recovery Strategy for Redside Dace in Ontario</u>.

- Water quality and quantity targets appropriate for Redside Dace as described in these guidelines including:
  - Maintenance of natural flow and function of streams including water balance (i.e., the hydrological cycle of the water including groundwater, surface water, etc.)
  - Sediment that does not exceed 25 mg/l of total suspended solids over the background stream level during construction. Once construction is completed the creek should be stabilized to minimize erosion and ensure sediment is not being released into the stream.

MNR works closely with local Conservation Authorities on stream realignments/relocations. Local Conservation Authorities review these in order to issue permits under their Regulation of *Development, Interference with Wetlands and Alterations to Shorelines and Watercourses.* Conservation Authorities also generally conduct screening on behalf of the Fisheries and Oceans Canada (DFO) under the federal *Fisheries Act* to determine if projects will have a harmful alteration, disruption or destruction (HADD) of fish habitat. If it is determined that there is a HADD, MNR will also work closely with the DFO (see Section 2.3 for further information on an Interim Protocol established).

For further information on natural channel design, consult the Adaptive Management of Stream Corridors in Ontario available at:

http://www.conservation-ontario.on.ca/resources/reports/index.html

# Complex Case Study for a Proposed Plan of Subdivision

Project: Proposed plan of a 100 acre subdivision adjacent to existing Redside Dace occupied stream, with 950 low density residential homes, roads and underground utilities including sanitary and storm sewers, water main, hydro and communications. The storm sewer system is to be connected to a stormwater pipe that is proposed to discharge into a Redside Dace stream. A 60 m stream crossing is proposed for a 4 lane arterial road across an unconfined valley with a meander belt width of 12m. Location of proposed road passes through former pasture area. Subwatershed plan was completed in advance of subdivision; no contributing habitat features are adjacent to the stream corridor.

Potential impacts: Loss of riparian vegetation, topsoil removal and grading of land adjacent to stream. Possible harm to the species with release of sediment into the watercourse from grading activities. Loss of riparian habitat through construction of connecting stormwater headwall and connecting discharge channel through the stream corridor into creek. Increased storm runoff from impervious surfaces potentially damaging spawning and pool habitats and water quality. Loss of riparian habitat through the construction of the road and installation of utilities.

Mitigation: In discussions between the municipality and the proponent, the proposed plan of subdivision was amended to exclude individual lots and site grading from regulated habitat per recommendations of the subwatershed plan. Road crossing and stormwater discharge could not be relocated or re-designed to avoid potential impact to habitat and species. Proponent consults with MNR regarding ESA requirements and it was determined that mitigation was not sufficient to avoid impacts and an Overall Benefit permit would be required.

Comprehensive preventative sediment and erosion control plan in place for tablelands to avoid discharge into Redside Dace habitat (e.g., grading and infrastructure installation phased over several months with disturbed areas being graded flat and stabilized with hydroseed, sediment control fences and sediment control pond in place, conveyance channels lined with sod and catch basins covered with filter fabric to filter sediment, regular inspections and maintenance of measures).

Application of recommended stormwater management strategies and targets from subwatershed plan to match, as close as possible, to pre-development seasonal water balance:

- lot level infiltration from rooftop runoff designed to achieve infiltration/attenuation of first 8mm of storm
- conveyance controls designed to achieve infiltration/attentuation of first 5 mm of storm runoff from roads and sidewalks
- end-of- pipe extended detention wetland designed to accommodate quality and quantity control for 25mm storm events with 72 hour detention per the recommendations of the subwatershed plan
- sub-surface cooling trench used at outlet of stormwater wetland to mitigate anticipated 3.5°C increase in temperature of storm runoff
- conveyance channel discharges to valley floor without direct connection to stream; conveyance channel stabilized with erosion blanket, seed, native shrubs and trees
- level spreader used to spread storm flows across a wide area of meadow floodplain
- 5 year monitoring program proposed for stormwater practices to evaluate and report effectiveness

Geotechnical studies completed for proposed crossing of stream which find that trenchless techniques are technically feasible with minimal risk of failure; studies used to support Directional Drilling for installation of the watermain perpendicular to the stream corridor to avoid impact. Jack and bore techniques used to install the sanitary sewer perpendicular to the stream corridor to avoid impact.

#### Minimizing Impact:

Road crossing of unconfined stream valley could not be avoided. Impacts to stream corridor minimized by:

- use of prefabricated open bottom culvert for 12m meander belt of stream
- retaining wall system used to minimize footprint of road crossing through stream corridor
- stormwater from road crossing conveyed to extended detention wetland storm pond

## Overall Benefit:

Plan devised for residual loss of 0.36 ha of riparian habitat as a result of eliminating riparian habitat with road crossing. Proponent includes proposed 600m long livestock fencing project for rural site located upstream of occupied habitat. Overall benefit expected from the improved water quality for the occupied reach.

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For a list of MNR District Offices please see MNR's website at: <a href="http://www.mnr.gov.on.ca/en/ContactUs/2ColumnSubPage/STEL02">http://www.mnr.gov.on.ca/en/ContactUs/2ColumnSubPage/STEL02</a> 179002.html

## APPENDIX A

# Excerpt from the Canadian Water Quality Guidelines for the Protection of Aquatic <u>Life</u>

Table 1. Water quality guidelines for total particulate matter for the protection of aquatic life (Caux et al. 1997).

Aquatic life — Freshwater, estuarine, and marine	Guideline value
Suspended sediments	
clear flow	Maximum increase of 25 mg·L <sup>-1</sup> from background levels for any short-term exposure (e.g., 24-h period). Maximum average increase of 5 mg·L <sup>-1</sup> from background levels for longer term exposures (e.g., inputs lasting between 24 h and 30 d).
	Maximum increase of 25 mg-L <sup>-1</sup> from background levels at any time when background levels are between 25 and 250 mg-L <sup>-1</sup> . Should not increase more than
Turbidity	10% of background levels when background is >250 mg-L <sup>-1</sup> .
	Maximum increase of 8 NTUs from background levels for a short-term exposure (e.g., 24-h period). Maximum average increase of 2 NTUs from background levels for a longer term exposure (e.g., 30-d period).
high flow or nurbid waters	Maximum increase of 8 NTUs from background levels at any one time when background levels are between 8 and 80 NTUs. Should not increase more than 10% of background levels when background is >80 NTUs.
Daposited bedload sediment	Insufficient information to derive guideline.
Streambed substrate*	The state of the s
fine sediments	The quantity in streambed substrates should not exceed 10% <2 mm, 19% <3 mm, and 25% <6.35 mm.
The second secon	Geometric mean diameter should not exceed 12 mm.
Fig. 41	Fredle number should not exceed 5 mm.
intergrave) discontinued	Minimum of 6.5 mg·L <sup>-1</sup> .

Canadian Environmental Quality Guidelines Canadian Council of Ministers of the Environment, 1999, updated 2002

## **Andrew McGregor**

. rom:

Richardson, Kathy (MNR) < kathy.richardson@ontario.ca>

Sent:

Thursday, January 03, 2013 7:57 AM

To:

Sarah Crosgrey; Chris Lorenz

Cc:

Rosatte, Rick (MNR)

Subject:

RE: renewal of protocol #243

Thanks Sarah,

At this time I have not received a WSC permit application for this project

Kathy Richardson Senior Fish and Wildlife Technical Specialist Guelph District Niagara Office 905 562 1177

From: Sarah Crosgrey [mailto:foxtrot1@rogers.com]

Sent: January 2, 2013 1:02 PM

To: Chris Lorenz

Cc: Rosatte, Rick (MNR); Richardson, Kathy (MNR)

Subject: renewal of protocol #243

January 2, 2013

Chris, (Aquafor Beech Limited)

The OMNR Wildlife Animal Care Committee has reviewed and approved the renewal of your protocol: "Ambystomatid Salamander Surveys."

Your protocol number for 2013 is #13-243

Protocol approvals are valid for one calendar year only and must be kept current. Should amendments to projects or procedures be deemed necessary, the researcher must contact the Wildlife Animal Care Committee and provide updated information for review.

A summary report will be required annually or upon completion of this project, stating number of animals handled, injuries, fatalities and any problems that may have occurred. This report is necessary for our files plus it will expedite the process if this protocol is to be renewed in the future.

Please note that if there are multiple unanticipated injuries or mortalities the project must be stopped. A report is to be submitted to the Wildlife Animal Care Committee with amendments to rectify the issue(s) prior to resumption.

Researchers who are not collaborating with an expert in animal pathology/physiology or who have limited expertise in this area should seek appropriate assistance in the event of an unexpected and unexplained mortality. Specimens should be submitted for necropsy to the nearest Canadian Cooperative Wildlife Health Centre facility in the event of an unexpected mortality. Make arrangements prior to commencing field work. Contact information for CCWHC facilities can be found at <a href="http://www.ccwhc.ca/contact\_us.php">http://www.ccwhc.ca/contact\_us.php</a>

Please ensure that you have also contacted the appropriate Ministry of Natural Resources District Office(s) in your study area for the required permit(s) before this research begins. It is also your responsibility to provide them with a copy of this approval.

Good luck with your project,

Sarah

Sarah Crosgrey, Assistant Chair Wildlife Animal Care Committee Ontario Ministry of Natural Resources foxtrot1@rogers.com

ph: 519-268-6745 fax: 519-268-6746

## **Andrew McGregor**

∂rom:

Thompson, Melinda (MNR) < Melinda. Thompson@ontario.ca>

Sent:

Wednesday, February 27, 2013 3:34 PM

To:

'Chris Lorenz'

Subject:

RE: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

Follow Up Flag:

Follow up

Flag Status:

Completed

If you think that there will be no impacts to the wetlands, then it is unlikely that the surveys would be required.

Melinda Thompson, B.A.Hon., M.Sc.

Species at Risk Biologist

Aurora District, Ministry of Natural Resources 50 Bloomington Rd Aurora, ON L4G 0L8

Tel. (905) 713-7425 Fax (905) 713-7360

melinda thompson@ontario ca



Please consider the environment before printing this email

From: Chris Lorenz [mailto:lorenz.c@aquaforbeech.com]

**Sent:** February 27, 2013 3:27 PM **To:** Thompson, Melinda (MNR)

Subject: RE: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

Thank you for the timeline Melinda, I appreciate it. However, if the road widening is aligned in such a way as to avoid direct impacts to these woodlots, would there still be need of JESA surveys?

#### Chris

From: Thompson, Melinda (MNR) [mailto:Melinda.Thompson@ontario.ca]

Sent: February 27, 2013 2:48 PM

To: 'Chris Lorenz'

Cc: Aulenback, Danielle (MNR)

Subject: RE: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

### Hi Chris

I intend to review it next week, and it should be issued in about 2 weeks or so, if everything is satisfactory.

#### Melinda

Melinda Thompson, B.A.Hon., M.Sc.

Species at Risk Biologist
Aurora District, Ministry of Natural Resources
50 Bloomington Rd Aurora, ON L4G 0L8

Tel (905) 713-7425 Fax (905) 713-7360

melinda thompson@ontario.ca



Please consider the environment before printing this email

From: Chris Lorenz [mailto:lorenz.c@aquaforbeech.com]

Sent: February 27, 2013 9:58 AM

To: Thompson, Melinda (MNR); McAllister, Aurora (MNR) Cc: Golby, Karen (MNR); Aulenback, Danielle (MNR)

Subject: FW: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

### Good morning,

Following up my emails below, I was hoping to inquire about the status of our salamander survey applications (attached). As you know, JESA surveys usually begin late March/early April and I would like to ensure that we have all the necessary approvals ahead of time.

That being said, the Region is now considering strictly widening the road to the south and not touching the woodlot north of Britannia Road, just west of the 407 (please see attached map), and north to avoid the woodlot south of Britannia Road, west of Hwy 25. As Britannia Road already exists through this area, if the Region stays clear of these woodlots (i.e. avoids direct impacts), would JESA surveys need to be completed for the purpose of a Schedule C Class EA? Conservation Halton has indicated that they would not require JESA surveys if this is the case, but to check with the MNR.

If you could let me know as soon as possible, I would really appreciate it. As it is already the end of February, I would like to inform the region as soon as possible so that they can make appropriate decisions re. the alignment of the road. If you would like to discuss over the phone, please contact me at the number below.

Thanks for your time,

Regards.

Chris

Chris Lorenz, M.Sc. Aquatic Biologist Aquafor Beech Limited 55 Regal Road, Unit 3 Guelph, Ontario N1K 1B6

Telephone: (519) 224-3746 Cell Phone: (519) 830-0236 Facsimile: (519) 224-3750 Lorenz.c@aguaforbeech.com



From: Chris Lorenz [mailto:lorenz.c@aquaforbeech.com]

Sent: January 18, 2013 8:18 PM

To: 'Golby, Karen (MNR)'; 'Melinda Thompson'

Subject: FW: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

Good evening Karen and Melinda.

I was hoping to inquire about the status of our salamander survey applications (17(2)(b) (attached) and WSCA). As you know, surveying will commence late March/Early April and I just want to make sure that we have all the necessary approvals.

Also, Melinda, I sent you an email on December 20, 2012 asking for your advice on possible survey locations along Britannia Road between Tremaine Road and the 407 in Milton. As of today we would like to survey in the two significant woodlots I mentioned in my previous email. Are there any other locations that you would suggest?

Thanks! Have a great weekend.

#### Chris

From: Chris Lorenz [mailto:lorenz.c@aquaforbeech.com]

Sent: December 20, 2012 1:28 PM

To: 'Golby, Karen (MNR)'; 'Melinda Thompson'

Cc: 'frew.g@aquaforbeech.com'; 'Andrew McGregor'; 'Lori Knight'

Subject: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

Good afternoon Karen and Melinda,

Please find attached our application to conduct surveys for Jefferson Salamanders along Britannia Road between Tremaine Road and Highway 407 in Milton, ON, under clause 17(2)(b) of the Endangered Species Act (2007).

If you have any questions or concerns, please do not hesitate to contact me at the number below.

Thank you, and happy holidays!

Regards,

Chris

Chris Lorenz, M.Sc. Aquatic Biologist Aquafor Beech Limited 55 Regal Road, Unit 3 Guelph, Ontario N1K 1B6

Telephone: (519) 224-3746 Cell Phone: (519) 830-0236 Facsimile: (519) 224-3750 Lorenz.c@aquaforbeech.com



## **Andrew McGregor**

From:

Aulenback, Danielle (MNR) < Danielle. Aulenback@ontario.ca>

Sent:

Wednesday, March 06, 2013 2:41 PM

To:

Chris Lorenz; Thompson, Melinda (MNR)

Cc:

frew.g@aguaforbeech.com; 'Andrew McGregor'; 'Lori Knight'

Subject:

RE: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

#### Hi Chris

Speaking with you today regarding the B-permit application for Britannia road you had indicated that through your surveys to date of the project location there are no identified vernal pools or wellands with in the right of way. You did indicate that there was a wet meadow adjacent to the woodlot by the 407. Based on this information there is no need for Jefferson Salamander surveys to be conducted.

Regards,
Danielle Aulenback
Assistant Species at Risk Biologist
Ministry of Natural Resources
50 Bloomington Rd. West
Aurora, ON, 14G 018

Ph: 905-713-7732

E-mail: danielle.aulenback@ontario.ca

From: Chris Lorenz [mailto:lorenz.c@aquaforbeech.com]

Sent: 20-Dec-12 1:28 PM

**To:** Golby, Karen (MNR); Thompson, Melinda (MNR)

Cc: frew.g@aquaforbeech.com; 'Andrew McGregor'; 'Lori Knight'

Subject: Jefferson Salamander 17(2)(b) Permit application - Britannia Road

Good afternoon Karen and Melinda.

Please find attached our application to conduct surveys for Jefferson Salamanders along Britannia Road between Tremaine Road and Highway 407 in Milton, ON, under clause 17(2)(b) of the Endangered Species Act (2007).

If you have any questions or concerns, please do not hesitate to contact me at the number below.

Thank you, and happy holidays!

Regards,

Chris

Chris Lorenz, M.Sc. Aquatic Biologist Aquafor Beech Limited 55 Regal Road, Unit 3 Juelph, Ontario N1K 1B6 Telephone: (519) 224-3746 Cell Phone: (519) 830-0236 Facsimile: (519) 224-3750 Lorenz.c@aquaforbeech.com





Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: (905) 825 8822

September 27, 2013

Steven Strong
District Planner
Ministry of Natural Resources
50 Bloomington Road West
RR#2
Aurora, ON L4G 3G8

Dear: Mr. Strong

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study

Highway 407 to Tremaine Road (Regional Road 22)

The Class Environmental Assessment (EA) Study to address a wide range of options for transportation corridor improvements to satisfy future travel demands on Britannia Road from Highway 407 to Tremaine Road (Regional Road 22), in the Town of Milton is nearing completion. The Project Team has documented the study process and recommendations in the **DRAFT** Environmental Study Report (ESR).

A copy of the <u>DRAFT</u> ESR is enclosed for Ministry's review and comments. For ease of distribution within your organization, a CD copy of the <u>DRAFT</u> ESR text has also been included. All comments on the Draft ESR must be provided to the undersigned by no later than <u>Friday Ocotber 25, 2013</u>. The ESR will be finalized in December 2013 and subsequently filed for the 30 day Public Review Record.

If you have any questions or require additional information, please do not hesitate to contact me at (905) 825-6000 extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis

## **Andrew McGregor**

**Subject:** 

FW: Draft Environmental Study Report for the Britannia Road Transportation Corridor Improvements

From: McAllister, Aurora (MNR) [mailto:Aurora.McAllister@ontario.ca]

Sent: Monday, December 02, 2013 3:40 PM

To: Jakaitis, Alicia

Cc: Devlin, Jane (MNR); smason@hrca.on.ca

Subject: RE: Draft Environmental Study Report for the Britannia Road Transportation Corridor Improvements

Hello Alicia,

I apologize for the delay in providing my comments on the Draft Environmental Study Report (dated October 2013) for the Britannia Road Transportation Corridor Improvements. I have reviewed the report specifically with respect to species at risk and offer the following comments:

#### 5.2.3.5. Breeding Bird Survey

- The ESR notes that Barn Swallow were confirmed as nesting in a culvert running under Britannia Road, slightly to
  the west of the wood. If this culvert will be impacted by the proposed improvements, MNR will need to be
  contacted during detailed design to discuss possible requirements under the Endangered Species Act, 2007
  (ESA) with respect to this species.
- MNR recommends that a qualified professional visit each of crossings along this stretch of Britannia Road at least one year prior to construction to determine the presence of Barn Swallow nests at the other watercourse crossings.
- Similarly, the two barns that are south-east of the Britannia Road Fourth Line intersection (to be demolished) should be visited by a qualified professional construction to determine the presence of Barn Swallow nests.

#### 5.2.5.5. Significant Aquatic Species

- This past summer (2013), MNR and Conservation Halton staff confirmed the presence of Silver Shiner in the Main Branch of Sixteen Mile Creek. This means that now both Sixteen Mile Creek East Branch at Britannia Road (Crossing No. 15), and Sixteen Mile Creek Main Branch (Crossing No. 7) are known to be occupied by Silver Shiner.
- Silver Shiner currently receives both species protection (under section 9) and general habitat protection (under section 10) of the ESA. General habitat is defined under the ESA as an area on which a species depends directly or indirectly to carry out its life processes (for example, reproduction, rearing, migration and feeding). The general habitat of Silver Shiner consists essentially of the following elements: the area within the bankfull width of the occupied reach of stream and the floodplain and riparian vegetation adjacent to the occupied reach of stream.
- MNR will need to be contacted during detail design to discuss mitigation measures as well as permitting requirements under the ESA with respect to this species.

## 6.5.3. Selection of Preferred Stormwater Alternative

- With respect to water quality control, the discharge of water from stormwater into Silver Shiner habitat should not
  exceed 25 mg/L of total suspended solids (TSS) above the background stream level of TSS (this is consistent
  with the level recommended by the Canadian Aquatic Water Quality Guidelines for the Protection of Aquatic Life
  for Total Particulate Matter).
- Please also note that thermal impacts from stormwater discharge from the road must also be minimized as part of the Britannia Road improvements project. Ideally, discharge should be no more than ~24°C to be consistent with the preferred temperature range for this species.

#### 9.3.4.4. Aquatic Resources

Given the presence of Silver Shiner and other sensitive aquatic species, MNR confirms that the fisheries timing
window of July 1 to September 15 will be applied to in and near water work at crossings 7 and 15 as well as to
their respective contributing watercourses (e.g. upstream of occupied habitat).

Please note that my comments are specific to species at risk. Jane Devlin is the Area Biologist for Halton Region and will be providing additional comments on other natural heritage-related aspects of this file (e.g. PSWs, etc.).

Regards,

Aurora McAllister Species at Risk Biologist Aurora District, Ministry of Natural Resources 50 Bioomington Road, Aurora, ON L4G 0L8

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Thank you



4 Welding Way off Administration Road P.O. Box 1000 Concord, ON, L4K 1B9 T: 905,669,3264 F: 905.760.3406

January 14th, 2013.

Delcan Corporation 4342 Queen Street, Unit 407 Niagara Falls, Ontario L2E 7J7

Attn: Mr. Andrew McGregor, MCIP, RPP

**Environmental Planner** 

Subject: Britannia Road Grade Separation at Mile 38.72 on the Halton

Subdivision

Dear Mr. McGregor:

We acknowledge receipt of your request for comments on the preliminary design section of Britannia Road dated October, 2012.

CN has no objection of an overhead bridge in principal at the aforementioned location. For clarification that is road over rail as mentioned in October 2012. Furthermore, CN will not contribute to the costs associated with the construction and/or maintenance of the structure based on the current cross product values not justifying the grade separation.

Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Sincerely,

Stefan Linder, B.Eng, MBA Manager Public Works

Stefan.linder@cn.ca

MO

H- -----

# Minutes of CN Rail Meeting

## **Britannia Road (Regional Road 6) Transportation Corridor Improvements** Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** 

Thursday, January 31, 2013 1:00 p.m.

LOCATION:

Halton Room, Halton Region

PRESENT:

Halton Region Melissa Green-Battiston

Alicia Jakaitis

Halton Region

Nick Palomba

**Delcan Corporation** 

Andrew McGregor

Delcan Corporation (Minutes)

Bob Bower

Delcan Corporation

Stefan Linder Mike Vallins

CN

CN

## **Items Discussed**

## 1. Introductions and Project Description

Nick Palomba (Delcan) began the meeting with introductions and a description of the project, particularly in the vicinity of the CN Rail crossing (Mile 38.72 Halton Subdivision), which is currently an atgrade crossing.

## 2. Region's Preference for an Underpass

The Region's preference for an underpass (road under rail) was discussed. The Region stated that an underpass at this location would be better suited to the adjacent future development to the north (Boyne Subdivision). The Region cited examples of other similar underpasses in the area.

### 3. CN's Preference for an Overpass & Project Timing

CN stated that their preference is for an overpass (road over rail) at this location, as identified in their January 14, 2013 letter to Delcan. CN cited that construction of an overpass would have less impact on rail traffic, particularly with respect to rail speed and schedule disruptions as well as increased costs due to track relocation.

CN would accept un underpass but cautioned that the Halton Sub is a main line and that they cannot spread themselves too thin with regards to their ability to manage projects, therefore project scheduling is key. CN's consultant is responsible for the design of rail diversions/detours and construction is coordinated in-house.

#### 4. Number of Tracks

CN to advise on number of tracks that would be needed for new grade separation.

CN

Action



# **Minutes of CN Rail Meeting**

# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

5. Permit Requirements	
Approval would be required under Section 8 of the <i>Railway Safety Act</i> .	Region
6. ESR Requirements	
Delcan asked CN for their requirements in writing so they could be incorporated into the ESR. CN stated that they would follow up the meeting with their requirements in writing.	CN
The Region stated that a copy of the draft ESR would be provided to CN for their review. CN advised that a 4 week review period would be plenty.	Delcan
7. Contact Information	
Alicia Jakaitas (Halton Region) to provide Stefan (CN) with Tony Finelli's contact information.	Region

cc: All present

Note: These minutes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.





Public Works
Transportation Services
1151 Bronte Road
Oakville ON L6M 3L1
Fax: (905) 825 8822

September 27, 2013

Stefan Linder
Director – Public Works Studies and Construction
4 Welding Way
P.O. Box 1000
Concord, Ontario L4K 1B9

Dear: Mr. Linder

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

The Class Environmental Assessment (EA) Study to address a wide range of options for transportation corridor improvements to satisfy future travel demands on Britannia Road from Highway 407 to Tremaine Road (Regional Road 22), in the Town of Milton is nearing completion. The Project Team has documented the study process and recommendations in the **DRAFT** Environmental Study Report (ESR).

A copy of the <u>DRAFT</u> ESR is enclosed for CN's review and comments. For ease of distribution within your organization, a CD copy of the <u>DRAFT</u> ESR text has also been included. All comments on the Draft ESR must be provided to the undersigned by no later than <u>Friday</u> <u>Ocother 25, 2013</u>. The ESR will be finalized in December 2013 and subsequently filed for the 30 day Public Review Record.

If you have any questions or require additional information, please do not hesitate to contact me at (905) 825-6000 extension 7556 or at alicia.jakaitis@halton.ca

Sincerely,

Alicia Jakaitis





4 Welding Way off Administration Road P.O. Box 1000 Concord, ON, L4K 1B9 T: 905.669.3264

October 25, 2013.

The Regional Municipality of Halton 1151 Bronte Road Oakville, Ontario L6M 3L1

Attn: Ms. Alicia Jakaitis,

Transportation Coordinator

Subject:

Britannia Road (Regional Road 6) Class Environmental Assessment

Study Highway 407 to Tremaine Road (Regional Road 22)

Dear Ms. Jakaitis:

We acknowledge receipt of your request for comments on the Environmental Assessment (EA) Study of Britannia Road dated September 27, 2013. This will confirm that CN does have an interest in this project due to the existing railway atgrade crossing at Mile 38.72 on the Halton Subdivision. CN requires involvement in this project and is interested in the impacts that the Region's preferred alternatives may have on our railway. CN requests to be kept informed as the EA process proceeds and to be advised of the potential impacts on this railway crossing.

The EA indicates that the Region's preferred alternative requires a grade separation. CN does not object to a grade separation at this location provided that all costs associated with its construction and maintenance are assumed by the Region. We note that the rail/road cross-product at the existing crossing does not warrant the construction of a grade separation.

CN further notes that the Region is proposing a subway design for the grade separation. CN objects to a subway design and would ask the Region to consider the road over rail option as CN proposed at the meeting in October 2012. To ensure that our rail operations are not adversely affected, CN will require involvement throughout the design stages and the preliminary and final design drawings will require approval from this office.

As you may be aware, CN is a significant landowner in the two southern quadrants of Britannia Road. As such, CN will require further review of its future land use of the property south of Britannia Road before being in a position to provide detailed comments on the design of the structure. The proposed design of the grade separation will have to take into account CN's requirements.

Prior to CN approving the design, the Road Authority will be required to enter into a Grade Separation Agreement with CN as well as to provide a Notice of Works as required under the *Railway Safety Act*.

Should you have any questions or concerns, please do not hesitate to contact the undersigned.

Sincerely,

Stefan Linder, B.Eng, MBA Manager Public Works

Stefan.linder@cn.ca



### CN Rail Meeting Notes

# Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) to Highway 407

**HELD ON:** 

Tuesday, December 17, 2013 - 9:00 a.m.

LOCATION:

Silvercreek Room, Halton Region

PRESENT:

Stefan Linder CN Rail

Melissa Green-Battiston

Halton Region

Alicia Jakaitis Tim Dennis Halton Region

Tim Demis

Halton Region
Halton Region

Joseph Choi Stefan Linder

CN Rail

# Items Discussed ITEM 1 – INTRODUCTIONS

1.1 Those at the meeting were introduced.

# ITEM 2 – BRITANNIA ROAD CLASS ENVIRONMENTAL ASSESSESSMENT (EA) STUDY – OVERVIEW AND STUDY STATUS

2.1 The study limits of the current Class Environmental Assessment (EA) Study is between Tremaine Road (Regional Road 22) and Highway 407, which includes the CN Rail at-grade crossing (Mile 38.72 Halton Subdivision).

#### ITEM 3 – PROPOSED IMPROVEMENTS ON BRITANNIA ROAD

- 3.1 The preferred alternative for Britannia Road includes a widening to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407, with protection for 6 lanes, as required, prior to 2031. The preferred alternative also includes a south by-pass around Omagh and an underpass grade separation at the CNR tracks.
- 3.2 The right-of-way on Britannia Road is 47m and the ultimate cross-section will consist of the following:
  - 3.5m lanes (including 2 future High Occupancy Vehicle curb lanes)
  - 1.8m on road cycling lanes
  - 3.0m multi-use pathways on both sides of the roadway

### ITEM 4 - UNDERPASS VS. OVERPASS AS PREFERRED ALTERNATIVE

- 4.1 The Region's preference for an underpass (road under rail) was discussed. The Region stated that an underpass at this location would be preferable given the adjacent future development to the north (Boyne Secondary Plan) with respect to noise mitigation and accessibility to the active transportation network. An underpass option also minimizes impacts to two adjacent creek crossings and by reducing the overhead clearance, potential negative grading impacts into the Boyne Secondary Plan are mitigated.
- 4.2 CN stated their preference is for an overpass (road over rail) at this location as stated in their October 25, 2013 letter. CN cited that construction of an overpass would have less impact on rail traffic, particularly with respect to rail speed and schedule disruptions as well as increased costs due to track relocation.
- 4.3 CN noted that an overpass provides a future buffer noise and visual for future CN owned development lands on the south side of the grade separation. However, Halton Region did confirm that no planning work has been completed on these lands as they are outside of the urban area post 2021.
- 4.4 CN would accept an underpass but cautioned that the Halton Subdivision is a main line and that resources are limited with regards to their ability to manage projects, therefore project scheduling is key. Timing of the underpass construction would be governed by CN's available resources for the project. CN's consultant is responsible for the design of rail diversions/detours and construction is coordinated in-house.
- 4.5 CN to advise on ultimate right-of-way and the number of future tracks required at the underpass grade separation.

cc: All present

Note: These notes are believed to be an accurate summary of the discussions of the meeting. Please advise as soon as possible if there are any errors or omissions.



January 8, 2014

Stefan Linder CN Rail 4 Welding Way Concord, Ontario L4K 1B9 Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: 905-847-2192

Re:

Class Environmental Assessment Study

Britannia Road (Regional Road 6) Corridor Improvements from Tremaine Road

(Regional Road 22) to Highway 407

Dear Mr. Linder:

Thank you for your letter dated October 25, 2013 and for taking the time to meet with the Britannia Road Class Environmental Assessment (EA) Study project team on Tuesday, December 17, 2013 at the Halton Regional Centre. Attached you will find notes from that meeting.

As discussed, the Environmental Study Report will be finalized in early 2014 and you will be notified when the ESR is available for public review and comment. Thank you again for providing your comments and we look forward to working with CN during the detailed design phase of the study. If you have any questions, please contact the undersigned at (905) 825-6000, extension 7556 or at alicia.jakaitis@halton.ca.

Sincerely,

Alicia Jakaitis

**Transportation Coordinator** 

c. Nick Palomba, Delcan Corporation
Melissa Green-Battiston, Supervisor Transportation Planning – Halton Region

Sincerely,

Alicia Jakaitis

Transportation Coordinator

## Andrew McGregor

Subject:

RE: Britannia Road Class Environmental Assessment - Meeting Notes

From: Jakaitis, Alicia [mailto:Alicia.Jakaitis@halton.ca]

**Sent:** January-22-14 9:06 AM

To: 'Stefan Linder'

Cc: n.palomba@delcan.com; Green-Battiston, Melissa; Dennis, Tim; Choi, Joseph Subject: RE: Britannia Road Class Environmental Assessment - Meeting Notes

Hi Stefan,

Thank you for taking time to meet with staff on December 19, 2013 and for your email on January 10' 2013. We understand from your comments that CN has no objection to grade separating the at-grade crossing at Mi. 38.72 Halton Subdivision, but that CN would prefer that a road over rail grade separation be adopted.

We have undertaken a review of both options for the crossing (over vs. under) as documented in the draft Environmental Study Report circulated to CN in Fall 2013. Based on this analysis, a subway design has been identified as the preferred solution for the grade separation at the Mi. 38.72 crossing. This evaluation has considered the adjacent future residential land uses, environmental considerations (impact on adjacent watercourses), ability to accommodate future road connections and the accommodation of active transportation infrastructure.

At this time, the Region is working to complete the Environmental Study Report and would ask that a meeting be arranged to discuss the design and construction of the subway, track right-of-way protection, and any additional provisions to be incorporated in the final ESR.

As you are aware, this project is moving immediately into the detail design upon the filling of the ESR and we recognize that the design and construction of the grade separation are critical and our design team will be working with CN throughout the duration of the project. As you requested, we have opened a \$10,000 Purchase Order for CN to enable recovery of your preliminary costs associated with the grade separation project.

The ESR is scheduled to be finalized in April 2014 and made available for public review and comment. Please let me know a time that is available for you to meet with the Britannia Road Project Team so we can finalize any project commitments required for CN.

Alicia

## Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca

From: Stefan Linder [mailto:Stefan.Linder@cn.ca]

**Sent:** Friday, January 10, 2014 2:02 PM

To: Jakaitis, Alicia

**Cc:** n.palomba@delcan.com; Green-Battiston, Melissa; Dennis, Tim; Choi, Joseph **Subject:** RE: Britannia Road Class Environmental Assessment - Meeting Notes

Alicia,

CN has not agreed to accept a subway at Britannia as stated in 4.4 of the notes. CN would accept a subway if it were the only feasible option and would consider Halton's recommendation.

That being said, I have touched based internally and CN is still in favor of a road over rail option as indicated in previous correspondence.

I will be touching base shortly with the number of tracks required to protect for.

Kindest Regards, Stefan

From: Jakaitis, Alicia [mailto:Alicia.Jakaitls@halton.ca]

Sent: Thursday, January 09, 2014 12:13

To: Stefan Linder

Cc: n.palomba@delcan.com; Green-Battiston, Melissa; Dennis, Tim; Choi, Joseph

Subject: Britannia Road Class Environmental Assessment - Meeting Notes

Happy New Year Stefan,

Thank you again for taking time to meet with the Project Team for the Britannia Road Class Environmental Assessment Study. Attached are the meeting notes from our meeting. A hard copy will be sent in the mail.

Alicia

### Alicia Jakaitis

Transportation Coordinator Transportation Services Public Works Halton Region (905) 825-6000 ext. 7556 alicia.jakaitis@halton.ca

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## **Andrew McGregor**

**Subject:** 

FW: Britannia Road EA - CPR At-Grade Crossing - Road Widening

From: Li-Lian Lui [mailto:Li-Lian Lui@cpr.ca]

Sent: November-02-12 8:35 AM

To: Nick Palomba

Cc: 'Andrew McGregor'; Paul Kerry

Subject: RE: Britannia Road EA - CPR At-Grade Crossing - Road Widening

Hi Nick.

At this time, I would only be able to comment that the nearby Derry Road crossing currently does not have an active crossing protection system. The proposal for the Britannia Rd widening would result in a similar configuration as Derry Road.

CP would need to re-evaluate both crossings and their safety. I am currently seeking internal counsel on this issue. Will certainly keep you posted when more definitive information becomes available.

Thank you for your time and collaboration, Li-Lian

LI-Lian Lui, M.Eng. | Specialist Public Works | 1290 Central Parkway West, Suite 700, Mississauga, ON L5C 4R3 | PO 905-803-5989 | C 416-806-3102

From: Nick Palomba [mailto:n.palomba@delcan.com]

Sent: Thursday, November 01, 2012 3:42 PM

To: Li-Lian Lui

Cc: 'Andrew McGregor'; Paul Kerry

Subject: RE: Britannia Road EA - CPR At-Grade Crossing - Road Widening

Li-Lian,

Thank you for your response. Based on this extremely infrequent use, would CPR be supportive of leaving the stop and proceed with a flag man and only the cross bucks?

Our forecast AADT traffic volumes are 22000-25000 in 2031. Given the 25,000 AADT (highest forecast) it would require 15 train movements a year to reach a cross product of 1000 which triggers a signal system. Is this level of crossing usage reasonable in the foreseeable future?

Thank you for your assistance.

Nick

From: Li-Lian Lui [mailto:Li-Lian Lui@cpr.ca]

Sent: November-01-12 1:19 PM

To: Nick Palomba

Cc: 'Andrew McGregor'; Paul Kerry

Subject: RE: Britannia Road EA - CPR At-Grade Crossing - Road Widening

Hi Nick,

Thanks for the call today.

Further to our discussion, it has been confirmed that the spur is used by Hydro One to service their local transformer facility. The siding agreement between CP and Hydro One also permits the railway to use the spur from time to time as needed. There was a recent CP movement that occurred over this crossing this year. Contrary to the message discussed from 2003, movements should be anticipated to be greater than 1 every 5 years.

Hope this helps. Feel free to contact me if you have further questions. Regards, Li-Lian

Li-Lian Lui, M.Eng. | Specialist Public Works | 1290 Central Parkway West, Suite 700, Mississauga, ON L5C 4R3 | PO 905-803-5989 | C 416-806-3102

From: Nick Palomba [mailto:n.palomba@delcan.com]

**Sent:** Tuesday, October 30, 2012 11:06 AM

To: Li-Lian Lui

Cc: 'Andrew McGregor'; Paul Kerry

Subject: RE: Britannia Road EA - CPR At-Grade Crossing - Road Widening

Li-Lian I look forward to hearing from you. Could you please call me at 905-984-9201 at your earliest convenience.

From: Jack Carello [mailto:Jack Carello@cpr.ca]

Sent: October-30-12 10:17 AM

To: Nick Palomba

Cc: Andrew McGregor; Li-Lian Lui; Paul Kerry

Subject: RE: Britannia Road EA - CPR At-Grade Crossing - Road Widening

Hi Nick - Received voicemail.

Your contact in regards to this proposal would be Li-Lian Lui Public Works Specialist whom I've cc'd. For reference purposes this would be the Hydro One spur at mile 26.50,(2.84).

Regards,

## Jack Carello SR/WA

#### CANADIAN PACIFIC

1290 Central Pkwy West, Suite 800 Mississauga, Ontario L5C 4R3

Tel (905)803-3417

From: Nick Palomba [mailto:n.palomba@delcan.com]

**Sent:** Monday, October 29, 2012 5:34 PM

**To:** Jack Carello **Cc:** Andrew McGregor

Subject: FW: Britannia Road EA - CPR At-Grade Crossing

Hello Jack,

Further to my voicemail. We are undertaking an EA study for the Widening of Britannia Road in Halton Region and would like to get some information about the CP Rail at grade crossing identified in the graphic.



I was wondering if it is an active line, who is operating on it and what is the current daily train traffic. From our field investigations it looks like the tracks are very infrequently used. Also we are wondering if there are any future plans to change the track usage (next 10-20 years).

Please feel free to call if you wish to discuss. Than you in advance for you timely respond.

Have a great day.

Nick Palomba, P. Eng., Vice-President Division Manager, Transportation Division

4342 Queen Street, Unit 407 Niagara Falls, Ontario, L2E 7J7 T: 905,356,7003 ext. 6411

F: 905.356.7008

E: n.palomba@delcan.com http://www.delcan.com





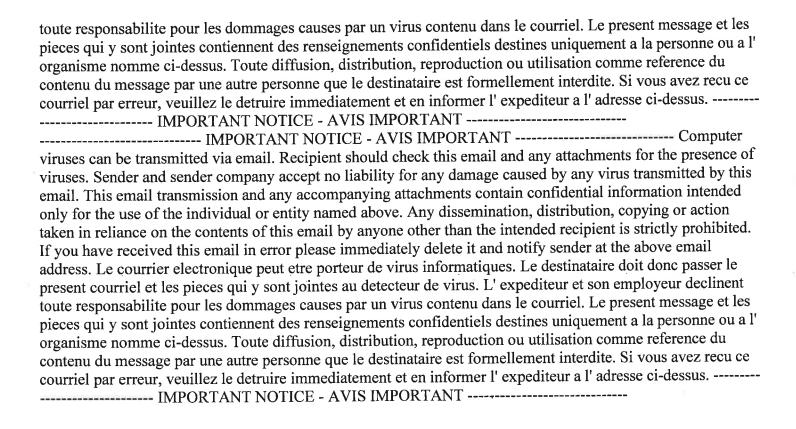
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## **Agenda**



## **MTO Project Team Meeting**

## Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

Tuesday January 15, 2012 at 10:00 a.m. 1201 Wilson Avenue Toronto, Building D

**Purpose of Meeting:** Provide MTO with opportunity to comment on the proposed connection of the widened Britannia Road and the AT facilities at the existing Highway 407 interchange.

### 1. Introductions

## 2. Study Overview

- Purpose of the study
- Proposed Roadway cross-section
  - Active Transportation
  - HOV/BRT
- Where we are in the study
- MTO to provide input on any planned roadway infrastructure improvements in immediate area
- 3. Coordination of Roadway Improvements with Highway 407 Interchange/Ramps
  - Interim roadway cross-section (4-Lane)
  - Ultimate roadway cross-section (6-Lane)
  - Implementation timing
  - Discussion and/or opportunities related to east end of the project.

## 4. Next Steps

- Follow up and any comments or questions which may arise
- Finalize project ESR and File
- Commence detail design

## 5. Other Items

## **Minutes of MTO Meeting**

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** 

Tuesday, January 15, 2013 10:00 a.m.

LOCATION:

MTO Offices at 1201 Wilson Avenue Toronto, Building D

PRESENT:

Alexandre Gitkow MTO
Frank Martin MTO
Greg Roszler MTO
Slawomir Demianczuk MTO

Jeff Booker Dragan Mrkela Hwy 407ETR Hwy 407 ETR

Melissa Green-Battiston Alicia Jakaitis Tony Finelli Nick Palomba

Halton Region (via teleconference) Halton Region (via teleconference) Halton Region (via teleconference)

Action

Delcan Corporation (Minutes)

Manoj Dilwaria

Delcan Corporation

## **Items Discussed**

### 1. Introductions

Attendees introduced themselves. Nick provided the study background to the attendees.

## 2. Study Overview

Nick explained that the purpose of the meeting is to provide MTO with opportunity to review and comment on the Region's proposed transition from the widened Britannia Road with AT facilities to the existing Highway 407 interchange.

He also discussed the purpose of the study, proposed roadway cross section elements including active transportation and HOV/BRT lanes and study implementation timelines.

Nick asked if there were any plans to modify or expand the current interchange and/or bridge crossing. Jeff noted that at this time there is no plan to expand the interchange or bridge for the foreseeable future

## 3. Coordination of Roadway Improvements with Highway 407 Interchange/Ramps

The 4 lane (interim roadway design) and 6 lane (ultimate roadway design) plans were presented to the MTO along with their implementation timelines. How each of these plans will connect with the existing ramp terminals was presented and discussed.

MTO commented that right turn channelization for the southbound right turn at the N-E/W ramp terminal should only be installed in the 6- lane scenario. Also, MTO requested that the taper from

## Minutes of MTO Meeting

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

eastbound Britannia Road to the E-S on ramp be extended to just short of the CP spur line.

Jeff requested that the traffic analysis supporting the ramp terminal configuration for the various geometric configurations be supplied to Hwy 407ETR and MTO for their consideration. Delcan to provide a summary.

Delcan

Greg inquired as to how the Region is planning to extend active transportation east of their study limits across the interchange. Melissa indicated that the future extension will be determined at a later date as per Halton Region's Active Transportation Master Plan. This would require coordinated with the City of Mississauga.

Frank inquired about the railway crossing at the east end of the study limit. Nick explained that it is CP spur line, which is very infrequently used (i.e. only to ship hydro transformers). The crossing is currently operating on a stop and proceed basis and CP rail has not requested any modified crossing control.

Tony requested that Delcan forward plans to MTO for their detailed review in order to minimize and significant issues at the detailed design stage.

Delcan

## 4. Next Steps

Nick mentioned that Delcan will provide MTO/Hwy 407ETR with 4/6 lane plans along with a letter documenting the existing and future traffic volumes and analysis at the Highway 407 ramp terminals.

Delcan

MTO/ Hwy 407ETR will require copies of the draft ESR for their review. Delcan confirmed that copies will be sent through Alexandre.

### 5. Other Items

No other items were discussed.

The meeting was adjourned at 10:45am.

cc: All attendees





3115 Harvester Road, Suite 102, Burlington, ON L7N 3N8
Tel: 905.631.0500 ◆ Fax: 905.631.0570

www.delcan.com

March 4, 2013

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Mr. Alexandre Gitkow
Permits Officer, Central Region
Corridor Management Section,
Ministry of Transportation
1201 Wilson Avenue
Downsview, Ontario
M3M 1J8

Re: Class Environmental Assessment Study Britannia Road Corridor Improvements

Mr. Gitkow:

Further to our January 15, 2013 meeting for the Britannia Road Corridor Improvements Class Environmental Assessment study, we are pleased to provide the requested existing and future transportation volumes and analyses for the east end of the study and how it will connect with Highway 407 ramp terminals.

At the meeting we presented two scenarios, a 4-lane interim design and a 6-lane ultimate design. Subsequent to the meeting the project team decided to terminate/commence the HOV/BRT lanes at the intersection of Britannia Road and Eighth Line. Thus, the interim and ultimate design east of Eighth Line will only consist of 4-lanes. As such, there would not be any geometric improvements required at the ramp terminals (refer **Figure 1**).

A transportation analysis for this corridor was completed as a part of the Environmental Assessment process. The relevant traffic volumes and analyses are presented below:

#### Existing (2011) Transportation Analysis

The existing (2011) weekday AM and PM peak hour traffic volumes are included below in **Figure 2**.



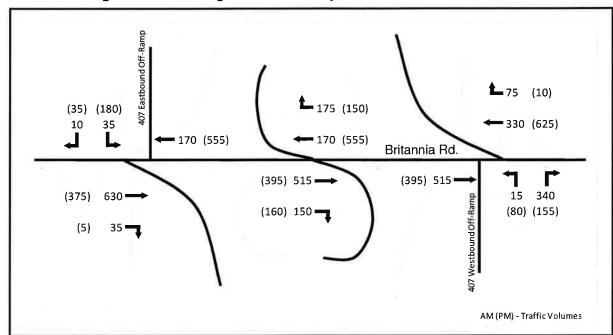


Figure 2 - Existing 2011 Weekday Peak Hour Traffic Volumes

**Table 1** shows the intersection operational performance. The detailed intersection performance summary sheets are provided in **Appendix A**.

**HCM Performance Measures** Intersection Intersection Weekday AM Weekday PM Movement Delay Delay V/C LOS V/C LOS (s) (s) Britannia Road and No Critical Movements Highway 407 N to E/W Overall 5.7 0.43 5.1 0.43 Α (Traffic Signal) Britannia Road and No Critical Movements Highway 407 S to E/W Overall 9.7 0.51 Α 5.3 0.39 Α (Traffic Signal)

Table 1: Existing (2011) Operational Performance

As presented above the both ramp terminals are currently operating satisfactorily with a peak hour LOS A.

#### Future (2031) Transportation Analysis

The future (2031) weekday AM and PM peak hour traffic volumes are included below in **Figure 3**.



(10)(80) (275) **175** (150) 95 **1**055 (1170) 990 (1140) 990 (1140) Britannia Rd. (1170) 670 -(1170) 670 (1055)765 = 110 465 (160) 150 (120) (235) (5) ء 35 AM (PM) - Traffic Volumes

Figure 3 – Future 2031 Weekday Peak Hour Traffic Volumes

**Table 2** shows the intersection operational performance. The detailed intersection performance summary sheets are provided in **Appendix A**.

**HCM Performance Measures** Intersection Weekday AM Weekday PM Intersection Movement Delay Delay V/C LOS V/C LOS (s) (s) No Critical Movements Britannia Road and Highway 407 N to E/W Overall 7.4 0.45 Α 13.1 0.65 В No Critical Movements Britannia Road and Highway 407 S to E/W Overall 17.2 0.75 11.3 0.62 В

**Table 2: 2031 Operational Performance** 

As presented above the both ramp terminals are forecast to operate satisfactorily during the 2031 weekday AM and PM peak hours under the expanded Britannia Road. No geometric or traffic control improvements are required at the ramp terminals.



We trust that the analyses and design presented in this letter is acceptable. If you have any questions or require additional information, please feel free to contact me directly at (905) 356-7003 Ext 6411.

Yours very truly,
DELCAN CORPORATION

Nick Palomba, P. Eng., Vice President

Division Manager, Transportation Division

Encls.

CC:

Jeff Booker, Highway 407 ETR Alicia Jakaitis, Halton Region

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# **APPENDIX A**

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Movement	EBL	EBT	WBT	WBR	SBL	SBR	No Contract	J		JOI C		p yau
Lane Configurations		<b>^</b>	<b>^</b>		7	7			- 14			
Volume (vph)	0	630	170	0	35	10						
Ideal low (vphpl)	1900	1900	1900	1900	1900	1900						
Lane Width	3.7	3.7	3.7	3.7	4.0	4.0						
Total Lost time (s)		6.0	6.0		6.0	6.0						
Lane Util. actor		0.95	0.95		1.00	1.00						
rt		1.00	1.00		1.00	0.85						
It Protected		1.00	1.00		0.95	1.00						
Satd. low (prot)		3579	3476		1584	1480						
It Permitted		1.00	1.00		0.95	1.00	m <sup>2</sup>				12	
Satd. low (perm)		3579	3476		1584	1480						
Peak-hour factor, PH	0.96	0.96	0.96	0.96	0.96	0.96		THE.	750		- vis	 1/11=1
Adj. low (vph)	0	656	177	0	36	10						
RT R Reduction (vph)	0	0	0	0	0	10						
Lane roup low (vph)	0	656	177	0	36	0						
Heavy Vehicles ( )	0	2	5	0	19	14						
Turn Type						Perm						
Protected Phases		4	8		6							
Permitted Phases						6						
Actuated reen, (s)		10.4	10.4		0.8	0.8						
Effective reen, g (s)		10.4	10.4		0.8	0.8						
Actuated g C Ratio		0.45	0.45		0.03	0.03						
Clearance Time (s)		6.0	6.0		6.0	6.0						
Vehicle Extension (s)		3.0	3.0		3.0	3.0						
Lane rp Cap (vph)		1604	1558		55	51						
v s Ratio Prot		c0.18	0.05		c0.02	U.Y.						
v s Ratio Perm		00.10	0.00		00.02	0.00						
v c Ratio		0.41	0.11		0.65	0.01						
Uniform Delay, d1		4.3	3.7		11.1	10.8						
Progression actor		1.00	1.00		1.00	1.00						
Incremental Delay, d2		0.2	0.0		24.6	0.1						
Delay (s)		4.5	3.8		35.7	10.9						
Level of Service		4.5 A	3.0 A		D	В						
Approach Delay (s)		4.5	3.8		30.3							
Approach L S		4.5 A	3.0 A		30.5 C							
		^			U							 
Intersection Summary		4	etica 1		الشابعي	1		No.	FILE	1	900	1 4
HCM Average Control Delay			5.7	Н	CM Level	of Servi	ce			Α		
HCM Volume to Capacity ratio			0.43	6	V -1							
Actuated Cycle Length (s)			23.2		um of los					12.0		
Intersection Capacity Utilization			45.3	IC	CU Level	of Service	Э			Α		
Analysis Period (min)			15									
c Critical Lane roup												

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Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>^</b>			44	7	7	
Volume (vph)	515	0	0	330	15	340	
Ideal low (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width	3.7	3.7	3.7	3.7	4.0	4.0	
Total Lost time (s)	6.0			6.0	6.0	6.0	
Lane Util. actor	0.95			0.95	1.00	1.00	
rt	1.00			1.00	1.00	0.85	
It Protected	1.00			1.00	0.95	1.00	
Satd. low (prot)	3564			3650	1885	1654	
It Permitted	1.00			1.00	0.95	1.00	
Satd. low (perm)	3564			3650	1885	1654	
Peak-hour factor, PH	0.93	0.93	0.93	0.93	0.93	0.93	
Adj. low (vph)	554	0.33	0.93	355	16	366	
RT R Reduction (vph)	0	0	0	0	0	72	
Lane roup low (vph)	554	0	0	355	16	294	
	2		2				
Heavy Vehicles ( )		0		0	0	2	
Bus Blockages (hr)	2	0	0	0	0	0	
Turn Type						Perm	
Protected Phases	4			8	2		
Permitted Phases						2	
Actuated reen, (s)	11.2			11.2	11.6	11.6	
Effective reen, g (s)	11.2			11.2	11.6	11.6	
Actuated g C Ratio	0.32			0.32	0.33	0.33	
Clearance Time (s)	6.0			6.0	6.0	6.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	
Lane rp Cap (vph)	1147			1175	628	551	
v s Ratio Prot	c0.16			0.10	0.01		
v s Ratio Perm						c0.18	
v c Ratio	0.48			0.30	0.03	0.53	
Uniform Delay, d1	9.5			8.9	7.8	9.4	
Progression actor	1.00			1.00	1.00	1.00	
Incremental Delay, d2	0.3			0.1	0.0	1.0	
Delay (s)	9.8			9.0	7.8	10.4	
Level of Service	Α			Α	Α	В	
Approach Delay (s)	9.8			9.0	10.3		
Approach L S	Α			A	В		
Intersection Summary	22 TO 1		, I gitan		11001	N-KON TO	"In the Italian American South
HCM Average Control Dela	У	-	9.7	Н	CM Level	of Service	A
HCM Volume to Capacity ra			0.51				
Actuated Cycle Length (s)	1000		34.8	Sı	ım of lost	time (s)	12.0
Intersection Capacity Utiliza	ation		45.3			of Service	Α
Analysis Period (min)			15				
c Critical Lane roup			, 0				

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Movement	EBL	EBT	WBT	WBR	SBL	SBR		STALL WAY	104.00
Lane Configurations		44	<b>^</b>		7	7		11	
Volume (vph)	0	375	555	0	180	35			
Ideal low (vphpl)	1900	1900	1900	1900	1900	1900			
Lane Width	3.7	3.7	3.7	3.7	4.0	4.0			
Total Lost time (s)		4.0	4.0		4.0	4.0			
Lane Util. actor		0.95	0.95		1.00	1.00			
rt		1.00	1.00		1.00	0.85			
It Protected		1.00	1.00		0.95	1.00			
Satd. low (prot)		3614	3650		1885	1638			
It Permitted		1.00	1.00		0.95	1.00			
Satd. low (perm)		3614	3650		1885	1638			
Peak-hour factor, PH	0.94	0.94	0.94	0.94	0.94	0.94		* T	" Partier
Adj. low (vph)	0	399	590	0	191	37			
RT R Reduction (vph)	0	0	0	0	0	29			
Lane roup low (vph)	0	399	590	0	191	8			
Heavy Vehicles ( )	0	1	0	0	0	3			
Turn Type						Perm			
Protected Phases		4	8		6				
Permitted Phases						6			
Actuated reen, (s)		8.3	8.3		4.3	4.3			
Effective reen, g (s)		8.3	8.3		4.3	4.3			
Actuated g C Ratio		0.40	0.40		0.21	0.21			
Clearance Time (s)		4.0	4.0		4.0	4.0			
Vehicle Extension (s)		3.0	3.0		3.0	3.0			
Lane rp Cap (vph)		1456	1471		393	342			
v s Ratio Prot		0.11	c0.16		c0.10				
v s Ratio Perm						0.00			
v c Ratio		0.27	0.40		0.49	0.02			
Uniform Delay, d1		4.1	4.4		7.2	6.5			
Progression actor		1.00	1.00		1.00	1.00			
Incremental Delay, d2		0.1	0.2		0.9	0.0			
Delay (s)		4.2	4.6		8.1	6.5			
Level of Service		Α	Α		Α	Α			
Approach Delay (s)		4.2	4.6		7.9				
Approach L S		Α	Α		Α				
Intersection Summary	البر إذا	1,219.	W W	A 11			48.00	617, 22	STAN SALM
HCM Average Control Delay			5.1	Н	CM Level	of Service		Α	
HCM Volume to Capacity ratio			0.43						
Actuated Cycle Length (s)			20.6		um of lost			8.0	
Intersection Capacity Utilization			32.0	IC	U Level o	of Service		Α	
Analysis Period (min)			15						
c Critical Lane roup									

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Movement	EBT	EBR	WBL	WBT	NBL	NBR	
Lane Configurations	<b>十</b> 个	STATE OF A	Wild order	<b>^</b>	*	7	
Volume (vph)	395	0	0	625	80	155	
Ideal low (vphpl)	1900	1900	1900	1900	1900	1900	
Lane Width	3.7	3.7	3.7	3.7	4.0	4.0	
Total Lost time (s)	4.0			4.0	4.0	4.0	
Lane Util. actor	0.95			0.95	1.00	1.00	
rt	1.00			1.00	1.00	0.85	
It Protected	1.00			1.00	0.95	1.00	
Satd. low (prot)	3476			3544	1848	1687	
It Permitted	1.00			1.00	0.95	1.00	
Satd. low (perm)	3476			3544	1848	1687	
Peak-hour factor, PH	0.91	0.91	0.91	0.91	0.91	0.91	
Adj. low (vph)	434	0	0	687	88	170	
RT R Reduction (vph)	0	0	0	0	0	130	
Lane roup low (vph)	434	0	0	687	88	40	
Heavy Vehicles ( )	5	0	0	3	2	0	
Turn Type						Perm	
Protected Phases	4			8	2		
Permitted Phases						2	
Actuated reen, (s)	8.3			8.3	5.0	5.0	
Effective reen, g (s)	8.3			8.3	5.0	5.0	
Actuated g C Ratio	0.39			0.39	0.23	0.23	
Clearance Time (s)	4.0			4.0	4.0	4.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	
Lane rp Cap (vph)	1354			1381	434	396	
v s Ratio Prot	0.12			c0.19	c0.05		
v s Ratio Perm						0.02	
v c Ratio	0.32			0.50	0.20	0.10	
Uniform Delay, d1	4.5			4.9	6.5	6.4	
Progression actor	1.00			1.00	1.00	1.00	
Incremental Delay, d2	0.1			0.3	0.2	0.1	
Delay (s)	4.7			5.2	6.8	6.5	
Level of Service	Α			Α	Α	Α	
Approach Delay (s)	4.7			5.2	6.6		
Approach L S	Α			Α	Α		
Intersection Summary			1875				
HCM Average Control Delay			5.3	Н	CM Level	of Service	
HCM Volume to Capacity ra			0.39		. 15		
Actuated Cycle Length (s)			21.3	S	um of lost	time (s)	
Intersection Capacity Utiliza	tion		32.0		U Level c		
Analysis Period (min)			15				
c Critical Lane roup							

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EBL	EBT	WBT	WBR	SBL	SBR	
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	2000	2000	2000	2000	2000	
	7.0	7.0		7.0	7.0	
		0.95		1.00	1.00	
		1.00		1.00	0.85	
					1.00	
				1579	1475	
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Movement         EBT         EBR         WBL         WBT         NBL         NBR           Lane Configurations         1         1         1         1         1         1         1         1         1         465         1         1         465         1         10         465         1         1         465         1         1         1         2000         20
Lane Configurations         **
Volume (vph)         670         0         0         1055         110         465           Ideal low (vphpl)         2000         2000         2000         2000         2000         2000           Total Lost time (s)         7.0         7.0         7.0         7.0           Lane Util. actor         0.95         0.95         1.00         1.00           rt         1.00         1.00         0.85
Ideal low (vphpl)         2000
Total Lost time (s)     7.0     7.0     7.0     7.0       Lane Util. actor     0.95     0.95     1.00     1.00       rt     1.00     1.00     1.00     0.85
rt 1.00 1.00 0.85
1100 0100
It Protected 1.00 1.00 0.95 1.00
Satd. low (prot) 3669 3758 1879 1648
It Permitted 1.00 1.00 0.95 1.00
Satd. low (perm) 3669 3758 1879 1648
Peak-hour factor, PH 1.00 1.00 1.00 1.00 1.00 1.00
Adj. low (vph) 670 0 0 1055 110 465
RT R Reduction (vph) 0 0 0 0 0 0
Lane roup low (vph) 670 0 0 1055 110 465
Heavy Vehicles ( ) 2 0 2 0 0 2
Bus Blockages ( hr) 2 0 0 0 0
Turn Type Perm
Protected Phases 2 6 4
Permitted Phases 4
Actuated reen, (s) 23.1 19.5 19.5
Effective reen, g (s) 23.1 19.5 19.5
Actuated g C Ratio 0.41 0.34 0.34
Clearance Time (s) 7.0 7.0 7.0 7.0
Vehicle Extension (s) 3.0 3.0 3.0
Lane rp Cap (vph) 1497 1534 647 568
v s Ratio Prot 0.18 c0.28 0.06
v s Ratio Perm c0.28
v c Ratio 0.45 0.69 0.17 0.82
Uniform Delay, d1 12.1 13.8 12.9 16.9
Progression actor 1.00 1.00 1.00 1.00
Incremental Delay, d2 1.0 2.5 0.1 9.0
Delay (s) 13.1 16.3 13.0 25.9
Level of Service B B B C
Approach Delay (s) 13.1 16.3 23.4
Approach L S B B C
Intersection Summary
HCM Average Control Delay 17.2 HCM Level of Service
HCM Volume to Capacity ratio 0.75
Actuated Cycle Length (s) 56.6 Sum of lost time (s)
Intersection Capacity Utilization 56.6 ICU Level of Service
Analysis Period (min) 15
c Critical Lane roup

	۶	<b>-</b>	+	•	-	4	
Movement	EBL	EBT	WBT	WBR	SBL	SBR	
Lane Configurations		<b>^</b>	<b>^</b>		7	7	
Volume (vph)	0	1055	1140	0	275	80	
Ideal low (vphpl)	2000	2000	2000	2000	2000	2000	
Total Lost time (s)		7.0	7.0		7.0	7.0	
Lane Util. actor		0.95	0.95		1.00	1.00	
rt		1.00	1.00		1.00	0.85	
It Protected		1.00	1.00		0.95	1.00	
Satd. low (prot)		3684	3579		1579	1475	
It Permitted		1.00	1.00		0.95	1.00	
Satd. low (perm)		3684	3579		1579	1475	
Peak-hour factor, PH	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. low (vph)	0	1055	1140	0	275	80	
RT R Reduction (vph)	0	0	0	0	0	31	
Lane roup low (vph)	0	1055	1140	0	275	49	
Heavy Vehicles ( )	0	2	5	0	19	14	
Turn Type	1 1					Perm	
Protected Phases		2	6		4		
Permitted Phases						4	
Actuated reen, (s)		30.0	30.0		14.5	14.5	
Effective reen, g (s)		30.0	30.0		14.5	14.5	
Actuated g C Ratio		0.51	0.51		0.25	0.25	
Clearance Time (s)		7.0	7.0		7.0	7.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	
Lane rp Cap (vph)		1889	1835		391	366	
v s Ratio Prot		0.29	c0.32		c0.17	000	
v s Ratio Perm		0.20	00.02			0.03	
v c Ratio		0.56	0.62		0.70	0.13	
Uniform Delay, d1		9.7	10.2		20.0	17.1	
Progression actor		1.00	1.00		1.00	1.00	
Incremental Delay, d2		1.2	1.6		5.7	0.2	
Delay (s)		10.9	11.8		25.7	17.3	
Level of Service		В	В		C	В	
Approach Delay (s)		10.9	11.8		23.8	-	
Approach L S		В	В		C		
Intersection Summary		110.08		N. Dec. 1		villa ( a Till	Salarda Alexandra
HCM Average Control Delay			13.1	ш	CM Level	of Service	В
HCM Volume to Capacity ratio			0.65	- OP	CIVI LEVE	OI OCI VICE	D
Actuated Cycle Length (s)			58.5	Q <sub>1</sub>	um of los	time (e)	14.0
Intersection Capacity Utilization			56.2			of Service	14.0 B
Analysis Period (min)			15	10	O FEACI	DI GELVICE	
c Critical Lane roup			10				

	-	*	•	+	1	-	
Movement	EBT	EBR	WBL	WBT	NBL	NBR	The State of the S
Lane Configurations	<b>^</b>			<b>^</b>	*	7	
Volume (vph)	1170	0	0	1140	120	235	
Ideal low (vphpl)	2000	2000	2000	2000	2000	2000	
Total Lost time (s)	7.0			7.0	7.0	7.0	
Lane Util. actor	0.95			0.95	1.00	1.00	
rt	1.00			1.00	1.00	0.85	
It Protected	1.00			1.00	0.95	1.00	
Satd. low (prot)	3669			3758	1879	1648	
It Permitted	1.00			1.00	0.95	1.00	
Satd. low (perm)	3669			3758	1879	1648	The state of the s
Peak-hour factor, PH	1.00	1.00	1.00	1.00	1.00	1.00	
Adj. low (vph)	1170	0	0	1140	120	235	
RT R Reduction (vph)	0	0	0	0	0	36	
Lane roup low (vph)	1170	0	0	1140	120	199	
Heavy Vehicles ( )	2	0	2	0	0	2	
Bus Blockages ( hr)	2	0	0	0	0	0	
Turn Type						Perm	
Protected Phases	2			6	4	10.00	
Permitted Phases						4	
Actuated reen, (s)	22.7			22.7	11.1	11.1	
Effective reen, g (s)	22.7			22.7	11.1	11.1	
Actuated g C Ratio	0.47			0.47	0.23	0.23	
Clearance Time (s)	7.0			7.0	7.0	7.0	
Vehicle Extension (s)	3.0			3.0	3.0	3.0	
Lane rp Cap (vph)	1742			1785	436	383	
v s Ratio Prot	c0.32			0.30	0.06	000	
v s Ratio Perm					0.00	c0.12	
v c Ratio	0.67			0.64	0.28	0.52	
Uniform Delay, d1	9.7			9.5	15.1	16.0	
Progression actor	1.00			1.00	1.00	1.00	
Incremental Delay, d2	1.0			0.8	0.3	1.2	
Delay (s)	10.7			10.2	15.4	17.2	
Level of Service	В			В	В	В	
Approach Delay (s)	10.7			10.2	16.6		
Approach L S	В			В	В		
Intersection Summary	"multi-state	fs X	WE W.	W.		Spirit .	
HCM Average Control Delay			11.3	Н	CM Level	of Service	В
HCM Volume to Capacity rat			0.62	100		7	And the second
Actuated Cycle Length (s)			47.8	Sı	um of lost	time (s)	14.0
Intersection Capacity Utilizat	tion		56.2			of Service	В
Analysis Period (min)			15				
c Critical Lane roup							



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: (905) 825 8822

September 27, 2013

Diana Zidar-Beaulne Ministry of Transportation Central Region 1201 Wilson Avenue, 6<sup>th</sup> Floor Downsview, Ontario M3M 1J8

Dear: Ms. Zidar-Beaulne

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

The Class Environmental Assessment (EA) Study to address a wide range of options for transportation corridor improvements to satisfy future travel demands on Britannia Road from Highway 407 to Tremaine Road (Regional Road 22), in the Town of Milton is nearing completion. The Project Team has documented the study process and recommendations in the **DRAFT** Environmental Study Report (ESR).

A copy of the <u>DRAFT</u> ESR is enclosed for Ministry's review and comments. For ease of distribution within your organization, a CD copy of the <u>DRAFT</u> ESR text has also been included. All comments on the Draft ESR must be provided to the undersigned by no later than <u>Friday Ocotber 25, 2013</u>. The ESR will be finalized in December 2013 and subsequently filed for the 30 day Public Review Record.

If you have any questions or require additional information, please do not hesitate to contact me at (905) 825-6000 extension 7556 or at <u>alicia.jakaitis@halton.ca</u>

Sincerely,

Alicia Jakaitis

# **Andrew McGregor**

Subject:

FW: Britannia Road - Regional Road 6 - Class Environmental Assessment Study - Highway 407 to Tremaine Rd (Reg Rd 22)

From: Beaulne, Diana (MTO) [mailto:Diana.Beaulne@ontario.ca]

Sent: Tuesday, November 13, 2013 11:04 AM

**To:** Jakaitis, Alicia **Cc:** Joknic, Sonja (MTO)

Subject: Britannia Road - Regional Road 6 - Class Environmental Assessment Study - Highway 407 to Tremaine Rd (Reg

Rd 22)

Good Morning Alicia,

The Ministry of Transportation has reviewed the draft Class Environmental Assessment Study and has the following comments.

Based on the recent submission from Halton Region of the of Britannia Road widening between Highway 407 ETR and Tremaine Road, 407 ERT requires additional review as follows.

## Design Criteria.

- In the plan view, 407 ETR requests that proposed sidewalks/bicycle lanes/multi use paths, and lane widths be identified and labelled to allow for detailed review.
- 407 ETR requests proposed cross section drawings be provided
- 407 ETR has concerns with termination of active transportation elements immediately adjacent to highway 407 ETR.
- The preferred design should consider ending bike lanes and multi use paths at 8<sup>th</sup> Line as Britannia Road structure currently does not provide for exclusive cycling facilities.
- All proposed design criteria within 407 ETR right of way must be approved by 407 ETR and MTO.
- Encroachment and/or Building and Land Use permit may be required.

Should you require additional information, or have any concerns, please contact me directly.

Kind Regards,

Diana Beaulne
Permits Officer, Central Region
Corridor Management Section
Ministry of Transportation
7<sup>th</sup> Floor, Building D
1201 Wilson Ave

Downsview, Ontario M3M 1J8

Tel: 416 235-3883 Fax: 416 235-4267

Diana.beaulne@ontario.ca

This message, including any attachments, is privileged and intended only for the person(s) named above. This material may contain confidential or personal information which may be subject to the provisions of the Municipal Freedom of Information & Protection of Privacy Act. Any other distribution, copying or disclosure is strictly prohibited. If you are not the intended recipient or have received this message in error, please notify us immediately by telephone, fax or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

Thank you



November 5, 2010

To Mr. Manoj Dilwaria,

RE: Notice of Study Commencement and Development of Technical Agency Committee (TAC) Britannia Road (RR 6) Transportation Corridor Improvements From Tremaine Road (RR 22) to Highway 407, Halton Region Class EA Study

Thank you for circulating Ontario Realty Corporation (ORC) on your Notice of Study Commencement and Development of Technical Agency Committee. The ORC is the strategic manager of the government's real property with a mandate of maintaining and optimizing value of the portfolio, while ensuring real estate decisions reflect public policy objectives of the government.

Our preliminary review of your notice and supporting information indicates that ORC-managed property is not within your study area. We have no other concerns with this undertaking. Please remove ORC from your circulation list with respect to this project.

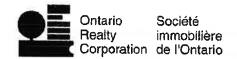
Thank you for the opportunity to provide initial comments on this undertaking. If you have any questions I can be reached at the contacts below.

Sincerely,

Lisa Myslicki

Environmental Coordinator
Ontario Realty Corporation - Professional Services
1 Dundas Street West,
Suite 2000, Toronto, Ontario
M5G 2L5
(416) 212-3768
lisa.myslicki@ontariorealty.ca

J. Wyslicki



February 8, 2011

Re: ORC EA requirements for Britannia Road Transportation Corridor Improvements

Thank for Contacting the ORC regarding the proposed undertaking and ORC Class EA requirements.

ORC is required, by the MOE and the environmental assessment act, to follow the "MEI Class EA Process for Realty Activities Other Than Electricity Projects (approved April 2004, amended September 11, 2008)" prior to any activities on ORC managed lands.

The Class EA parent document can be found at:

http://www.ontariorealty.ca/Assets/MEI+Class+EA+Document+(amended) 11Sep2008.pdf

Issue #1: Identification of undertaking(s) and trigger to MEI Class EA

Generally, for EA projects, the ORC is consulted regarding the applicability of the MEA/IEA Class EA processes and requirements when a proponent's proposed undertaking may directly or indirectly affect lands or facilities owned by MEI and managed by ORC. This would ensure that the correct undertaking described in the MEI Class EA is clearly identified and addressed. Please refer to section 9.7 of the Class EA, referenced in the preceding section, which explains that despite a proponent receiving an approval under the EA Act ("Act"), MEI, ORC, or an authorized agency under MEI ("MEI/ORC/Agency"), are still responsible for meeting the requirements of the Act when carrying out an undertaking on behalf of the proponent. (For example, this means that if a proponent's undertaking includes acquiring an easement or transfer of ownership of land owned by MEI and transacted by ORC on the ministry's behalf, then such realty activities to be conducted by ORC must be clearly identified and assessed in the proponent's EA study; otherwise, MEI/ORC/Agency must conduct a separate EA under the MEI Class EA process to meet its requirements under the Act.)

In addition, please ensure to include **any** lands that have been, or are subject to, an easement that include Hydro One towers and transmission lines on Bill 58 lands. MEI/ORC's realty undertaking should be clearly identified, and be made separate from undertakings conducted by Hydro One. MEI is the owner for all Bill 58 lands and is solely responsible for granting any easements or conducting any disposition of such lands to another party.

The proponent is requested to identify how the EA meets MEI/ORC's minimum EA requirements by referring to the seven point analysis, as described in section 4.2, Step B1 of the MEI Class EA and detailed within the Consultation and Documentation Report template located in Appendix 3.

According to the MEI Class EA, an undertaking is defined on Page 9-11, in the Glossary of Terms. Undertakings are broken down into components; that is, one or more actions which may apply to one or more subgroups. MEI/ORC/Agency undertakings need to be identified as real estate activities, including the issuance of a license/lease, granting of an easement, or disposition. Each undertaking has a different category level of consultation and analysis associated with it, as identified in Figure 2.2 EA Category Listing Matrix of the MEI Class EA.



Issue #2: Identifying the associated EA Category and ability to defer to an alternative EA

Please note that different undertakings in combination with the type of land to be impacted, determines the ORC EA Class. As an example, granting an easement on ORC managed lands is considered a Category "B" and an easement on Bill 58 lands, managed by Hydro One, is considered a Category "A". Category "A" is applied to undertakings that are minor in scale and have minimal or no adverse environmental effects. Based on the criteria of a Category "A" EA and depending on the scale of the area to be impacted by an undertaking, proper due diligence of an easement, impacting hydro corridor land, could require an elevation to a Category "B". Please note that licenses and leases on Hydro corridor lands are considered a Category "A" and therefore, generally do not require any EA work; however, the purchase of Hydro corridor lands is considered a Category "B" EA, according to the Figure 2.2 Category Listing Matrix.

As stated previously, the EA must meet the 7 point analysis identified in the MEI/ORC's Class EA.

Issue #3: Consultation with ORC Stakeholders

MEI/ORC/Agency is required to circulate major stakeholders prior to land transfer, dispositions or easements, depending on the type of land to be impacted and it is possible under the MEI Class EA Process to defer to an alternative EA, if the client ministry or agency's EA circulates the appropriate stakeholder. One major stakeholder to contact is the MNR. Often the MNR is not a significant contributor to the MEA process; however, they are in ORC's Class EA, as the MNR has a greater interest in our projects (being another government agency). This is where confusion lies between a Municipal Class EA and ORC's Class EA. Because of MNR's significant role in our EA, especially where there are significant natural features, we need to ensure that there comments are addressed. It would create potential future problems, with the MNR, if we choose to ignore there concerns, especially when they could be quite reasonable. As such, a "no response" is not sufficient for ORC. ORC will require a letter indicating the MNR is choosing to decline and documentation of consultation with the stakeholder is required.

Issue #4: Phase I Environmental Site Assessment and Stage 1/II Archaeological Assessments/Cultural Heritage Assessments

Depending on the type of realty activity to be completed, there is potential, based on the MEI Class EA Process, that a Phase I/II Environmental Site Assessment (ESA), Stage I/II Archaeological Assessment or Cultural Heritage Assessment may be required. Please note that if a Phase I ESA was not completed within the EA document, for the ORC managed lands, the deferral to the EA is still possible; however, the Phase I ESA must still be completed prior to disposition or granting of the easements according to the standards indicated. Please note that any required technical reports are to be procured and paid for by the proponent of the project.

ORC has certain standards for a Phase I ESA. The Phase I Environmental Site Assessment must be conducted in accordance with Schedule D of the Revised Brownfield Regulation. In addition to a site visit and interviews, the site history and records review shall include all the relevant sources to ensure compliance with Schedule D. Although Part VII is focused on risks to soil and groundwater, ORC expects the Phase I ESA work done for this assignment to include investigation and comment on designated substances and typical hazardous building materials. This is intended to capture topics such as asbestos, PCB-containing electrical equipment, leadbased paints, mercury containing materials, UFFI, mould, etc. With respect to Section 16(3)(c) of Schedule D, the likelihood of contaminants affecting the property must be presented as either high, medium, low or minimal for each potential risk identified. Please note that \*full\* reliance of



the report is required to be extended to the ORC without any liability cap. ORC will require written confirmation of this, from the proponent's consultant.

Issue #5: Ability to defer

The ability to defer to an alternative EA is determined if the EA meets MEI's Class EA seven point analysis. The identification of the MEI realty undertaking and sufficient consultation must be adequately documented. When the EA has been reviewed by ORC staff, and approval to defer has been granted, then the proponent will be required to complete and sign a deferral sheet acknowledging that the EA meets ORC's/MEI's Class EA requirements.

### **Concluding Remarks**

If the proposed undertaking has a potential to cause impacts to MEI-owned property, it also has the potential to cause net negative environmental effects. Our comments are intended to ensure that outstanding issues of environmental, socio-economic and cultural heritage concerns related to this property, as well as complying with all regulations, will be appropriately addressed prior to the commencement of this undertaking. ORC looks forward to continuing communication regarding this project.

Please note that in addition to the above requirements, and depending on the type of agreement, ORC may also be required to circulate First Nations regarding the undertaking. Should First Nations consultation be a requirement of your EA, I recommend you contact ORC for further details regarding this subject.

Please contact the undersigned if you have any questions.

Regards.

Lisa Myslicki

Environmental Coordinator
Ontario Realty Corporation - Professional Services
1 Dundas Street West,
Suite 2000, Toronto, Ontario
M5G 2L5
(416) 212-3768
lisa.myslicki@ontariorealty.ca

1. Wyslicki



July 13, 2011

To Mr. Andrew Head, Mr. Manoj Dilwaria

### RE: Britannia road Transportation Corridor Improvements

Thank you for circulating Infrastructure Ontario (formerly the Ontario Realty Corporation) on your Notice of Public Information Centre #2. Infrastructure Ontario (IO) is the strategic manager of the government's real property with a mandate of maintaining and optimizing value of the portfolio, while ensuring real estate decisions reflect public policy objectives of the government.

As you may be aware, IO is responsible for managing real property that is owned by the Ministry of Infrastructure (MOI). Our preliminary review of your notice and supporting information indicates that IO-managed property is directly in the study area. As a result, your proposal may have the potential to impact this property and/or the activities of tenants present on IO-managed lands. Attached please find a map that identifies these properties to assist you in identifying and avoiding potential impacts on IO-managed lands. Please note that lands managed by Hydro One, on behalf of IO are in the study area. These lands are also subject to the same following requirements.

### Potential Negative Impacts to IO Tenants and Lands

### **General Impacts**

Negative environmental impacts associated with the project design and construction, such as the potential for dewatering, dust, noise and vibration impacts, and impacts to natural heritage features/habitat and functions, should be avoided and/or appropriately mitigated in accordance with applicable regulations best practices and Ministry of Natural Resources (MNR) and Ministry of the Environment (MOE) standards. Avoidance and mitigation options that characterize baseline conditions and quantify the potential impacts should be present as part of the EA project file. Details of appropriate mitigation, contingency plans and triggers for implementing contingency plans should also be present.

### Impacts to Land holdings

Negative impacts to land holdings, such as the taking of developable parcels of IO managed land or fragmentation of utility or transportation corridors, should be avoided. If the potential for such impacts is present as part of this undertaking, you should contact the undersigned to discuss these issues at the earliest possible stage of your study.

If takings are suggested as part of any alternative these should be appropriately mapped and quantified within EA report documentation. In addition, details of appropriate

mitigation and or next steps related to compensation for any required takings should be present. IO requests circulation of the draft EA report prior to finalization if potential impacts to IO-managed lands are present as part of this study.

# Heritage Management Process & Class Environmental Assessment (EA) Process

Should the proposed activities impact cultural heritage features, on IO managed lands, a request to examine cultural heritage issues which can include the cultural landscape, archaeology and places of sacred and secular value could be required. The Ontario Realty Corporation Heritage Management Process should be used for identifying and conserving heritage properties in the provincial portfolio (this document can be downloaded from the Heritage section of our website: http://www.ontariorealty.ca/What-We-Do/Heritage.htm). Through this process, IO identifies, communicates and conserves the values of its heritage places. In addition, the Class EA ensures that IO considers the potential effects of proposed undertakings on the environment, including cultural heritage.

## Potential Triggers Related to MOI's Class EA

The IO is required to follow the MOI Class Environmental Assessment Process for Realty Activities Not Related to Electricity Projects (MOI Class EA). The MOI Class EA applies to a wide range of realty and planning activities including leasing or letting, planning approvals, dispostion, granting of easements, demolition and property maintenance/repair. For details on the IO Class EA please visit the Environment and Heritage page of our website found at <a href="http://www.ontariorealty.ca/AssetFactory.aspx?did=2240">http://www.ontariorealty.ca/AssetFactory.aspx?did=2240</a>

If the MOI Class EA is triggered, and deferral to another ministry's or agency's Class EA or individual EA is requested, the alternative EA will be subject to a critical review prior to approval for any signoff of a deferral by the proponent. The alternative EA needs to fulfill the minimum criteria of the MOI Class EA. When evaluating an alternative EA there must be explicit reference to the corresponding undertaking in the MOI Class EA (e.g., if the proponent identifies the need to acquire land owned by MOI, then "acquisition of MOI-owned land", or similar statement, must be referenced in the EA document). Furthermore, sufficient levels of consultation with MOI's/IO's specific stakeholders, such as the Ontario Ministry of Natural Resources, must be documented with the relevant information corresponding to MOI's/IO's undertaking and the associated maps. In addition to archaeological and heritage reports, a Phase I Environmental Site Assessment (ESA), on IO lands should also be incorporated into the alternative EA study. Deficiencies in any of these requirements could result in an inability to defer to the alternative EA study and require completing MOI's Class EA prior to commencement of the proposed undertaking.

In summary, the purchase of MOI-owned/IO-managed lands or disposal of rights and responsibilities (e.g. easement) for IO-managed lands triggers the application of the MOI Class EA. If any of these realty activities affecting IO-managed lands are being proposed

as part of any alternative, please contact the Sales and Marketing Group through IO's main line (Phone: 416-327-3937, Toll Free: 1-877-863-9672), and contact the undersigned at your earliest convenience to discuss next steps.

### **Specific Comments**

If an EA for this project is currently being undertaken and the undertaking directly affects all or in part any IO-managed property, please send the undersigned a copy of the DRAFT EA report and allow sufficient time (minimum of 30 calendar days) for comments and discussion prior to finalizing the report to ensure that all MOI Class EA requirements can be met through the EA study.

## **Concluding Comments**

J. Myslicki

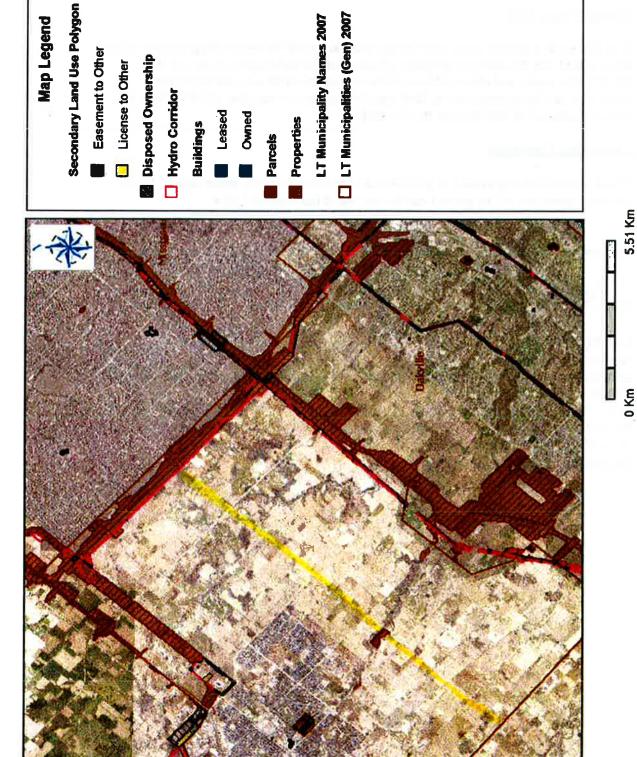
Thank you for the opportunity to provide initial comments on this undertaking. If you have any questions on the above I can be reached at the contacts below.

Sincerely,

Lisa Myslicki

Environmental Advisor Infrastructure Ontario - Professional Services 1 Dundas Street West, Suite 2000, Toronto, Ontario M5G 2L5 (416) 212-3768

lisa.myslicki@infrastructureontario.ca





Date: 1:04:27 PM Wednesday, July 13, 2011

For discussion purposes only.



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: (905) 825 8822

October 1, 2013

Lisa Myslicki
Environmental Advisor
Ontario Infrastructure and Lands Corporation
1 Dundas Street West, Suite 2000
Toronto, Ontario M5G 2L5

Dear: Ms. Myslicki

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

The Class Environmental Assessment (EA) Study to address a wide range of options for transportation corridor improvements to satisfy future travel demands on Britannia Road from Highway 407 to Tremaine Road (Regional Road 22), in the Town of Milton is nearing completion. The Project Team has documented the study process and recommendations in the **DRAFT** Environmental Study Report (ESR).

A copy of the <u>DRAFT</u> ESR is enclosed for ORC's review and comments. For ease of distribution within your organization, a CD copy of the <u>DRAFT</u> ESR text has also been included. All comments on the Draft ESR must be provided to the undersigned by no later than <u>Friday Ocotber 25, 2013</u>. The ESR will be finalized in December 2013 and subsequently filed for the 30 day Public Review Record.

If you have any questions or require additional information, please do not hesitate to contact me at (905) 825-6000 extension 7556 or at <u>alicia.jakaitis@halton.ca</u>

Sincerely,

Alicia Jakaitis

# **Andrew McGregor**

Subject:

FW: Britannia Road Draft ESR Review

From: Myslicki, Lisa (IO) [mailto:Lisa.Myslicki@infrastructureontario.ca]

Sent: Tuesday, March 18, 2014 11:18 AM

**To:** Andrew McGregor

Subject: RE: Britannia Road Draft ESR Review

Hi Andrew, thanks for your e-mail. Yes, the EA currently meets IO's streamlining requirements. However, a potential exists that future requirements regarding the streamlining of the MOI class EA could change.

Regards,

Lisa Myslicki

Environmental Advisor
Ontario Infrastructureand Lands Corporation

Direct: 416 212 3768
(416) 212-1131

Myslicker

☑ Ilsa.myslicki@infrastructureontario.ca

please consider the environment before printing this e-mail.

# **Stephanie Jarvis**

Subject:

Britannia Road EA

**BDS.EmailID:** 

93de170d0962448f9c9d8f489897d4c4

From: Anne Fisher

Sent: Thursday, September 30, 2010 8:42 AM

To: Stephanie Jarvis

**Cc:** Bronwyn Parker; Barb Koopmans **Subject:** RE: Britannia Road EA

### Stephanie,

I have outlined below my concerns about the impact that changes to Britannia could have on the heritage resources within this area. I will start at the Tremaine Road end of Britannia and work my way eastwards to the 407. Britannia has traditionally been a major road and as a consequence a number of small villages developed along its major intersections. While little remains of some of these former thriving communities their presence should not be forgotten in the development of Britannia Road and they should all be marked in some way.

- There are 2 properties on Tremaine just north of Britannia (6116 Tremaine and 6081 Tremaine), both contain late 19th century buildings - however both are a distance from Britannia (over 250m) and are therefore unlikely to be affected by any road widening. If proposals affected either of these properties we would like to know.
- No. 5703 Tremaine (to the south of Britannia) is also of heritage significance, however the historic buildigns on this lot are also located a distance from Britannia Road (300m+) and so are unlikely to be affected by changes to Britannia.
- There is a very significant heritage farmstead at 1510 Bronte Street South (formerly known as 6054 First Line) Britannia Road is over 150m away so hopefully, this will not be affected by any road widening.
- There is a heritage property at 5761 First Line (south of Britannia) this is of likely to be of lesser significance than the one's mentioned above and we have received a demolition request for the buildings on this property (we are awaiting a Heritage Impact Assessement). This is over 100m from Britannia.

### **Boyne**

- The intersection of Britannia and Regional Road 25 is the old village of Boyne: This village contains a number of heritage buildings some of which would be affected by a road widening:
  - 6003/6009 Regional Road 25 -this is the old gas station. The house is a mid-late 19th century house with a 1920's gas station building that also includes a 1940's addition. The gas station buildings would be affected by any road widening. Heritage Milton consider this property to be a landmark and to be of heritage significance. They have asked that I write a report to Council including their recommendation that this be designated under the provisions of Part IV of the Ontario Heritage Act. I would like to see any proposals that would affect this property. Any development affecting this property would have to be looked at very carefully and may become very contentious.
  - Boyne also includes the old schoolhouse that is on the property at 6035 Regional Road 25 this is of heritage significance.
  - The property to the south of Britannia in Boyne is 8240 Britannia (formerly 2284 Britannia) is a heritage property of both architectural and historical significance. The old farmhouse is set back from both roads, however the barns are located close to Britannia. The buildings on this property form part of a significant heritage landscape that should be conserved. Any road widening on Britannia could affect these barns and this would have to be looked at very carefully.
  - 8161 Britannia (formerly 2297 Briannina) this is a heritage property that should be conserved. The house is located over 25m from the roadway so it may not be threatened by a road widening.

- 8321 Britannina the farm here <u>may</u> be of heritage significance, a site visit on to the actual property would be needed to confirm this (the buildings are not visible from the street).
- 8815 Britannia (formerly 2077) is the Omagh Presbyterian church. This is historically and architectually significant and needs to be conserved. The church is set quite close to the road and any road widening could considerably harm its setting. Any road widening should stop before it affects the trees at the front of this church.
- 1635 Thompson Road is on the SE corner of the intersection of Britannia and Thompson Roads. This is both historically and architectually significant. Any road widening should respect this property, including its barns. The cluster of buildings here represents a heritage landscape. Any road widening should not harm the house or barns on this property.

### Omagh

- The village of Omagh is situated at the intersection of Britannia and Fourth Line. This is the largest and most significant of the old historic villages that remain in Milton from the former Township of Trafalgar. It retains many heritage buildings and its traditional character. Staff will be recommending that is be designated a Heritage District under Part V of the Ontario Heritage Act. All road widening within this village should therefore be avoided and new roads and road widenings should detour this historic village. The traditional village stretches from 9815 Britannia in the west to 10080 Britannia in the east and from 1595 Fourth Line in the north to 5784 Fourth Line to the south but its relationship to the Omagy Presbyterian Church at 8815 Britannia can not be forgotten. Staff would wish to approve any detour route.
  - 9815 Britannia Road (formerly 1427) is a historic farmstead
  - 9905 & 9965 Britannia (formerly 1393 & 1373) form a pair of traditional workers cottages.
  - 9850 Britannia (formerly 1412) is a historic church.
  - 9950 Britannia (formerly 1370) is an heritage house within the village.
  - 10025 Britannia (formerly 1353) is an heritage house and is the former hotel / village shop.
  - 1599, 1595 and 1501 Fourth Line are also of heritage significance.
  - 10080 Britannia (formerly 1336) is an historic house.
- 10720 Britannia is a heritage property.
- The intersection of Britannia and Trafalgar Roads is the old village of <u>Drumquin</u> a few historic reminders of this village do remain they include:
  - The heritage house behind the gas station on the NW corner of this intersection (6018 Trafalgar)
  - 6007 Trafalgar Road

Anne Fisher MCIP, RPP, MRTPI

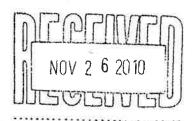
6119 Trafalgar Road (this may have been demolished)

I can't find any heritage resources to the east of Trafalgar Road - however I will double check by taking a quick drive out there this afternoon / lunchtime. I'll get back to you with the result.

I hope this helps.

### Anne

Planner
Planning and Development Department
Town of Milton
905-878-7252 X 2565
anne.fisher@milton.ca
www.milton.ca





# **Planning and Development**

November 9, 2010

Mr. Manoj Dilwaria
Principal and Technical Director
Delcan Corporation
3115 Harvester Road, Suite 102
Burlington, ON L7N 3N8

Dear Mr. Dilwaria,

RE: Britannia Road (RR 6) Transportation Corridor Improvements, Halton Region Class Environmental Assessment Study

Town of Milton Planning staff received the Notice of Study Commencement for the above mentioned study on September 24, 2010. Our Fax Back Form was provided on September 29, with the promise of providing key planning documents that are relevant to this Class EA Study.

As such, please find the following documents for the study team's review in relation to the Britannia Road Class EA Study on the attached CD:

- Town of Milton Boyne Survey Secondary Plan (including the Milton Education Village) Reports/Information
- Official Plan Amendment 30 (OPA 30)
- Archeology Report
- Draft Final Subwatershed Update Study (SUS)
- Transportation Strategy Draft Report

Further, an Initial Heritage Review of Britannia Road including the Heritage Cluster of Omagh, completed internally, is also attached to this letter in hard copy.

One report, the Functional Stormwater and Environmental Management Strategy (FSEMS) has not been included, however will be forwarded once it is received from the consultant.

Should you have any questions or comments regarding these documents, please do not hesitate to contact me at 905 878 7252 ext. 2567 or by email at <a href="mailto:stephanie.jarvis@milton.ca">stephanie.jarvis@milton.ca</a>.

Thank you,

Stephanie Jarvis, OALA, CSLA, ASLA, LEED® AP

Environmental and Sustainability Planner

Enclosed:

CD containing the above List of reports

Hard copy of Initial Heritage Review of Britannia Road and

Heritage Cluster of Omagh

Copy of letter to:

(by email)

Andrew Head, Region of Halton Brian Hudson, Region of Halton

Bill Mann, Town of Milton

Barbara Koopmans, Town of Milton

Anne Fisher, Town of Milton Paul Cripps, Town of Milton



# **Planning and Development**

July 6, 2011

Mr. Andrew Head, C.E.T. Project Manager Transportation Services Regional Municipality of Halton

VIA EMAIL: andrew.head@halton.ca

Dear Mr. Head,

RE: Britannia Road (Regional Road 6)

Transportation Corridor Improvements Class EA

Following the most recent Public Information Centre held on June 8, 2011, the Town of Milton Planning and Development Department wishes to make the following formal comments with regard to the above mentioned Class EA.

There are three heritage areas (Boyne, Drumquin and Omagh) and a number of heritage properties that are potentially impacted by the scope of the project. Planning staff's comments outlining the heritage implications of the Region's proposed route for widening Britannia Road are below.

6116, 6081 and 5703 Tremaine
 None of these properties are affected by the widening of Britannia Road.

# 2. **1510 Bronte Street South & 5761 First Line**These properties are not affected by the widening of Britannia Road.

### 3. Boyne

The intersection of Britannia and Regional Road 25 is the old village of Boyne. This village contains a number of heritage buildings, of which, some, would be affected by a road widening:

regard to the exact road design in relation to this property to minimize the impact on the barn ramp. Therefore although the proposed road widening will have an impact on this important heritage property, it is likely that with an appropriate design the impact would not be significant.

# c. 8161 Britannia (heritage property)

The house on this lot would not be affected by the proposed road widening. There is a large tree close to the proposed new property line. It is requested that, if possible, this tree be retained.

#### 4. 8321 Britannia

Any cultural heritage resource on this property is not affected by the proposed road widening.

### 5. 8815 Britannia (Omagh Presbyterian Church)

This building is historically and architecturally significant and should be conserved. The Region has, thus far, taken into account the proximity of this church when planning the road widening. The retention of the existing lot line in front of this property is welcomed.

Planning staff request that the Region try to retain the trees in front of this church as they form part of its historic setting.

6. **1635 Thompson Road** - SE corner of Britannia and Thompson Roads (Identified as 8760 Britannia Road on the Region's maps but is 1635 Thompson Road on Town mapping)

This site is both historically and architecturally significant. No objections are offered with respect to the proposed road widening as this would not harm the buildings on this lot. Please note, however, that the setting of the farmstead would be altered.

### 7. Omagh

The village of Omagh is situated at the intersection of Britannia and Fourth Line. This is the largest and most significant of the old historic villages that remain in Milton from the former Township of Trafalgar. It retains many heritage buildings and its traditional character.

This village is a good candidate for designation as a Heritage District under Part V of the Ontario Heritage Act.

Town of Milton 150 Mary Street, Milton, ON L9T 6Z5 Planning 905-878-7252 Phone ● 905-876-5024 Fax Building 905-878-7252 Phone ● 905-878-5639 Fax

### a. Alternative 5A: no change to the road path

This option would pass straight through Omagh and decimate what remains of this historic village. The majority of the heritage buildings within the village would be destroyed.

Planning staff are opposed to Alternative A on the basis of the significant loss of heritage resources.

### b. Alternative 5B: north of Omagh

This would preserve the majority of the heritage resources in Omagh; however most of the barns and farm buildings at 9815 Britannia Road would be destroyed. Some of these barns potentially have heritage significance. While the farmhouse would be retained, the heritage landscape at this site would be destroyed. Milton staff has not had the opportunity to inspect the farm buildings and therefore cannot confirm their significance.

### c. Alternative 5C: south of Omagh

Milton staff prefers this route alignment alternative in terms of heritage preservation.

Alternative 5C, as shown, passes directly through the heritage property at 5752 Fourth Line. However, it is noted that the original house from this lot has already been demolished. This route would not require the demolition of the barn from this lot, though a second outbuilding would be demolished. This latter building is most likely a modern shed or the remnants of an old drive shed, though it has not been confirmed, and is likely of less significance than the barn that would be demolished as a result of Alternative 5B.

In its current alignment, Britannia Road has a detrimental impact on the historic village in that it divides it on an east-west axis. *Milton staff fully supports the Alternative 5C in this regard as it provides the opportunity to protect Omagh as a single more cohesive unit.* Should Alternative 5C ultimately be selected, staff notes that specific policies would be required to be incorporated into the Regional and local Official Plans to allow lot creation, within the defined boundaries of the village, to potentially facilitate the relocation of heritage buildings from more highly urbanized areas of the community to the north.

The proposed cul-de-sacs are appropriately located to support the protection of the character of this historic village.

### 8. 10720 Britannia

This is a heritage property but it will not be materially affected by the proposed widening.

### 9. **Drumquin**

The old village of Drumquin is at the intersection of Britannia and Trafalgar Roads. A few historic reminders of this village do remain including:

a. 6018 Trafalgar Road (heritage house behind the gas station)

It is located on the NW corner of the Britannia/Trafalgar intersection but would not be affected by the proposed road widening.

### b. 6007 Trafalgar Road (heritage house)

This property contains a heritage house that would be destroyed by the proposed road widening of Britannia.

There is very little information available about this property and the information that is available consists of only old photos. The property includes a timber frame house that was likely built in the late 1800's. Staff has not been inside the building and cannot comment on the house's state other than to indicate that the house appears to have been vacant for some time, is in a poor state of repair, and has been greatly altered. Given these observations, it is unlikely to be a good candidate for heritage designation.

It is recommended that staff ask the Region to arrange for access to the property to determine whether we should seek the relocation of the house rather than permit its complete demolition.

### c. 6119 Trafalgar Road

This property will not be affected by the proposed road widening.

In conclusion, with specific regard to heritage conservation, Milton Planning staff has no objection to the proposed road widening. However, staff strongly recommends the following be duly considered on the basis of the above comments:

- That the Region of Halton erect a commemorative structure in the general location of the former garage / workshop building at 6003/9 Regional Road 25 in accordance with the request of Milton Town Council. It should reflect the historical significance of this property within the historic village of Boyne and to act as a landmark at the intersection of Regional Road 25 and Britannia Road. This sign should include some of the concrete blocks from the former garage building in addition to the date stone. Heritage Milton is to be consulted regarding the location, design and content of the commemorative structure, which would act as a gateway feature to the expanded Milton Urban Area.
- That the Region also erect signs to mark the historic villages of Omagh and Drumquin.
- That Milton staff be consulted with regard to the exact road alignment in relation to the barn at 8240 Britannia Road to ensure that there is minimum damage to the ramp of this barn.
- That the large tree in front of 8161 Britannia Road be retained, if possible.
- That the trees in front of 8815 Britannia, the Omagh Presbyterian Church, be retained, if possible.
- That Milton Planning staff objects to Alternative 5A as this alignment would destroy the historic fabric of the village of Omagh, and has substantive land use planning and heritage preservation implications for Omagh.
- That the Milton Planning staff recommends and supports Alternative 5C as the appropriate alignment for by-passing the village of Omagh.
  - In addition, Milton Planning staff recommends that Regional and Local Official Plan area designations for the village of Omagh be reviewed and revised, following the realignment decision, to allow lot creation to potentially facilitate the relocation of heritage buildings from more highly urbanized areas of the community to the north within the defined village boundary.
- That staff ask the Region to obtain authorization to access the house at 6007
   Trafalgar Road in order to assess its heritage significance and thereby.
   determine whether it should be relocated or permitted to be demolished.

Milton staff trust that consideration of these comments will be helpful in completing the Class EA for Britannia Road (Regional Road 6). Should you have any questions or require clarification, please do not hesitate to contact the undersigned at (905) 878-7252 ext. 2567 or by email at <a href="mailto:stephanie.jarvis@milton.ca">stephanie.jarvis@milton.ca</a>.

Thank you,

Stephanie Jarvis, MCIP, RPP, OALA, CSLA, LEED® AP Environmental and Sustainability Planner

Attached: Colour image of Barn mentioned in Comment 3b re: 8240 Britannia Rd.

Copy to:

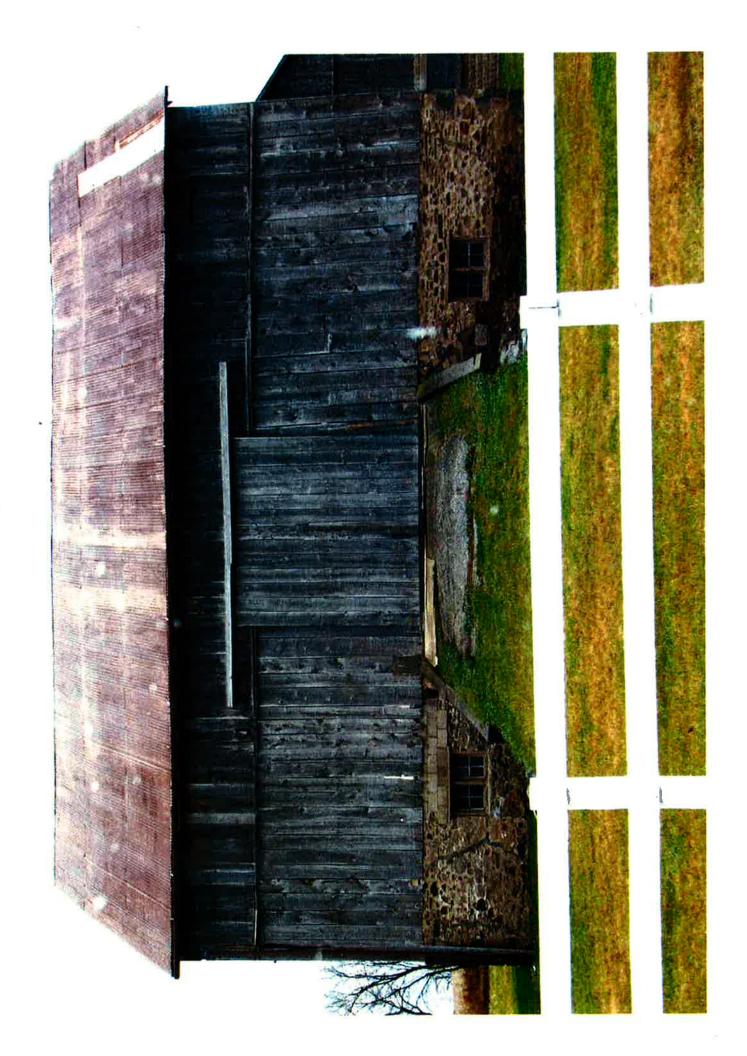
Mr. Manoj Dilwaria, Delcan Corporation

(by email)

Mr. Paul Cripps, Town of Milton Mr. Bill Mann, Town of Milton

Ms. Barbara Koopmans, Town of Milton

Ms. Anne Fisher, Town of Milton







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www.delcan.com

November 19, 2012

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Mrs. Stephanie Jarvis Town of Milton 150 Mary Street Milton, Ontario L9T 6Z5

Re: Class Environmental Assessment Study Britannia Road Corridor Improvements

Mrs. Jarvis:

As you know, Delcan, on behalf of Halton Region has been completing a Class Environmental Assessment (EA) for improvements to the Britannia Road corridor. Since August of 2010, three Public Information Centres (PIC's) have been held to present the study findings and to provide an opportunity for the public to provide their comments and concerns. Subsequently, the comments you provided at the PIC(s) have been considered in the development and evaluation of alternatives and have been incorporated into the study.

The following is a summary of the concerns you raised regarding the heritage areas and heritage properties within the study area, as well as our formal response and consideration of these concerns:

- 1. 6116, 6081 and 5703 Tremaine Road these properties are outside of the Britannia Road Improvements Class EA study area.
- 2. 1510 Bronte Street South and 5761 First Line These properties are not outside the Britannia Road Improvements Class EA study area.

### 3. Boyne

- a) It is our understanding that the former gas station has already been demolished for the road improvements to Regional Road 25. We also note that the remaining house is not worthy of designation.
- b) 8240 Britannia Road The preferred alternative does not impact this building directly. The study has attempted to minimize the amount of property required on the south side of Britannia Road at this location, however, some property is still required. It should be noted that the preferred design alternative is preliminary and may be slightly adjusted during detailed design.
- c) 8161 Britannia Road The preferred alternative design alignment was revisited and it was determined that the alignment cannot be further modified to avoid the removal of the tree identified in your letter.

# Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

- 4. 8321 Britannia Road As you noted, the preferred alternative alignment should have no impact on any cultural heritage resource on this property.
- 5. 8815 Britannia Road (Omagh Presbyterian Church) The preferred alternative alignment does not impact the private property at this location. However the trees located along the frontage of the church property are within the Region's ROW. The boulevard through this area has been eliminated and the sidewalk made curb-face. This will avoid direct impact to the trees, but the sidewalk construction will still be occurring within the tree "driplines" (outer circumference of the tree canopy). It is recommeded that tree protection measures be employed in this area during construction in order to avoid/minize any damage to the trees.
- 6. 1635 Thompson Road As noted, the preferred alternative alignment does not impact the buildings on this property.
- 7. Omagh The preferred alternative alignment identified at PIC #3 includes a south bypass, which you had noted as being preferrable.
- 8. 10720 Britannia Road As you noted, the preferred alternative alignment should have no impact to this heritage property.

### 9. Drumquin

- a) 6018 Trafalgar Road As you noted, the preferred alternative alignment should have no impact to this building.
- b) 6007 Trafalgar Road As you noted, this house is in poor condition. As a part of our study, a Cultural and Built Heritage Study was completed which identified this building as being listed on the Town of Milton Heritage Inventory. The roadway alignment for Britannia Road in the vicinity of this property has been modified such that there will be no property requirement and no impact on the structure. Ultimately, Trafalgar Road will be a six lane facility and is scheduled for widening in 2027 as per the recommendations of the *Halton Region Transportation Master Plan to 2031 The Road to Change.* Therefore, during the detailed design phase of this project, the Region will commit to undertaking a Heritage Impact Assessment of the property to further assess its heritage significance under ultimate conditions.
- c) 6119 Trafalgar Road As you noted, the preferred alternative alignment should have no impact to this building.

Delcan, along with the Region, are currently working on preparing the final documents for the Class EA study. Once these documents are finalized, they will be put on display for public review for a period of 30 days. At this time it is anticipated that this will occur in the Fall of 2012. Further details regarding this will be provided to you as they become available.

Thank you again for providing your comments. We will ensure any concerns or issues you





# Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

have will be considered within the scope of this study as per the Class EA process.

If you have any questions or require additional information, please feel free to contact me directly at (905) 356-7003 Ext 6411.

Yours very truly, DELCAN CORPORATION

Nick Palomba, P. Eng., Vice President Division Manager, Transportation Division

cc: Alicia Jakaitis - Halton Region





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3115 Harvester Road, Suite 102, Burlington, ON L7N 3N8
Tel: 905.631.0500 ● Fax: 905.631.0570

www.delcan.com

January 10, 2013

Delcan Ref. No: TN1390 Region Ref No: PR-2667

Mr. Jeff Fraser Town of Milton 150 Mary Street Milton, Ontario L9T 6Z5

Re: Class Environmental Assessment Study Britannia Road Corridor Improvements - Omagh Baseball Diamond

Mr. Davies:

Delcan, on behalf of Halton Region has been completing a Class Environmental Assessment (EA) for improvements to the Britannia Road corridor.

Please be advised that the Class Environmental Assessment (EA) for Britannia Road is nearing completion and the Project Team is currently documenting the study process and recommendations in an Environmental Study Report (ESR). Refinements to the Technically Preferred are also being made and will be included in the final ESR.

As you are aware, the Technically Preferred Alternative, as presented at the December 2011 PIC, includes a south by-pass around the Omagh Community. The current south realignment of Britannia would impact the Omagh baseball diamond rendering unusable for baseball.

At a meeting with Town staff in October 2012, the project team was advised that this sport facility must be maintained in order to accommodate the current and future recreational demands for the Town of Milton. Town staff requested that alternatives be explored in order to maintain a functioning Omagh baseball diamond. Discussion was held around the following possible alternatives:

- Reorienting the baseball diamond (Town staff provided overall dimensions for sports facility);
- Accommodate active transportation on the existing Britannia Road through by-pass;
- Reducing the Britannia by-pass cross section and right-of-way width;
- Shifting the Britannia by-pass further south.

Delcan has reviewed the roadway design with consideration to the items identified above and has determined the following:

- The reorientation of the baseball diamond with existing and suggested field dimensions was not feasible due to property constraints.
- As part of the Britannia Road widening, 3.0 metre multi-use path and 1.8 metre on road cycling lanes on both sides of the road are being proposed. Consideration was given to shifting the north multi-use path to continue through existing Britannia Road to reduce the cross section width required of the by-pass in an attempt to reduce the impact on the ball diamond. The realignment of the north side multi-use

trail through the existing Britannia Road corridor is not easily implementable and would have notable impacts to property or vegetation. Therefore, shifting the north multi-use pathway to existing Britannia Road is not preferred due to the impacts on existing residential and heritage properties and mature vegetation.

- Criteria considered in the design of the current south alignment of the Britannia Road by-pass were location of the adjacent intersections and concerns over loss of developable land. The design of the by-pass was reviewed and shifting the new corridor further south was possible while respecting this criteria.
- With a priority to accommodate active transportation, the right of way of the by-pass in the vicinity of the ball diamond can be reduced to 42 meters.

Taking into consideration, a realignment of the corridor further south and a reduction in cross section will allow for the north side multi-use trail to remain in the corridor and avoid all impacts to the existing baseball diamond with both the interim 4 lane and ultimate 6 lane cross sections. To achieve this realignment the corridor is shifted to the south (both on the west and east side of Fourth Line) increasing the size of the remnant land parcels between the existing Britannia Road and the bypass section. There are two land owners affected by this shift.

Plans that illustrate the revised Technically Preferred Alternative of the Britannia Road south by-pass are attached for your information.

Thank you again for providing your comments, if you have any questions or require additional information, please feel free to contact me directly at (905) 356-7003 Ext 6411.

Yours very truly,
DELCAN CORPORATION

Nick Palomba, P. Eng., Vice President

Division Manager, Transportation Division

Attch.

cc: Alicia Jakaitis - Halton Region









Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) To Highway 407

**HELD ON:** Tuesday, April 2, 2013 2:00 p.m.

**LOCATION:** Halton Region Offices – Aldershot Room

**PRESENT:** Tim Dennis Halton region

Maureen Vanravens
Melissa Green-Battiston
Alicia Jakaitis
Tony Finelli
James Stiver
Brian Huber
Halton Region
Halton Region
Halton Region
Halton Region
Halton Region

Amy Mayes Conservation Halton
Cory Harris Conservation Halton

Barb Koopmans Town of Milton Martin Bateson Town of Milton Paul Cripps Town of Milton

Ron Schechenberger AMEC

Greg Frew Aquafor Beech

Nick Palomba Delcan Corporation (Minutes)

## **Items Discussed**

**Action** 

### 1. Introductions

Attendees introduced themselves. Nick provided the study background to the attendees.

## 2. Study Overview

Alicia and Nick explained that the purpose of the meeting is to present the Britannia Road EA Stormwater Management (SWM) Strategy and discuss the works being undertaken as part of the Boyne Area by the Town.

They also presented an overview of the Britannia roadway project including the purpose of the study, proposed roadway cross section elements including active transportation and HOV/BRT lanes.

The roadway design plans were presented along with their implementation timelines.

## **Overview of Existing Drainage**

Greg of Aquafer Beech Limited (ABL) presented an overview of the existing area drainage and crossings within the project area.



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

Greg provided a summary of the recommended SWM Strategy for Britannia Road. Greg distributed reference drawings of the culvert locations along with analysis summary sheets which identified the various culvert flows and proposed structure sizing.

Strategy was developed based on criteria requested by Conservation Halton (CH).

- Regulated crossings were to be sized to allow for 2 times bank full width as well as not result in increase in flood levels upstream.
- Unregulated crossings were sized to meet the capacity requirements as well as freeboard and overtopping requirements from the Region.
- For the unregulated crossings adjacent to the Boyne Survey Secondary Plan area, temporary culverts can be avoided by providing roadside ditches to transfer water to permanent culverts at the regulated crossings.
- Within the Omagh area the temporary ditching along the north side would be brought into the Stormsewer as there is insufficient property for ditching in the area of the baseball diamond under the 6 lane configuration.
- Greg noted that the recently installed culvert at RR 25 is undersized according to the new CH's size requirements. He informed the study team that CH's would not be opposed to the EA recommending that a culvert twinning be investigated as detailed design proceeds.
- Ron stated that they expect some of the stream crossing locations to be revised slightly as the landuse planning continues. Town of Milton to send drawings to Alicia when prepared.

 Ron stated that the landowner in the southwest quadrant at Omagh is not a participating landowner, therefore the temporary flows in culvert crossing No. 10 may remain for an extended period. Town



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

- Ron suggested that re-alignment of watercourse #11 around the east side of Omagh might be given consideration.
- Amy stated that if a diversion was indeed to be recommended, the EA document will need to acknowledge this, and that a separate detailed study would be required for the re-aligned channel.
- Greg and Amy noted that the culvert at No. 11, if re-aligned, would still need to span 2 times bankfull width.
- Ron/Paul also suggested that the Region consider building the future culverts with deep footings as they may want to regrade and slightly deepen the channels to allow for easier SWM pond outletting.
- Ron noted that Aquafor has used the most up-to-date information available for Boyne. However, the SWM planning for Boyne is on-going and some SWM pond locations may be revised.
- Ron noted that the landowner group is looking at the option of putting Regional Storm storage within the valleys. One option is to design Britannia Road as a dam/embankment. An alternative is to build separate embankments upstream.
- Tim stated that the Region would prefer to not use Britannia Road as an embankment due to added liability and structural requirements.
- Cory noted that CH's preference is to avoid terrestrial/environmental impacts within the valley, and instead have the storage provided in off-line SWM ponds. The option of spilling out of the SWM ponds into adjacent park lands was also noted for extreme storms.
- Amy also noted that online (valley) storage would require MNR approval under the Lakes & Rivers Improvement Act.



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

Nick spoke to an online pond east of Thompson Road. ABL could not get access from the owner during their site investigation. Therefore they were not able to identify the specifics or purpose of the pond. The roadway plans, as shown, show a significant impact on this pond (a portion of the existing pond is located on the Region's road allowance). It was determined that this would be one of the property owners that the project team would contact for a meeting. CH advised that they do not support this type of pond and ask that it not be reinstated.

Region/Delcan

#### 3. Other Items

Town staff was requested to stay after formal meeting ended to review impacts of the proposed roadway corridor on several Town properties.

#### **Omagh**

Nick Presented the revised alignment plans for the Omagh bypass. The roadway alignment was shifted southerly to avoid taking property from the baseball diamond. The impact of this shift was an increase in the size of the remnant land parcels between existing Britannia Road and the bypass. Discussions with the property owners of the remnant parcels have not occurred yet.

Barb enquired as to whether AT facilities would be provided along existing Britannia Road in the Bypass area. Nick stated that they were not planned due to the property constraints and impacts. The AT facilities have been accommodated along both the north and south side of the bypass.

## **Grade Separation**

Nick presented that the final grade separation plan at the CN track was to be an underpass crossing with retaining walls and a pumping station. The multiuse trail would be elevation through the grade



Britannia Road (Regional Road 6) Transportation Corridor Improvements
Tremaine Road (Regional Road 22) To Highway 407

separate to minimize grade issues. This plan requires less property and was considered to be more compatible with the planned adjacent residential

## **Terra/School Properties**

Nick presented a plan which shows a signalized consolidated driveway at the Terra Greenhouse & Saint Nicholas School property. This configuration highlighted the possibility of a driveway connection to Drumquin Park across the school property. The Town stated that they would be supportive of exploring this further and said they would provide further comments post the meeting to the Region.

Town

## **Boyne Community Centre**

The proposed roadway widening will reduce the amount of parking which currently exists. Town staff was asked to look at this site and provide feedback as to whether this parking should be replaced. Town staff stated that they would take this away and provide feedback post meeting to Alicia.

Town

The meeting was adjourned at 4:30 pm.

cc: All attendees



والربيب والموطاح ليوافك الرامية فلات



Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: (905) 825 8822

September 27, 2013

Paul Cripps
Director, Engineering Services
Town of Milton
150 Mary Street
Milton, Ontario
L9T 6Z5

Dear: Mr. Cripps

RE: Britannia Road (Regional Road 6) Class Environmental Assessment Study Highway 407 to Tremaine Road (Regional Road 22)

The Class Environmental Assessment (EA) Study to address a wide range of options for transportation corridor improvements to satisfy future travel demands on Britannia Road from Highway 407 to Tremaine Road (Regional Road 22), in the Town of Milton is nearing completion. The Project Team has documented the study process and recommendations in the **DRAFT** Environmental Study Report (ESR).

A copy of the <u>DRAFT</u> ESR is enclosed for the Town's review and comments. For ease of distribution within your organization, a CD copy of the <u>DRAFT</u> ESR text has also been included. All comments on the Draft ESR must be provided to the undersigned by no later than <u>Friday Ocotber 25, 2013</u>. The ESR will be finalized in December 2013 and subsequently filed for the 30 day Public Review Record.

If you have any questions or require additional information, please do not hesitate to contact me at (905) 825-6000 extension 7556 or at <u>alicia.jakaitis@halton.ca</u>

Sincerely,

Alicia Jakaitis

.

## **Andrew McGregor**

Subject:

FW: Britannia Road Draft EA Comments

**Attachments:** 

Britannia Comments AMEC.pdf; Britannia Comments Planning.doc; Britannia Commnets

Engineering.xls

From: paul.cripps@milton.ca [mailto:paul.cripps@milton.ca]

Sent: Monday, December 09, 2013 9:23 AM

To: Jakaitis, Alicia Cc: Dennis, Tim

Subject: Britannia Road Draft EA Comments

Alicia,

I have attached our comments for the Draft EA. I apologise for their lack of consistent format, but I think you will find all the information there. If you would like to meet to discuss any of these issues, please let us know.

Thanks Paul

Need to send us LARGE or IMPORTANT files? Need guaranteed delivery? Simply go to <a href="https://fta.milton.ca">https://fta.milton.ca</a>. Contact <a href="https://en.milton.ca">Help.desk@milton.ca</a> for an account.

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File no: TP98053E.A26

#### Memo

To:

Paul Cripps, Town of Milton

From:

Aaron Farrell/Ron Scheckenberger

Date:

December 9, 2013

C.C.:

Bronwyn Parker, Town of Milton

Subject:

Review of Stormwater Management Plan for Britannia Road Class

**Environmental Assessment (Delcan Corporation, October 2013)** 

As requested, we have reviewed the recommended stormwater management plan provided in the above document to confirm that the currently recommended stormwater management plan for the improvement of Britannia Road complies with the criteria and recommendations advanced in the Boyne Survey Secondary Plan Area Functional Stormwater and Environmental Management Strategy (AMEC, March 2013 Draft Final) and the Boyne Survey Secondary Plan Area Conceptual Fisheries Compensation Plan (AMEC, March 2013 Draft Final), as well as the Implementation Principles and accompanying Schedules which have been prepared for the Boyne Survey Secondary Plan Area in consultation with Conservation Halton and the area Landowners. The following have been noted based upon our review.

- 1. Page 101: Section 5.3.2 references the 2011 Draft Functional Stormwater and Environmental Management Strategy (FSEMS); this should be revised to reference the March 2013 Draft Final FSEMS.
- 2. Page 101: The 2011 Draft Conceptual Fisheries Compensation Plan (CFCP) is referenced in Section 5.3.3; this should be revised to reference the March 2013 Draft Final CFCP.
- 3. Page 102: The 2013 CFCP recommends that crossings be designed to provide spans of three times the bankfull width to address fluvial geomorphic constraints and should also be designed to accommodate passage of wildlife. The reference to crossings twice the bankfull width should be revised accordingly.
- 4. Page 102: The 2010 SUS is referenced in Section 5.3.4; this should be revised to reference the March 2013 Draft Final SUS.
- 5. Page 105: Section 5.4.2 indicates that the FSEMS recommends stormwater management facilities be provided north of Britannia Road within the limits of the Boyne Survey Area. It should be noted that the stormwater management facility locations provided within the FSEMS are conceptual and subject to revision as part of the SIS process for the Boyne Survey Area. The currently anticipated stormwater management facility locations are presented within the Implementation Principles provided in Appendix I of the March 2013 FSEMS; the Schedules which accompany the Implementation Principles provide the currently anticipated stormwater management facility locations, based upon conceptual plans developed by the area landowners. Figure 5-7 of the Class EA should be revised to reflect the currently anticipated facility

AMEC Environment & Infrastructure A division of AMEC Americas Limited 3215 North Service Road Burlington, Ontario L7N 3G2 Tel +(905) 335-2353 Fax +(905) 335-1414 www.amec.com

locations, but should also acknowledge that the locations are subject to further change and refinement through the SIS process.

It should also be noted that the watercourse upstream of crossing 9 of the Class EA (ref. Watercourse SE-2-D-1) is proposed to be eliminated and its drainage density and conveyance functions replicated post-development, however the watercourse is not required to be maintained or reconstructed post-development as a regulated feature.

This section notes that the stormwater management ponds are required to provide post-to-pre flood control for the 2 year through 100 year storm events, and potential for the Regional Storm event. This section should also note that the stormwater management facilities are required to provide stormwater quality control and erosion control in accordance with the criteria advanced in the FSEMS.

- 6. Page 106: The flow rates presented in Table 5-6 should be revised to present the values from the March 2013 FSEMS. Please also note that the recommended stormwater management plan requires post-to-pre control at the downstream limit of the Boyne Survey Secondary Plan Area (i.e. at Britannia Road) for all events up to and including the Regional Storm event; hence, the simulated peak flows for future uncontrolled land use conditions should not be included in the table.
- 7. Page 109: Section 5.4.3.2 indicates that the MTO design criteria for hydraulic structures was referenced in completing the hydraulic analyses for the existing hydraulic structures. The specific MTO criteria should be cited for clarity. In particular, clarification is required regarding the MTO criteria which specifies that a 50 year design flow should be applied for a freeboard assessment of rural arterial roadway crossings with spans less than 6 m, as well as the MTO criteria which require that the crossings be sized to convey the Regional Storm event without overtopping the roadway. This latter requirement specific to no overtopping for a Regional Storm cited in the document differ from our understanding of the current MTO and MNR criteria for sizing hydraulic structures. Additional justification should be provided for conducting hydraulic analyses for the existing rural arterial roadway, recognizing that the roadway is proposed to be developed to provide an urban arterial road.

This section notes that the Britannia Road crossing of the tributary west of Regional Road 25 was constructed in 2012, and was sized based upon the existing roadway classification as a rural arterial road, rather than the ultimate classification of Britannia Road as an urban arterial road. The freeboard and capacity of this crossing should be evaluated based upon the ultimate classification of the roadway as an urban arterial, which may require the application of a higher design standard for the freeboard condition.

8. Page 110: The results of the hydraulic analyses as presented in Table 5-7 regarding the freeboard capacity and overtopping event for the existing hydraulic structures differ from those presented in Table 3.3.1 of the March 2013 FSEMS. In particular, the freeboard capacity and overtopping event for crossings 1, 5, 6, 9, and 11 in Table 5-7 are higher than the results presented in Table 3.3.1 of the March 2013 FSEMS for the

- corresponding crossings. Additional discussion is required in the Class EA to rationalize this discrepancy.
- 9. Page 111: A characterization of the watercourses through the Boyne Survey Area, based upon fluvial and aquatic habitat conditions, is presented in the March 2013 SUS. The characterization of the watercourses and the associated constraint rankings presented in the SUS were established in consultation with Conservation Halton and DFO. As such, the information presented in the SUS should be cited and used to characterize the watercourse conditions and associated net constraint rankings, as well as the watercourse management requirements advanced in the March 2013 FSEMS.
- 10. Page 114. It is suggested in the last paragraph on this page that consideration should be given toward maintaining the existing roadside ditches along Britannia Road, at the detailed design stage to ensure positive drainage toward the watercourses adjacent the new road. With respect to the existing roadside ditches adjacent to the Boyne Survey Secondary Plan Area, consideration for maintaining these features under the interim condition (i.e. following the urbanization of Britannia Road but prior to the development of the Boyne Survey Area) is certainly appropriate, however it is anticipated that the roadside ditches will ultimately be eliminated and replaced with an urban drainage system once the Boyne Survey Secondary Plan Area becomes developed. This should be noted within the Class EA.
- 11. Page 117: The results of a channel stability analysis are presented. Additional information is required regarding the methodology applied (i.e. continuous simulation or event methodology, model and meteorological data, etc.). It should be noted that the erosion analyses completed for the FSEMS applied continuous simulation, and assessed the duration of critical flow exceedence for all watercourses with the exception of the Sixteen Mile Creek Main Branch; for the Sixteen Mile Creek, the erosion analyses applied a spreadsheet method which accounted for the duration and magnitude of critical shear stress. It should also be noted in this section that the FSEMS requires that erosion control be provided for all new development within the Boyne Survey Secondary Plan Area in the form of increased extended detention volume within the end-of-pipe facilities; full details regarding the stormwater management requirements are provided in the FSEMS.
- 12. Page 141: Section 6.5.3 presents the recommended stormwater management plan for the future expansion of Britannia Road. The recommended stormwater management plan would utilize the future stormwater management facilities within the Boyne Survey Secondary Plan Area to provide stormwater management for the portion of Britannia Road within the limits of the Boyne Survey Secondary Plan Area, and oil/grit separators for the portions of Britannia Road east of James Snow Parkway and at the south bypass of Omagh. As noted previously, the currently envisioned locations for the stormwater management facilities within the Boyne Survey Secondary Plan Area are presented on the Schedules accompanying the Implementation Principles in Appendix 'I' of the March 2013 FSEMS, and in some instances differ from what is depicted on Figure 5-7 of the Class EA. In particular, the following have been noted based upon a comparison of the two stormwater management facility location plans:

- Pond S2-1 is proposed to be located north of the realigned watercourse in the IP Schedules, and would be separated from Britannia Road by the realigned watercourse; the Class EA should consider the requirements and feasibility of capturing and conveying runoff from Britannia Road to the stormwater management facility for treatment as proposed, and incorporate recommendations accordingly into the final document.
- Ponds S3-1 and S3-3 are currently not proposed within the IP Schedules; the implications of this difference in the stormwater management plan should be reviewed and the stormwater management plan revised as appropriate to address this difference.
- The IP Schedules currently include a stormwater management facility north of Britannia Road and on the east side of the Sixteen Mile Creek Main Branch; this should be reflected in the stormwater management plan for Britannia Road and opportunities to divert runoff from Britannia Road toward this facility should be assessed accordingly.

It should also be recognized that the lands south of Britannia Road fall within the limits of Sustainable Halton, and have been identified for future development. Potential opportunities and benefits to have runoff directed from Britannia Road toward these lands and incorporated into future stormwater management facilities should be considered as well as part of the Class EA.

In addition to the above, we note that hydrologic analyses have not been included within the Class EA to demonstrate the performance of the proposed stormwater management plan with respect to satisfying erosion and quantity control targets within the Sixteen Mile Creek and Indian Creek Watersheds. Moreover, the stormwater management plan does not discuss opportunities to incorporate quantity controls for the Regional Storm event into the design of the roadway; have these opportunities been evaluated and reviewed with interested stakeholders (i.e. Conservation Halton, Halton Region, Town of Milton, Landowners)?

Additionally, the recommended stormwater management plan does not include the provision of LID infiltration BMP's to maintain groundwater recharge, on the basis that infiltration is currently limited due to the underlying soils. This is contrary to the recommended stormwater management plan advanced in the March 2013 FSEMS, which requires that LID infiltration BMP's be implemented for all new development in order to maintain the pre-development groundwater recharge. Additional discussion is required to support the exclusion of this requirement for the expansion of Britannia Road, and to document that this has been supported by Conservation Halton.

Finally, we note that the stormwater management plan presented in the Class EA does not include discussion regarding requirements for interim stormwater management practices which may be required the interim condition (i.e. following the urbanization of Britannia Road but prior to the development of the Boyne Survey Area). The requirements for an interim stormwater management system to provide stormwater quality, quantity, and erosion control should be assessed and an interim stormwater management plan should be developed accordingly and incorporated into the Class EA.

- 13. Page 170: The last paragraph on this page indicates that the proposed crossings have been designed based upon a 50 year freeboard design condition and conveyance of the Regional Storm flow without overtopping; the information presented in Table 8-1 indicates that several crossings have been proposed with spans greater than 6 m. Based upon our understanding of the current freeboard design standards for freeboard design (ref. Highway Drainage Design Standards, MTO, January 2008), the 100 year design standard should be applied for the crossings with total spans exceeding 6 m. The analyses should be revised to correspond to the appropriate design standard, or else supporting rationale is required for the application of a lower design standard. Furthermore, as previously noted, the additional information is required regarding the application of the design criteria for conveying the peak discharge during the Regional Storm event; this should also include discussion regarding the opportunities and constraints associated with incorporating Regional Storm quantity controls into the design of the roadway and the associated hydraulic structures.
- 14. Page 171: Figure 8-6 presents the locations of existing structures to remain, structures to be replaced, optional hydraulic structures, and temporary structures. This information has been compared with the watercourse alignments presented in the IP Schedules in the FSEMS in order to verify that the recommended crossings in the Class EA correspond to the requirements advanced in the current IP Schedules. The following have been noted based upon our review and comparison:
  - No stormwater management facility is currently proposed upstream of Crossing 4 as part of the IP's; as such, this crossing should be designated as a temporary structure.
  - Additional information is required within the Class EA to document the criteria and additional analysis/information required to determine whether the optional hydraulic structure west of Regional Road 25 (ref. Structure 6) should be implemented or not. It should be noted within the Class EA that if this structure is not implemented in the location shown, a temporary conveyance structure will nevertheless be required, and an ultimate crossing will be required somewhere in the vicinity of this crossing and Structure 5 to accommodate the ultimate realigned watercourse within the Boyne Survey Secondary Plan Area.
  - Crossings 8 and 9 coincide with the proposed stormwater management facility outfalls and a low-constraint watercourse; Table 8-1 should be amended as required to note the requirements of these structures, and the crossings should be sized according to these criteria.
  - Crossing 11 is located along the realigned Britannia Road, which is further south
    of the current roadway alignment near the Omagh Tributary; additional
    information is required regarding interim and ultimate requirements for
    conveyance between the current roadway and crossing and the currently
    proposed ultimate crossing and roadway, and recommendations advanced
    accordingly.
- 15. Page 172: The information in Table 8-1 indicates that the proposed grade of Britannia Road would be up to 1.5 m higher than the existing grade of the roadway in certain locations. What are the implications of this higher profile with respect to the grading and fill requirements within the Boyne Survey Secondary Plan Area? The information in this

table also notes that Crossing 9 is proposed to be a twin structure; additional information is required as to why a twin structure is proposed rather than a single span opening. As noted previously, this table should be revised to note that Crossings 8 and 9 correspond to the locations of stormwater management facility outlets and a low-constraint watercourse crossing, and the hydraulic structures sized according to that criteria.

- 16. Page 173: Additional information is required regarding the methodology which has been applied for the hydraulic analysis of the replacement structures along Britannia Road; were these completed using HEC-RAS or some other methodology? If the former, were the HEC-RAS models developed as part of the FSEMS used for the assessment? As previously noted, the reported conveyance and freeboard capacity of the existing culverts, as provided in the Class EA, suggest a higher capacity for the existing structures compared to what has been determined and documented in the March 2013 FSEMS. Depending upon the rationale for the discrepancy, the conclusion that the proposed replacement structures would decrease upstream flood levels may be inaccurate; notwithstanding, the upstream watercourses within the Boyne Survey Secondary Plan Area are recommended for realignment as part of the future development within the Secondary Plan Area, hence any increased water surface elevation would represent an interim increase to flood potential and may thus be acceptable subject to agreement from the upstream landowner.
- 17. Page 175: The recommended stormwater management plan is summarized in Section 8.6.2. This section should be revised as required to reflect the comments provided above for Comment 12. In addition, this section should recognize the requirement to provide erosion control for all new development within the Boyne Survey Secondary Plan Area within the end-of-pipe facilities, as well as the requirement to provide post-to-pre control for events up to and including the Regional Storm event and LID infiltration BMP's to maintain groundwater recharge.

The recommended stormwater management plan for the Boyne Survey Class EA includes a requirement to mitigate thermal impacts. This is noted to be consistent with the recommendations advanced in the March 2013 FSEMS.

- 18. Page 176: The stormwater management plan presented in Figure 8-7 should be revised as required to reflect the currently proposed locations of the stormwater management facilities within the Boyne Survey Secondary Plan Area as previous discussed.
- 19. Page 177: Section 8.6.3 notes that the culvert alignments have been established based upon Conservation Halton's preference for hydraulic structures perpendicular to the roadway. The ultimate watercourse alignments within the Boyne Survey Secondary Plan Area should be accounted for in establishing the alignments of the crossings at Britannia Road. The currently anticipated watercourse alignments are presented in the Implementation Principles and the accompanying schedules, which are included in Appendix 'I' of the FSEMS.
- 20. Page 184: Section 8.6.4 recommends that a grade separation be implemented at the CN rail crossing, and that a pumping station be constructed in order to drain runoff from the grade separation. The capacity for the pumping station should be provided within

the Class EA, based upon the pumping rate and the corresponding design storm frequency/return period. Additional information should also be provided regarding other drainage alternatives at the grade separation which have been considered and the basis for discounting them (i.e. gravity drains). Finally, the pumping station for the grade separation is proposed to be located on the south side of Britannia Road within the Sustainable Halton lands. Additional information is required to support siting the pumping station within these lands; are there any environmental constraints (i.e. watercourses, terrestrial features, etc.) which have been or should be considered in the ultimate siting of the pumping station? This should account for requirements to provide setbacks and/or buffers, in accordance with Conservation Halton Policy.

21. Page 187: The reference to the *hydrological* investigations in Section 8.6.5 include discussion regarding freeboard and capacity; should these references be revised to *hydraulic* investigations, recognizing the discussions which follow?

The same section indicates that a 54 m long bridge is recommended for the Britannia Road crossing of the Sixteen Mile Creek Main Branch, and cites a meander belt width of 30 m for the Sixteen Mile Creek Main Branch. The fluvial geomorphologic investigations completed for the March 2013 SUS and the March 2013 FSEMS indicate that the beltwidth of the Sixteen Mile Creek Main Branch is 120 m, including 10 % safety factor on each side. Additional information is required to support the substantially reduced beltwidth which has been applied for the sizing of the hydraulic structure.

Similarly, a 40 m long bridge is recommended for the Britannia Road crossing of the Sixteen Mile Creek East Branch, and cites a meander belt width of 30 m for the Sixteen Mile Creek East Branch. The fluvial geomorphologic investigations completed for the March 2013 SUS indicate that the beltwidth of the Sixteen Mile Creek East Branch ranges from 144 m to 180 m (depending upon location), including 10 % safety factor on each side. Additional information is likewise required to support the substantially reduced beltwidth which has been applied for the sizing of the hydraulic structure.

We trust that the foregoing satisfies your current requirements. Feel free to contact our office should you have any questions or require anything further.

AF/RBS/af

## Milton Planning Staff Comments on Draft Britannia Rd ESR

- Pg. 10 reference to Boyne 'Subdivision'. Incorrect, it is a Secondary Plan Area.
- Pg. 28 reference to Boyne population of 55,000. Boyne is being planned to accommodate 50,000 based on Secondary Plan forecasts
- Pg. 61 discusses villages of Boyne, Omagh and Drumquin. It should be noted that through the Boyne Survey Secondary Plan, the village of Omagh was identified as a Special Study Area, based on its historical significance to the Town of Milton. The Special Study is currently underway. The purpose of the Study is to identify and conserve the cultural heritage and character of the Omagh village area.
- Figure 5-3 depicts the Local Council approved June 2010 Land Use Plan for the Boyne Survey Secondary Plan. The Secondary Plan was approved by Halton Region in September 2013. Figure 5-3 should be updated to reflect the Regionally approved Land Use Plan.
- Pg. 64 discussion re: Boyne. This paragraph should be updated to reflect the Regional Approval and subsequent OMB appeal status of the Secondary Plan. In addition, this section references the ultimate population of 50,000 in Boyne, which is conflicting with the reference (noted earlier) - p. 28
- Beginning with section 5.3.2, numerous references are made to the 2011 Boyne Draft FSEMS and CFCP documents as prepared by Amec. The 'Draft Final' versions of these reports from March 2013 should be referenced instead. Regional Transportation staff was provided a DVD copy of the updated documents on April 9, 2013, and Regional Planning staff was provided with both paper and DVD copies on the same date. The updated information should be referenced and used as background information in this ESR.
- Pg. 145 typo re: Sernas Transtech attendance at PIC on behalf of 'Boyne Survey Landowners Group'
- General comment numerous references to 'Bronte Road'. Bronte Road does not exist in Milton. If the authors are referring to Bronte Street, correction needs to be made throughout the document from Road to Street. However, if they are referring to Regional Road 25, then Bronte Road needs to be corrected to Regional Road 25.
- Pg. 621 sentence 'It is understood that the Britannia Road widening will take place prior to the
  development of the Boyne area'. While staff understands that originally the reconstruction of
  Britannia Road was to be accelerated, this is no longer the case. Subdivision development
  within Boyne will commence in advance of this project.
- Pg. 659 sentence similar to above, which reads, 'Through discussions with Halton Region and Conservation Halton staff, it is recognized that the Britannia Road improvements will likely be constructed in advance of the planned future urban development...'. Please clarify whether the Town of Milton was consulted as it relates to the timing of the Britannia Road improvements relative to the timing of development of the Boyne Survey Area?

Page or Section	Comment
15	Traffic volumes for the AM peak (east of Eighth Line look low and should be confirmed
19	HRPS should be advised, if they have not already been so, about the speeding issue on Britannia between Sixth and Trafalgar
48	Justification for the phasing of the project needs to be added. There is no explanation why the section from Tremaine to RR25 is going to it's ultimate configuration during the first phase of construction, while the traffic volume figures are lower in this section.
Section 6.0	X-Sections for rural portion and interim conditions should be included
General	When alternatives are evaluated (i.e. Table 6-2) there needs to be justification for the recommended alternative
169	The recommendations related to right turn lanes should be review especially for RR25, JSP and Trafalgar Road.
Appendix J	All maps need a Legend
Interim Design Sheet 4 of 8	Active transportation links need to be identified between the two cul de sacs and the bypass. Prior to the transfer of the existing Britannia Road through the Omagh community, to the Town a structure review of the existing conditions (roadway and culvert) will be
	required. The location of the bypass would appear to be very close to existing agricultural buildings  The servicing corridor to the future pumping station on
Interim Design Sheet 5 of 8	Britannia should be considered.  Property ownership information should be removed
All maps	form the drawings, privacy issue.  In the profile portion of the drawing, it would appear
Interim Design Sheet 7 of 8	that the creek crossing is out of scale and in the wrong location.
Appendix K	The interim design is identified to have a 5 meter raised median, why the text in the report indicates a 12 meter median.

## **Andrew McGregor**

Subject:

FW: Britannia Road EA - milton comment/response table

**Attachments:** 

Delcan response REMilton comments Dec 2013.pdf; CH Comments\_Britannia Road\_Jan

8\_2014.pdf

Importance:

High

From: Dennis, Tim

Sent: Monday, February 03, 2014 2:07 PM

To: 'paul.cripps@milton.ca'

**Cc:** Jakaitis, Alicia; Green-Battiston, Melissa; Van Ravens, Maureen **Subject:** FW: Britannia Road EA - milton comment/response table

Importance: High

Paul,

The attached is in response to your December 9, 2013 e-mail forwarding the Town's comments regarding the Region's draft Britannia Road EA.

The response has been drafted by our project consultants and addresses each of your comments.

We would note that as the project proceeds to detailed design there will be a need for on-going consultation with CH, the Town, and landowners to finalize stormwater management plans.

#### Regards

Tim

Tim Dennis P.Eng.
Director Transportation Services
Public Works Department
Regional Municipality of Halton
Tel: 905-825-6000 ext. 7775

Fax: 905-847-2192

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Alicia Jakaltls

Copy: File

From: Nick Palomba

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Study Report

Memorandum

Date: January 31, 2014

# Response To Town Comments On The Draft Environmental Project: BRITANNIA RD EA

Draft Environmental Study Report, as submitted to the Region by email on December 9, 2013. The Delcan project team has reviewed the comments and our responses are summarized in **Table 1** attached. This memo Is in response to the Town's comments on the Britannia Road (Regional Road 6)

It is noted that many of the comments refer to the March 2013 Draft Boyne Survey Secondary Plan Area Functional Stormwater and Environmental Management Strategy, Draft Boyne Survey Secondary Plan Area Conceptual Fisheries Compensation Plan, and Draft fully aware of the updated reports, however, the assumed drainage patterns and hydrologic/hydraulic analyses in the Britannia Road EnvIronmental Assessment Study were developed based on information from the previous Draft 2011 Boyne Survey Secondary Plan Area Functional Stormwater and Environmental Management Strategy (FSEMS), and the March 2013 draft reports and utilized the best information available at the time while recognizing that further updates to the hydraulic, fluvial and SWM analysis may be required at detail design to address any further updates in the above noted reports. Sixteen Mile Creek Areas 2 and 7 Subwatershed Update Study (SUS). The Study Team is Draft 2011 Boyne Survey Secondary Plan Area Conceptual Fisheries Compensation Plan The analysis conducted as part of the EA process were completed prior to the (C)

presented an overview of the project along with the recommended stormwater management strategy for Britannia Road, which was prepared in response to Conservation Halton's requirements. In addition, it was discussed that this strategy would have to be modified at detail design, prior to implementation, as the SWM planning for Boyne was still on-going. It was further noted at this meeting that the assumptions made in the modeling would be documented in the ESR to be circulated to agencies in September 2013. At the April 2nd, 2013 meeting with the Town and AMEC, the Britannia Road EA Study Team

Subsequent to this meeting, Conservation Halton has reviewed the draft ESR and provided comments, all of which have been addressed to their satisfaction. Within these comments was a series of commitments by the Region to revisit and update Information during detailed design. The Delcan study team has reviewed and acknowledges there are differences that may affect the ultimate sizing of the Britannia Road bridge/culvert crossings and storm sewer outlet locations, however, these are not expected to change the overall nature of the improvements include bridge/culvert sizing requirements, future SWM pond / outlet locations and watercourse alignments/requirements upstream of Britannia Road. In essence, the detailed design stage for the Britannia Road improvements represents the stormwater recommendations in the ESR. The key differences between the 2011 and 2013 FSEMS reports which may impact the storm drainage design for the Britannia Road

most appropriate timeframe to update and finalize the crossing structure sizes, once impacts are better defined and/or finalized. Ultimately, final sizing will need to account for increased environmental criteria such as revised flows based on the final drainage configuration within the Boyne Secondary Plan area and possible changes to the "dassification" of the crossing locations. Also, given that stormwater management planning for the surrounding lands is still on-going and not finalized, the design of the Britannia Road storm sewer system, including future SVM pond of outlet locations and ultimate watercourse alignments/requirements is most appropriate at the detailed design stage, when the outlet locations to the future SVM pond is are better defined.

The Delcan project team therefore advises the Region that no additional updates are required to finalize the ESR as it has been determined that updates in the 2013 reports can be accommodated during the detail design phase of the project. It is recognized however, that once the 2013 reports are finalized and approved by CH, the information from these that reports will need to be incorporated into the detailed design of the roadway corridor where appropriate. As you are aware, CH has provided their sign off on the Britannia draft ESR on January 8, 2013 (Attachment A).

Please let me know if you require anything further.

Table 1: Response to the Town of Milton's Comments on the Draft Britannia Road Environmental Study Report

1	Low need Millery Commission	Region Response
AM	AMEC Conversits	
ri .	Page 101: Section 5.3.2 references the 2011 Draft Functional Stormwater and Environmental Management Strategy (FSEMS); this should be revised to reference the March 2013 Draft Final FSEMS.	Drainage patterns and hydrologic/hydraulic analyses for the Britannia Road Environmental Assessment Shudy were developed based on information from the Draft 2011 Boyne Survey Secondary Plan Area Functional Stocmwater and Environmental Management Strategy (FSEMS), the Draft 2011 Boyne Survey Secondary Plan Area Conceptual Fisheries Compensation Plan (CFCP) and Draft 2010 Sixteen Mile Creek Areas 2 and 7 Subwatershed Update Study (SUS) as discussed at our meeting on April 2, 2013. The use of these reports for the purpose of the analyses in the Shocess and in consultation with CH was prior to the subsequent draft report updates. The Delean study team has reviewed and acknowledges there are differences that may affect the ultimate sizing of the Britannia Road bridge/culvert crossings and storm sewer outlet locations, however these are not expected to change the overall nature of the stormwater recommendations in the ESR. It is acknowledged that information from the March 2013 draft reports, once finalized, will need to be accounted for. Therefore, updated information contained in the Final reports that is pertinent to the Britannia Road Class EA will be addressed during the subsequent detailed design phase of the study. The final ESR will be updated to include a new section outlining the changes in the 2013 reports and commitment to address the final ESEMS and CFCP as part of detail design.
5.	Page 101: The 2011 Draft Conceptual Fisheries Compensation Plan (CFCP) is referenced in Section 5.3.3; this should be revised to reference the March 2013 Draft Final CFCP.	Refer to response to comment No. 1.
ะเ	Page 102: The 2013 CFCP recommends that crossings be designed to provide spans of three times the bankfull width to address fluvial geomorphic constraints and should also be designed to accommodate passage of wildlife. The reference to crossings twice the bankfull width should be revised accordingly.	The use of two times bankfull width for the Britannia Road crossings was agreed to through discussions with Conservation Halton, and was applied except in cases where hydraulic criteria required a wider span. A supplementary note regarding the updated 2013 CFCP recommendations has been added to the EA Report for accuracy regarding the Boyne Secondary Plan lands.
4	Page 102: The 2010 SUS is referenced in Section 5.3.4; this should be revised to reference the March 2013 Draft Final SUS.	Refer to response to comment No. 1,
้ง	Page 105: Section 5.4.2 indicates that the FSEMS recommends stormwater management facilities be provided north of Britannia Road within the limits of the Boyne Survey Area. It should be noted that the stormwater management facility locations provided within the FSEMS are conceptual and subject to revision as part of the SIS process for the Boyne Survey Area. The currently anticipated stormwater management facility locations are presented within the Implementation. Principles provided in Appendix I of the March 2013 FSEMS, the Schedules which accompany the Implementation Principles provide the currently anticipated stormwater management facility locations, based upon conceptual plans developed by the area landowners. Figure 5-7 of the Class EA should be revised to reflect the currently anticipated facility locations, but should also acknowledge that the locations are subject to further change and refinement through the SIS process.	The ESR will be updated to note that the Boyne SWM facility locations are conceptual and subject to further change and refinement. The report will also be updated to note that the same water quality, erosion, and quantity control targets identified for lands in the Boyne Secondary Plan area would also be applied to any contributing lands from the Britannia Roud right-of-way.

Ž	Ap. Towned Willer Comment	Reginn Response
	It should also be noted that the watercourse upstream of crossing 9 of the Class EA (ref. Watercourse SE-2-D-1) is proposed to be eliminated and its dnainage density and conveyance functions replicated post-development, however the watercourse is not required to be maintained or reconstructed post-development as a regulated feature. This section notes that the stormwater management ponds are required to provide posttoper flood control for the 2 year through 100 year storm events, and potential for the Regional Storm event. This section should also note that the stormwater management facilities are required to provide stormwater quality control and erosion control in accordance with the criteria advanced in the FSEMS.	
٠	Page 106: The flow rates presented in Table 5-6 should be revised to present the values from the March 2013 FSEMS. Please also note that the recommended stormwater management plan requires post-to-pre control at the downstream limit of the Boyne Survey Secondary Plan Area (i.e. at Britannia Road) for all events up to and including the Regional Storm event; hence, the simulated peak flows for future uncontrolled land use conditions should not be included in the table.	Refer to response to comment No. I.  Please note that simulated peak flows for future uncontrolled land use conditions is included for reference purposes only.
7,	Page 109: Section 5.4.3.2 indicates that the MTO design criteria for hydraulic structures was referenced in completing the hydraulic analyses for the existing hydraulic structures. The specific MTO criteria should be cited for clarity. In particular, clarification is required regarding the MTO criteria which specifies that a 50 year design flow should be applied for a freeboard assessment of rural arterial roadway crossings with spans less than 6 m, as well as the MTO criteria which require that the crossings with spans less than 6 m, as well as the MTO criteria which require that the crossings be sized to convey the Regional Storm event without overtopping the roadway. This latter requirement specific to no overtopping for a Regional Storm cited in the document differ from our understanding of the current MTO and MNR criteria for sizing hydraulic structures. Additional justification should be provided for conducting hydraulic analyses for the existing rural arterial road.  This section notes that the Britannia Road crossing of the tributary west of Regional Road 25 was constructed in 2012, and was sized based upon the existing roadway classification of an urban arterial road, rather than the ultimate classification of Britamuia Road as an urban arterial road. The freeboard and capacity of this crossing should be evaluated based upon the ultimate classification of the roadway as an urban arterial, which may require the application of a higher design standard for the freeboard condition.	The ESR will be updated to clarify that MTO Directive B-100 was the basis for the hydraulic design criteria. The criteria for no overtopping during the Regional Storm is a requirement of the Region and a preference for Conservation Halton and will be more clearly noted in the final ESR.  Recommendations for the recently constructed crossing west of Regional Road 25 have been discussed with the Region and Conservation Authority. A culvert replacement with an opening which meets the higher design standards is recommended, however, it is understood that other options may be considered, including a culvert extension and/or addition of a second barrel. As noted in the ESR, the culvert requirements at Crossing 6 will be confirmed in consultation with Conservation Halton at detail design.

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1	a. Tawir of Milbie Connincer	Region Response
×.	Page 110: The results of the hydraulic analyses as presented in Table 5-7 regarding the freeboard capecity and overtopping event for the existing hydraulic structures differ from those presented in Table 3.3.1 of the March 2013 FSEMS. In particular, the freeboard capacity and overtopping event for crossings 1, 5, 6, 9, and 11 in Table 5-7 are higher than the results presented in Table 3.3.1 of the March 2013 FSEMS for the corresponding crossings. Additional discussion is required in the Class EA to rationalize this discrepancy.	Refer to response to comment No. 1.
6	Page 111: A characterization of the watercourses through the Boyne Survey Area, based upon fluvial and aquatic habitat conditions, is presented in the March 2013 SUS. The characterization of the watercourses and the associated constraint rankings presented in the SUS were established in consultation with Conservation Halton and DFO. As such, the information presented in the SUS should be cited and used to characterize the watercourse conditions and associated net constraint rankings, as well as the watercourse management requirements advanced in the March 2013 FSEMS.	Refer to response to comment No. 1.
10.	Page 114. It is suggested in the last paragraph on this page that consideration should be given toward maintaining the existing roadside ditches along Britannia Road, at the detailed design stage to ensure positive drainage toward the watercourses adjacent the new road. With respect to the existing roadside ditches adjacent to the Boyne Survey Secondary Plan Area, consideration for maintaining these features under the interin condition (i.e. following the urbanization of Britannia Road but prior to the development of the Boyne Survey Area) is certainly appropriate, however it is anticipated that the roadside ditches will ultimately be eliminated and replaced with an urban drainage system once the Boyne Survey Secondary Plan Area becomes developed. This should be noted within the Class EA.	ESR will be revised to include the noted comment for clarity.
11,	Page 117: The results of a charmel stability analysis are presented. Additional information is required regarding the methodology applied (i.e. continuous simulation or event methodology, model and meteorological date, etc.). It should be noted that the erosion analyses completed for the FSEMS applied continuous simulation, and assessed the duration of critical flow exceedence for all watercourses with the exception of the Sixteen Mile Creek, the erosion analyses applied a spreadsheet method which accounted for the duration and magnitude of critical shear stress. It should also be noted in this section that the FSEMS requires that crosion control be provided for all new development within the Boyne Survey Secondary Plan Area in the form of increased extended detention volume within the end-of-pipe facilities; full details regarding the stormwater management requirements are provided in	Supporting information for the stability analysis is documented within the Fluvial Geomorphology study (Appendix D) and the Hydraulic Analysis Assessment (Appendix C) of the draft ESR that was circulated to the Town and CH in September 2013. The applied methodology is event based using available HEC-RAS models for the major watercourse crossings and HY-8 models developed for the remaining culverts. While we appreciate the sophistication implied by the FSEMS approach described, we would caution that all erosion assessments can be equally limited by the over-simplification of critical erosion thresholds (no matter how rigorous the hydraulic shear stress simulations are), and this over-simplification is particularly true of vegetation-dominated fluvial systems within the Class EA study area. We would also note that in addition to the SWM erosion controls mentioned for the Boyne Survey Secondary Plan Area, recommendations for local erosion protection measures at open-bottom culverts are also provided in the Britannia EA Report.

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_	đ.	the FSEMS.	
1-	2. Page	12. Page 141: Section 6.5.3 presents the recommended stormwater management plan for	Refer to response to
_	the	the future expansion of Britannia Road. The recommended stormwater management	
_	plan	plan would utilize the future stormwater management facilities within the Boyne Survey	The ESR will be up
_	Sec	Secondary Plan Area to provide stormwater management for the portion of Britannia	identified for lands of
_	Ros	Road within the limits of the Boyne Survey Secondary Plan Area, and oil/grit separators	any contrataung tang
-	for	for the portions of Britannia Road east of James Snow Parkway and at the south bypass	
_	ofC	of Omagh. As noted previously, the currently envisioned locations for the stormwater	Ine issue of Region
_	mar	management facilities within the Boyne Survey Secondary Plan Area are presented on	duo consei vacioni i is
_	華	the Schedules accompanying the Implementation Principles in Appendix 'I' of the March	The ECD will be un
_	201	2013 FSEMS, and in some instances differ from what is depicted on Figure 5-7 of the	stormwater controls
_	Cla	Class EA. In particular, the following have been noted based upon a comparison of the	possible, for thermal
	two	two stormwater management facility location plans:	sensitive fisheries su

- · Pond S2-1 is proposed to be located north of the realigned watercourse in the IP watercourse; the Class EA should consider the requirements and feasibility of Schedules, and would be separated from Britannia Road by the realigned capturing and conveying runoff from Britannia Road to the stormwater management facility for treatment as proposed, and incorporate recommendations accordingly into the final document.
- Ponds S3-1 and S3-3 are currently not proposed within the IP Schedules; the implications of this difference in the stormwater management plan should be reviewed and the stormwater management plan revised as appropriate to address this difference.
- Britannia Road and on the east side of the Sixteen Mile Creek Main Branch; this The IP Schedules currently include a stormwater management facility north of opportunities to divert runoff from Britannia Road toward this facility should be should be reflected in the stormwater management plan for Britannia Road and assessed accordingly.

It should also be recognized that the lands south of Britannia Road fall within the limits of opportunities and benefits to have runoff directed from Britannia Road toward these Sustainable Halton, and have been identified for future development. Potential lands and incorporated into future stormwater management facilities should be considered as well as part of the Class EA.

comment No. 1.

draining to SWM Ponds in the Boyne Secondary Plan area would also be applied to pdated to note that that the same water quality, erosion, and quantity control targets ds from the Britannia Road right-of-way. nal Storm control was discussed at the meeting on April 2,2013 with Region, Town alton staff. updated to recommend that opportunities to apply LIDs in conjunction with other s be explored as detailed design proceeds, and that these measures be used, where al benefits. Priority would be given to those areas discharging to streams with more uch as Silver Shiner.

moves into detail design and a better understanding of the timing of the development of the Boyne Secondary Plan area is known, the interim vs. ultimate SWM strategy will be refined. The ESR will be The possible requirement for interim SWM controls adjacent to the Boyne Survey Area was discussed with Region and Conservation Halton Staff. Additional text will be added for clarity. As the project updated to note that the Boyne SWIM facility locations are conceptual and subject to further change and refinement. The report will also be updated to note that the same water quality, erosion, and quantity control targets identified for lands in the Boyne Secondary Plan area would also be applied to any contributing lands from the Britannia Road right-of-way.

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		In addition to the above, we note that hydrologic analyses have not been included within the Class EA to demonstrate the performance of the proposed stormwater management plan with respect to satisfying erosion and quantity control targets within the Sixteen Mile Creek and Indian Creek Watersheds. Moreover, the stormwater management plan does not discuss opportunities to incorporate quantity controls for the Regional Storm event into the design of the roadway; have these opportunities been evaluated and reviewed with interested stakeholders (i.e. Conservation Halton, Halton Region, Town of Milton, Landowners)?	
		Additionally, the recommended stormwater management plan does not include the provision of LID infiltration BMP's to maintain groundwater recharge, on the basis that infiltration is currently limited due to the underlying soils. This is contrary to the recommended stormwater management plan advanced in the March 2013 FSEMS, which requires that LID infiltration BMP's be implemented for all new development in order to maintain the pre-development groundwater recharge. Additional discussion is required to support the exclusion of this requirement for the expansion of Britamia Road, and to document that this has been supported by Conservation Halton. Finally, we note that the stormwater management plan presented in the Class EA does not include discussion regarding requirements for interim stormwater management practices which may be required the interim condition (i.e. following the urbanization of Britamia Road but prior to the development of the Boyne Survey Area). The requirements for an interim stormwater management system to provide stormwater management plan should be developed accordingly and incorporated into the Class EA.	
AP	13.	Page 170: The last paragraph on this page indicates that the proposed crossings have been designed based upon a 50 year freeboard design condition and conveyance of the Regional Storm flow without overtopping; the information presented in Table 8-1 indicates that several crossings have been proposed with spans greater than 6 m. Based upon our understanding of the current freeboard design standards for freeboard design (ref. Highway Drainage Design Standards, MTO, January 2008), the 100 year design standard should be applied for the crossings with total spans exceeding 6 m. The analyses should be revised to correspond to the appropriate design standard, or else supporting rationale is required for the application of a lower design standard. Furthermore, as previously noted, the additional information is required regarding the application of the design criteria for conveying the page discharge during the Regional Storm event; this should also include discussion regarding the opportunities and	Table 7-2 of the ESR demonstrates that crossings with spans greater than 6m have greater than 1m freeboard for the 100-year event.

		Region Respinse
	design of the roadway and the associated hydraulic structures.	
4.	Page 171: Figure 8-6 presents the locations of existing structures to remain, structures to be replaced, optional hydraulic structures, and temporary structures. This information has been compared with the watercourse alignments presented in the IP Schedules in the FSEMS in order to verify that the recommended crossings in the Class EA correspond to the requirements advanced in the current IP Schedules. The following have been noted based upon our review and comparison:  No stormwater management facility is currently proposed upstream of Crossing 4 as part of the IP's; as such, this crossing should be designated as a temporary structure.  *Additional information is required within the Class EA to document the criteria and additional analysis/information required to determine whether the optional hydraulic structure west of Regional Road 25 (ref. Structure 6) should be implemented or not. It should be noted within the Class EA that if this structure is not implemented or not. It should be noted within the Class EA that if this structure is not implemented in the location shown, a temporary conveyance structure will nevertheless be required, and an ultimate crossing will be required somewhere in the vicinity of this crossing and Structure 5 to accommodate the ultimate required to these within the Boyne Survey Secondary Plan Area.  *Crossings 8 and 9 onicide with the proposed stormwater management facility outfalls and a low-constraint waterourse; Table 8-1 should be amended as required note the requirements of these structures, and the crossings should be sized according to these criteria.  *Crossing 11 is located along the realigned Britannia Road, which is further south of the current roadway alignment near the Omagh Tributary; additional information is required regarding interim and ultimate requirements for conveyance between the current roadway and crossing and roadway, and recommendations advanced accordingly.	Refer to response to comment No. 1. The Delcan study team has reviewed the comments and acknowledges there are differences between the 2011 draft FSEMS report. It is acknowledged that recommendations in the ESR and the updated 2013 draft FSEMS report. It is acknowledged that information from the March 2013 reports, once finalized, may affect the ultimate sizing of the Britamia information from the Britamia Road Class EA will be addressed during the subsequent detailed design phase of the study.  The Region has received confirmation from CH on January 8, 2013 that no additional information is required for the EA Stage of the project.
15.	Page 172: The information in Table 8-1 indicates that the proposed grade of Britannia Road would be up to 1.5 m higher than the existing grade of the roadway in certain locations. What are the implications of this higher profile with respect to the grading and fill requirements within the Boyne Survey Secondary Plan Area? The information in this table also notes that Crossing 9 is proposed to be a twin structure; additional information is required as to why a twin structure is proposed rather than a single span opening. As noted previously, this table should be revised to note that Crossings 8 and 9 correspond to the locations of stormwater management facility outlets and a low-constraint waternourse crossing, and the hydraulic structures sized according to that criteria.	The increased elevation of the proposed road profiles noted in Table 8-1 is required to meet the minimum clearances for overtopping/freeboard. Generally, the increased elevation results in increased grading on either side of the cross section, however, for most watercourse crossings, grading impacts remain within the proposed 4/m ROW. Where the raise in elevation may result in impacts outside of the ROW, gabion boxes could easily be used. For example grading limits/casements will be confirmed as part of detail design.

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	No. Town of Millou Companie	Region Response
		Regarding the culvert sizing at crossing No. 9, the bankfull width at this location is 2.1m. Therefore, a barrel size of 4.8m was selected to ensure that the environmental requirement of two times the bankfull width is provided. A second barrel was necessary to meet the hydraulic conveyance criteria. Regarding the information for crossings No. 8 and 9, it is recognized that the updated information in the 2013 report, such as revised drainage patterns and stormwater pond locations, will be utilized in the subsequent detail design analysis for Britannia Road
	applied for the hydraulic analysis of the replacement structures along Britannia Road; were these completed using HEC-RAS or some other methodology? If the former, were these completed using HEC-RAS or some other methodology? If the former, were the HEC-RAS models developed as part of the FSEMS used for the assessment? As previously noted, the reported conveyance and freeboard capacity of the existing culverts, as provided in the Class EA, suggest a higher capacity for the existing structures compared to what has been determined and documented in the March 2013 FSEMS. Depending upon the rationale for the discrepancy, the conclusion that the proposed replacement structures would decrease upstream flood levels may be inaccurate; notwithstanding, the upstream watercourses within the Boyne Survey Secondary Plan Area are recommended for realignment as part of the future development within the Secondary Plan Area, hence any increased water surface elevation would represent an interim increase to flood potential and may thus be acceptable subject to agreement from the upstream landowner.	HEC-RAS modelling was applied for bridge crossings No. 7 and 15, as well as for crossing No. 11 in Omagh. The analysis for the remaining crossings was completed using HY8 modelling. The model results are included in a technical appendix to the ESR and have been reviewed by Conservation Halton staff.
Marine III	8.6.2. This section should be revised as required to reflect the comments provided above for Comment 12. In addition, this section should recognize the comments provided above for Comment 12. In addition, this section should recognize the requirement to provide exosion control for all new development within the Boyne Survey Secondary Plan Area within the end-of-pipe facilities, as well as the requirement to provide post-topre control for events up to and including the Regional Storm event and LID infiltration BMP's to maintain groundwater neanagement plan for the Boyne Survey Class EA includes a requirement to mitigate thermal impacts. This is noted to be consistent with the recommendations advanced in the March 2013 FSEMS.	Refer to response to comment Nc. 12.
-	18. Page 176: The stormwater management plan presented in Figure 8-7 should be revised as required to reflect the currently proposed locations of the stormwater management facilities within the Boyne Survey Secondary Plan Area as previous discussed.	Refer to response to comment No. 1.
_	19. Page 177: Section 8.6.3 notes that the culvert alignments have been established based	Refer to response to comment No. 1.

9	Jacking of Mistager autorient	Region Response
	upon Conservation Halton's preference for bydraulic structures perpendicular to the roadway. The ultimate watercourse alignments within the Boyne Survey Secondary Plan Area should be accounted for in establishing the alignments of the crossings at Britannia Road. The currently anticipated watercourse alignments are presented in the Implementation Principles and the accompanying schedules, which are included in Appendix 'I' of the FSEMS.	a
20.	Page 184; Section 8.6.4 recommends that a grade separation be implemented at the CN rail crossing, and that a pumping station be constructed in order to drain runoff from the grade separation. The capacity for the pumping station should be provided within the Class EA, based upon the pumping rate and the corresponding design storm frequency/return period. Additional information should also be provided regarding other drainage alternatives at the grade separation which have been considered and the basis for discounting them (i.e. gravity drains). Finally, the pumping station for the grade separation is proposed to be located on the south side of Britaunia Road within the Sustainable Halton lands. Additional information is required to support siting the pumping station within these lands; are there any environmental constraints (i.e. watercourses, terrestrial features, etc.) which have been or should be considered in the ultimate sting of the pumping station? This should account for requirements to provide setbacks and/or buffers, in accordance with Conservation Halton Policy.	The topography of the area is relatively flat, however, grading alternatives, such as gravity drains will be reviewed during the detail design.  Siting of the pumping station was discussed/reviewed during the EA with adjacent property owners as well as Regional staff. It was decided that final design/location requirements would be considered during detailed design in consultation with affected stakeholders.
21.	Page 187: The reference to the hydrological investigations in Section 8.6.5 include discussion regarding freeboard and capacity; should these references be revised to hydraulic investigations, recognizing the discussions which follow?  The same section indicates that a 54 m long bridge is recommended for the Britannia Road crossing of the Sixteen Mile Creek Main Branch, and cites a meander belt width of 30 m for the Sixteen Mile Creek Main Branch, and cites a meander belt width of beltwidth of the Sixteen Mile Creek Main Branch, including 10 % safety factor on each side. Additional information is required to support the substantially reduced beltwidth which has been applied for the sizing of the hydraulic structure.  Similarly, a 40 m long bridge is recommended for the Britannia Road crossing of the Sixteen Mile Creek East Branch, and cites a meander belt width of 30 m for the Sixteen Maire Creek East Branch, and cites a meander belt width of 30 m for the Sixteen Maire Creek East Branch, and cites a meander belt width of 30 m for the Sixteen March 2013 SUS indicate that the beltwidth of the Sixteen Mile Creek East Branch aranges from 144 m to 180 m (depending upon location), including 10 % safety factor on each side. Additional information is likewise required to support the substantially reduced beltwidth which has been applied for the sizing of the hydraulic structure.  Ver trust that the demension saisfness ware current requirements. Feel free to contact our office	The references in Section 8.6.5 to "hydrological" will be changed to "hydraulic".  The references to "meander belt widths" within Section 8.6.5 have been removed. The Fluvial Geomorphology Study (Appendix D) does not make recommendations for meander belt widths. The minimum recommended 30 and 32 m bridge spans for the Main and East Branches of Sixteen Mile Creek respectively are based on agreement with Conservation Halton for the 2 times bankfull width criteria (to address ecological considerations), plus subsequent confirmation and adjustments for hydraulic criteria. For the proposed upgrades to Britannia Road as outlined in the EA Report and Appendix D, the minimum bridge span recommendations reflect our opinion that larger span bridges are not necessarily the most cost effective in terms of significantly reducing long-term fluvial geomorphological impacts to a watercourse. Furthermore, a "zero-impact" bridge design would require single span bridges at least 120 and 144 m wide (respectively, as based on AMEC's comment), with no piers within the meander belt floodplain and was not considered practical at these locations.

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_	should you have any questions or require anything further.	
10	Town of Milton Planning Comments	
÷	Pg. 10. Reference to Boyne 'Subdivision'. Incorrect, it is a Secondary Plan Area.	All references to Boyne "Subdivision" will be revised to "Secondary Plan Area".
7		ESR will be revised to reflect 50,000 residents.
m.	Pg. 61: Discusses villages of Boyne, Omagh and Drumquin. It should be noted that through the Boyne Survey Secondary Plan, the village of Omagh was identified as a Special Study Area, based on its historical significance to the Town of Milton. The Special Study is currently underway. The purpose of the Study is to identify and conserve the cultural heritage and character of the Omagh village area.	ESR will be revised to reference the current Omagh Special Area Study.
4	Figure 5-3 depicts the Local Council approved June 2010 Land Use Plan for the Boyne Survey Secondary Plan. The Secondary Plan was approved by Halton Region in September 2013. Figure 5-3 should be updated to reflect the Regionally approved Land Use Plan.	ESR will be revised to reflect the status of the Secondary Plan.
۸.	Pg. 64: Discussion re: Boyne. This paragraph should be updated to reflect the Regional Approval and subsequent OMB appeal status of the Secondary Plan. In addition, this section references the ultimate population of 50,000 in Boyne, which is conflicting with the reference (noted earlier) - p. 28	ESR will be revised to reflect the Regional Approval and subsequent OMB appeal status of the Secondary Plan.
9	Beginning with section 5.3.2, numerous references are made to the 2011 Boyne Draft FSEMS and CFCP documents as prepared by AMEC. The 'Draft Final' versions of these reports from March 2013 should be referenced instead. Regional Transportation staff was provided a DVD copy of the updated documents on April 9, 2013, and Regional Planning staff was provided with both paper and DVD copies on the same date. The updated information should be referenced and used as background information in this ESR.	Refer to response to comment No. 1 under AMEC Comments.
_	7. Pg. 145: Sernas Transtech attendance at PIC on behalf of 'Boyne Survey Landowners Group'	Boyne Survey Land Owners Group' will be revised to 'Boyne Survey Landowners Group'.
1~	General comment: Numerous references to 'Bronte Road'. Bronte Road does not exist in Milton. If the authors are referring to Bronte Street, correction needs to be made throughout the document from Road to Street. However, if they are referring to Regional Road 25, then Bronte Road needs to be corrected to Regional Road 25.	ESR will be revised accordingly.
3,	Pg. 621: Sentence 'It is understood that the Britannia Road widening will take place prior to the development of the Boyne area'. While staff understands that originally the reconstruction of Britannia Road was to be accelerated, this is no longer the case. Subdivision development within Boyne will commence in advance of this project.	The timing of the Britannia Road improvements will be undertaken in consideration of development within the Boyne Secondary Plan Area and will be adjusted accordingly throughout the detail design process and construction of Britannia Road as needed.
	10. Pg. 659: Sentence similar to above, which reads, 'Through discussions with Halton Region and Conservation Halton staff, it is recognized that the Britannia Road improvements will likely be constructed in advance of the planned future urban development'. Please clarify whether the Town of Milton was consulted as it relates to the timing of the Boyne Survey Area?	Refer to response to comment No. 9 under Town of Milton Plauning Comments.
_	Town of Milton Engineering Comments	
_	k (east of Eighth Line) look low and should be confirmed	Traffic volumes have been reviewed and confirmed.
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1	a. Down of Milean Contracts	Region Response
7	Page 19: HRPS should be advised, if they have not already been so, about the speeding issue on Comment noted.  Britannia between Sixth and Trafalgar	omment noted.
Б	Page 48: Justification for the phasing of the project needs to be added. There is no explanation why the section from Tremaine to RR25 is going to it's ultimate configuration during the first phase of construction, while the traffic volume figures are lower in this section.	There is a section in the draft ESR that speaks specifically to the acceleration of the 6 lanes on Britannia Road. In response to the anticipated growth in south Milton – north Oakville, Regional Council approved accelerated construction of a number of road improvements in the Regional Council approved accelerated construction of a number of road improvements in the Regional Louding reconstruction of Britannia Road. The evidence from traffic issues encountered during the 2010 and 2011 construction seasons indicates that construction activities significantly impact traffic within the Regional Road network. Traffic diverted due to construction activities on Derry Road during the 2010 construction season resulted in traffic volumes on Britannia Road that were 2.4 times those observed in 2011. Significant growth in the Boyne Subdivision and construction activity associated with the implementation of these developments and planned water, wastewater and road works may also significantly impact short term traffic volumes in this area.
		To help address these concerns, the Region proposes to construct Britannia Road from Tremaine Road to Regional Road 25 (Capital Project 3985) to the ultimate six lane road configuration identified in the 2011 TMP Preferred Network. This will ensure that interim traffic demands are met and avoid the need to undertake future widening within the area. This recommendation was adopted by Regional Council on November 16, 2011 (through PW-63-11).
4,	Section 6.0: X-Sections for rural portion and interim conditions should be included	Comment noted. Plan and profile drawings highlighting both interim and ultimate conditions are provided in the ESR.
۸.	General: When alternatives are evaluated (i.e. Table (recommended alternative	5-2) there needs to be justification for the Justification for the recommended alternatives are provided in Sections 5.2.4, 5.3.3, 5.4.3 and 5.5.3.
9	Page 169: The recommendations related to right turn lanes should be reviewed especially for RR25, JSP and Trafalgar Road.	The analysis completed did not warrant east-west right turn lanes at the intersection of Regional Road 25. However, the provision for right turn lanes has been protected for at all intersections. For the balance of the corridor which is being implemented initially as a four lane cross section, right turn lanes are not required, however the need will be reviewed at detail design. All intersections, including James Snow Parkway and Trafalgar Road, will be revisited prior to the detailed design of the ultimate cross section in 2031 to confirm the need for these auxiliary lanes.
7	Appendix J: All maps need a Legend	ESR design drawings will be revised to include Legends.
∞	Interim Design Sheet 4 of 8: Active transportation links need to be identified between the two cul de sacs and the bypass. Prior to the transfer of the existing Britannia Road through the Omagh community, to the Town a structure review of the existing conditions (roadway and culvert) will be required. The location of the bypass would appear to be very close to existing agricultural buildings	The active transportation links along the north side of Britannia Road will be finalized during detailed design in consultation with the Town of Milton. Subsequent to the construction of the Britannia Road south by-pass, the sections of existing Britannia Road that are not utilized as part of the new corridor will be transferred to the Town of Milton. The road would be transferred to the Town in a reasonable state of repair, representing existing conditions, however, future negotiations/agreements will be required between the Region and Town. In the interim, the Region will continue to maintain existing Britannia Road.
9,		Interim Design Sheet 5 of 8: The servicing corridor to the future pumping station on Britannia Discussions with CN related to the grade separation and final property requirements are still ongoing and should be considered.
10.	All maps: Property ownership information should be ren	Property ownership information has been removed from the ESR design drawings.
11.	Interim Design Sheet 7 of 8: In the profile portion of crossing is out of scale and in the wrong location.	the drawing, it would appear that the creek   This has been reviewed. The noted creek crossing is in the correct location and is to scale.

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Page 11

#### **Andrew McGregor**

From: Andrew McGregor <a.mcgregor@delcan.com>

Sent: Thursday, October 31, 2013 1:30 PM

To: Delaquis, Dan (ENE)

Cc: Jakaitis, Alicia; Nick Palomba

Subject: RE: Britannia Road Draft ESR Review

#### Dan,

We don't anticipate significant changes from the draft that you have now so we'd still appreciate any comments you may have by the noted date below. Regardless, we'd be happy to send you a Final version (in PDF), once completed.

Regards, Andrew

From: Delaguis, Dan (ENE) [mailto:Dan.Delaguis@ontario.ca]

**Sent:** Thursday, October 31, 2013 11:56 AM

To: Andrew McGregor

**Subject:** RE: Britannia Road Draft ESR Review

Hi Andrew,

Unfortunately we were unable to review the Draft ESR, but would still like the opportunity to review the Final ESR. If the final is not that different from the draft, we will review the draft we already have. If the final has changes over the draft, please send us a copy of the ESR for review, or a link to the ESR if it is online.

Thanks, Dan

Daniel Delaquis | Environmental Resource Planner & Environmental Assessment Coordinator, Technical Support Section | Central Region

Ministry of the Environment | 5775 Yonge St. 8th Floor Toronto, Ontario, M2M 4J1 | T: 416-326-4839 F: 416-325-6347

From: Andrew McGregor [mailto:a.mcgregor@delcan.com]

**Sent:** October 29, 2013 3:03 PM

**To:** Delaquis, Dan (ENE) **Cc:** Jakaitis, Alicia

Subject: Britannia Road Draft ESR Review

Dan,

On October1, 2013 a Draft Environmental Study Report (ESR), documenting the study process and recommended corridor improvements for the section of Britannia Road (Regional Road 6) from Highway 407 to Tremaine Road (Regional Road 22) in the Town if Milton, was sent to you via courier for your review and comment. The deadline for receiving comments was **Oct. 25, 2013**. To date, the project team has yet to receive any comments on the draft report from the Ministry.

We would like to proceed with finalizing the ESR and submitting it for public review, in accordance with the *Environmental Assessment Act*. Therefore, we are asking that you provide us with any comments you may have on the

draft Report. If we do not receive a response to this email by Nov. 8, 2013, we'll assume you have no objections or comments on the recommendations contained in the report.

Kind regards,

Andrew McGregor, MCIP, RPP Environmental Planner, Transportation Division

**Delcan Corporation** 4342 Queen Street, Unit 407 Niagara Falls, Ontario L2E 7J7 T: 905.356.7003

F: 905.356.7008





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Britannia Road (Regional Road 6) Transportation Corridor Improvements From Tremaine Road (Regional Road 22) to Highway 407, Halton Region

## **FAX BACK FORM**

To:	Manoj Dilwaria	Fax Number:	905-631-0570
Re:	Britannia Road (Regional Road 6 From Tremaine Road (Regional F Class Environmental Assessmen	Road 22) to Highway 40'	
Ple	ase fill in the following information and	fax back before <u>Octobe</u>	<u>r 15, 2010</u> .
	Name: LORI KITTER	1970 <b>9</b> 1 101 200	
	Title: LANDS RESOUR	CE WORKER	
	Agency: <u>HIAWATNA</u> FIRST	MATION	
§ A	Address: 123 Paubash		Marie Control
	RR#2 REENE O	N KOL2GO	*****
	Phone: 705 - 295 - 4421		
	Fax: 705 - 295 - 4424		
	E-Mail: Iritter. hfn @ gmai	1.com	
Plea	My group/agency would like to volunt Committee (TAC) and will attend the TAM My group/agency would like to be kept to TAC.	AC meetings.	
Q	Please remove me from the project mail	ing list.	
bu	t reserve the right to the have no comments to reserve the right to the acute: would like a copy of the Archaeological As	provide inf the EAStu sessment u	out at a
	Thanks, Lori Rib	,	3-11-0
-	Lori Mil	er	

This information is being collected to assist the Consultant Team. It will be used in accordance with the Freedom of Information and Protection of Privacy Act and the Access to Information Act. With the exception of personal information, all information will become part of the public record.





## Halton.ca ( 311



#### NOTICE OF STUDY COMPLETION

#### **CLASS ENVIRONMENTAL ASSESSMENT STUDY**

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Highway 407 to Tremaine Road (Regional Road 22),
Town of Milton
PR-2667

#### Study

Halton Region has completed a Class Environmental Assessment (EA) Study to address future travel demands on Britannia Road (Regional Road 6) from Highway 407 to Tremaine Road (Regional Road 22), within the Town of Milton. The study has been conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007 & 2011), which is approved under the Ontario Environmental Assessment Act.

Taking into consideration the comments that were received from the Town of Milton, regulatory agencies and the public, Halton Region is recommending a preferred design which includes the widening of Britannia Road to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407 with protection for 6 lanes as required prior to 2031. The widening of Britannia Road will include a south by-pass of the roadway around the Omagh Community and a grade separation at the CN rail crossing. There will be 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

#### **Process**

The Environmental Study Report (ESR) has been prepared to document the planning, public consultation and decision making process undertaken for this study. By this Notice, the ESR is being placed on the public record for a 30-day review period in accordance with the requirements of the Municipal Class EA. Subject to comments received as a result of this Notice and the receipt of necessary approvals, Halton Region intends to proceed with the detail design and widening of Britannia Road as documented in the ESR.

The map shows the approximate limits of the study area.

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The ESR is available for review at the following locations.

Clerk's Department Regional Municipality of Halton 1151 Bronte Road Oakville, Ontario L6M 3L1

(905) 825-6000 Monday – Friday: 8:30 a.m. – 4:30 p.m.

Milton Public Library Beaty Branch 945 Fourth Line Milton, Ontario L9T 6P8

(905) 825-2665 Tuesday – Thursday: 10:00 a.m. – 9:00 p.m. Friday – Saturday: 10:00 a.m. – 5:00 p.m. Clerk's Department Town of Milton 150 Mary Street Milton, Ontario L9T 6Z5 (905) 878-7252 Monday – Friday:

8:30 a.m. - 4:30 p.m.

Milton Public Library Main Branch 1010 Main Street East Milton, Ontario L9T 6H7 (905) 875-2665 Tuesday – Thursday: 10:00 a.m. – 9:00 p.m. Friday – Saturday:

10:00 a.m. - 5:00 p.m.

Sunday: 1:00 p.m. - 5:00 p.m.

#### **Comments**

Further information may be obtained by contacting

Ms. Alicia Jakaitis, Project Manager, Halton Region, 905825-6000 ext. 7556. Please provide any written comments
to Halton Region by Monday November 10, 2014 (within 30
days of this Notice). If concerns regarding this project cannot
be resolved in discussion with Halton Region, a person
or party may request that the Minister of Environment
make an order for the project to comply with Part II of the
Environmental Assessment Act (referred to as a Part II Order).
Requests for a Part II Order must be received by the Minister,
at the address below by Monday November 10, 2014. A
copy of the request must also be sent to the Region's Project
Manager. If no request is received by Monday November
10, 2014, Halton Region intends to proceed with detailed
design and construction of this project as outlined in the ESR.

Minister of the Environment and Climate Change Environmental Approvals Branch 2 St. Clair Avenue West, Floor 12A Toronto ON, M4V 1L5



This Notice first issued on October 9, 2014 www.halton.ca/EAprojects



4342 Queen Street, Unit 407, Niagara Falls, ON L2E 6M9
Tel: 905.356.7003 • Fax: 905.356.7008
www.delcan.com

October 6, 2014

OUR REF: TN1390

Dear Sir / Madam:

Subject:

**Notice of Completion** 

Britannia Road (Regional Road 6) Transportation Corridor

Improvements Class Environmental Assessment Study

Halton Region has completed a Class Environmental Assessment (EA) Study to address future travel demands on Britannia Road (Regional Road 6) from Highway 407 to Tremaine Road (Regional Road 22) within the Town of Milton.

A Notice containing details of the study, the planning process undertaken and the Environmental Study Report public review and Part II Order process is enclosed.

If you have any questions or would like to provide comments on the study, please contact Alicia Jakaitis, Project Manager, Halton Region, at 905-825-6000 ext. 7556 (email alicia.jakaitis@halton.ca) or the undersigned at 905-356-7003, Ext. 6409 (email a.mcqreqor@delcan.com). Thank you for your assistance with this project.

Yours truly,

**Delcan Corporation** 

Andrew McGregor, MCIP, RPP

**Environmental Planner, Transportation Division** 

c.c. Alicia Jakaitas - Halton Region

Encis.



#### NOTICE OF STUDY COMPLETION

#### **CLASS ENVIRONMENTAL ASSESSMENT STUDY**

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Highway 407 to Tremaine Road (Regional Road 22),
Town of Milton
PR-2667

#### Study

Halton Region has completed a Class Environmental Assessment (EA) Study to address future travel demands on Britannia Road (Regional Road 6) from Highway 407 to Tremaine Road (Regional Road 22), within the Town of Milton. The study has been conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007 & 2011), which is approved under the Ontario Environmental Assessment Act.

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#### **Process**

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The map shows the approximate limits of the study area.

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C.N.A.

The ESR is available for review at the following locations.

#### Clerk's Department Regional Municipality of Halton 1151 Bronte Road

Oakville, Ontario L6M 3L1 (905) 825-6000 Monday – Friday: 8:30 a.m. – 4:30 p.m.

#### Milton Public Library Beaty Branch 945 Fourth Line

945 Toutin Line (905) 825-2665 Tuesday – Thursday: 10:00 a.m. – 9:00 p.m. Friday – Saturday: 10:00 a.m. – 5:00 p.m.

## Clerk's Department

Town of Milton 150 Mary Street Milton, Ontario L9T 6Z5 (905) 878-7252 Monday – Friday: 8:30 a.m. – 4:30 p.m.

#### Milton Public Library Main Branch

1010 Main Street East
Milton, Ontario L9T 6H7
(905) 875-2665
Tuesday – Thursday:
10:00 a.m. – 9:00 p.m.
Friday – Saturday:
10:00 a.m. – 5:00 p.m.
Sunday: 1:00 p.m. – 5:00 p.m.

#### **Comments**

Further information may be obtained by contacting

Ms. Alicia Jakaitis, Project Manager, Halton Region, 905825-6000 ext. 7556. Please provide any written comments
to Halton Region by Monday November 10, 2014 (within 30
days of this Notice). If concerns regarding this project cannot
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Requests for a Part II Order must be received by the Minister,
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copy of the request must also be sent to the Region's Project
Manager. If no request is received by Monday November
10, 2014, Halton Region intends to proceed with detailed
design and construction of this project as outlined in the ESR.

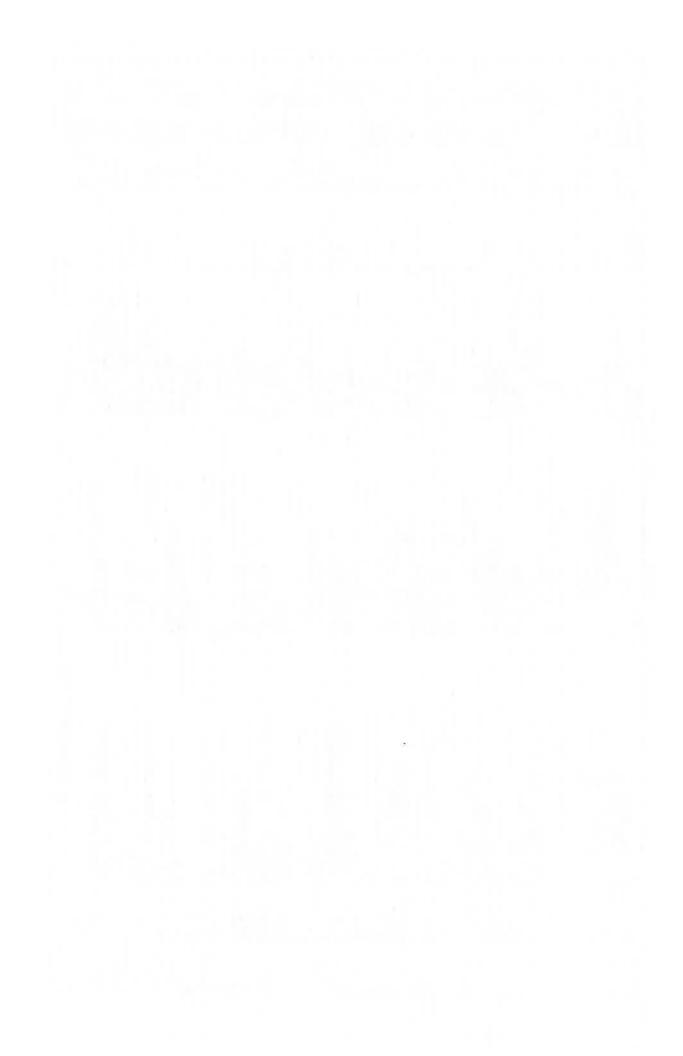
Minister of the Environment and Climate Change

Environmental Approvals Branch 2 St. Clair Avenue West, Floor 12A Toronto ON, M4V 1L5



This Notice first issued on October 9, 2014 www.halton.ca/EAprojects Britannia Road (Regional Road 6) Transportation Corridor Improvements Class Environmental Assessment

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Lasowski Mergen Sage Veale Strong		AT&T Canada	50 Worcester Road		Toronto	Ontario	M9W 5X2
Morgan Sage Veale Strong		Milton Hydro Distribution Inc	8065 t awson Rd		Millon	Ontario	L9T 5C4
Sage Veale Strong		Hatton Student Transportation Services	3190 Harvester Road		Burlington	Ontario	17N 3T1
Veale		Halton EMS	1179 Browle Road		Oakville	Ontario	LBM 4G3
Strong		Consequation Nation	2596 Britannia Road West		Burlington	Ontario	L7P 0G3
Tion or		Ministry of Natural Resources	50 Bizominaton Road West, RR#2		Aurora	Ontano	1.4G 3G8
Aurora McAllister Species at Risk Biologist		Ministry of Natural Resources	50 Bloomington Road	Aurora District	Aurora	Ontano	L4G OLB
		NO.	A Walding Way off Administration Road, PO Box		Contord	Ontario	L4K 1B9
100		CDR	1290 Central Parkway West, Suite 700		Meassauga	Ontario	LSC 4R3
Bearing	gement Section	Ministry of Transportation	1201 Wilson Avenue, Building 'D', 7th Floor		Downsview	Ontario	MSM 1JB
Modicki		Onland Infrastructure and Lands Corporation	1 Durides Street West, Suite 2000		Toronto	Ontario	M5G ZL5
hatten		Town of Milton	150 Mary Street		Millon	Ontario	L9T 8Z5
		Town of Milton	150 Mary Street		Milton	Ontano	1.97 6.25
19	tal Assessment Coordinator	Moutry of Environment	5775 Yonge St. 8th floor		Toronto	Ontario	M2M 4.11





October 9, 2014.

Chief James Marsden Alderville First Nation PO Box 46 Roseneath, ON K0K 2X0 Public Works Transportation Services 1151 Bronte Road Oakville ON L6M 3L1 Fax: (905) 847-2192

Re:

Britannia Road (Regional Road 6) Transportation Corridor Improvements Tremaine Road (Regional Road 22) to Highway 407, Town of Milton. Class Environmental Assessment Study

Dear Chief Marsden:

Halton Region has completed a Class Environmental Assessment Study to assess transportation comidor improvements on Britannia Road between Highway 407 to Tremaine Road in the Town of Milton. This Study is being carried out in accordance with the planning and design process for Schedule 'C' projects as outlined in the Municipal Engineers Association *Municipal Class Environmental Assessment* document (October 2000, as amended in 2007 & 2011), which is approved under the Ontario Environmental Assessments Act.

The Municipal Class Environmental Assessment (October 2000, amended 2007 & 2011), identifies consultation requirements with all stakeholders and we are endeavouring to continue separate and direct dialogue with First Nations. Correspondence from Halton Region does not represent consultation on behalf of the Governments of Canada or Ontario and Halton Region does not in any way represent the Governments of Canada or Ontario.

As part of the Class Environmental Assessment process, a Stage 1 Archaeological Assessment of the entire study corridor has been completed in accordance with the Ontario Heritage Act by Archaeological Services Inc. which has been documented in the Environmental Study Report. A copy of the Stage 1 Archaeological Assessment is attached for your reference. The assessment indicated that there are 46 archaeological sites registered within 1 km of the study area A review of the geography of the study area also suggests that the study corridor has potential for the identification of Aboriginal and historic archaeological remains, however the Britannia Road ROW does not retain archaeological potential due extensive and deep land alterations that have severely damaged the integrity of any archaeological resources. Additional archaeological assessment is therefore not required for road improvements within the current ROW boundaries and the Britannia Road ROW can be cleared of further archaeological concern;

However, in event that aboriginal remains or significant aboriginal artefacts are uncovered, we will stop all work activities to minimize further disturbance to the area and will immediately notify the appropriate authorities and your First Nation of archaeological discovery. Halton Region will not resume any work activities until all issues have been satisfactorily addressed as we understand that this is important in the preservation of aboriginal burial sites that may be encountered.

The Environmental Study Report has been completed and by this letter and attached Notice of Study Completion is being placed on public record for review from October 9 to November 10, 2014. If you have any questions or require additional information, please contact the undersigned at (905) 825-8000 ext. 7556.

Sincerely

Alicia Jakaitis

Encl Stage 1 Archaeological Assessment

cc: Nick Palomba, Delcan Corporation



#### NOTICE OF STUDY COMPLETION

#### **CLASS ENVIRONMENTAL ASSESSMENT STUDY**

Britannia Road (Regional Road 6) Transportation Corridor Improvements
Highway 407 to Tremaine Road (Regional Road 22),
Town of Milton
PR-2667

#### Study

Halton Region has completed a Class Environmental Assessment (EA) Study to address future travel demands on Britannia Road (Regional Road 6) from Highway 407 to Tremaine Road (Regional Road 22), within the Town of Milton. The study has been conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007 & 2011), which is approved under the Ontario Environmental Assessment Act.

Taking into consideration the comments that were received from the Town of Milton, regulatory agencies and the public, Halton Region is recommending a preferred design which includes the widening of Britannia Road to 6 lanes from Tremaine Road to Regional Road 25 and 4 lanes from Regional Road 25 to Highway 407 with protection for 6 lanes as required prior to 2031. The widening of Britannia Road will include a south by-pass of the roadway around the Omagh Community and a grade separation at the CN rail crossing. There will be 3.0 metre multi-use paths and 1.8 metre on road cycling lanes on both sides of the corridor, as well as a 5 metre raised median to enhance gateway and corridor features.

#### Process

The Environmental Study Report (ESR) has been prepared to document the planning, public consultation and decision making process undertaken for this study. By this Notice, the ESR is being placed on the public record for a 30-day review period in accordance with the requirements of the Municipal Class EA. Subject to comments received as a result of this Notice and the receipt of necessary approvals, Halton Region intends to proceed with the detail design and widening of Britannia Road as documented in the ESR.

The map shows the approximate limits of the study area.

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The ESR is available for review at the following locations.

# Clerk's Department Regional Municipality of Halton 1151 Bronte Road

Oakville, Ontario L6M 3L1 (905) 825-6000 Monday – Friday: 8:30 a.m. – 4:30 p.m.

#### Milton Public Library Beaty Branch 945 Fourth Line

Milton, Ontario L9T 6P8 (905) 825-2665 Tuesday – Thursday: 10:00 a.m. – 9:00 p.m. Friday – Saturday: 10:00 a.m. – 5:00 p.m.

## Clerk's Department

Town of Milton 150 Mary Street Milton, Ontario L9T 6Z5 (905) 878-7252 Monday – Friday: 8:30 a.m. – 4:30 p.m.

## Milton Public Library

Main Branch
1010 Main Street East
Milton, Ontario L9T 6H7
(905) 875-2665
Tuesday – Thursday:
10:00 a.m. – 9:00 p.m.
Friday – Saturday:
10:00 a.m. – 5:00 p.m.
Sunday: 1:00 p.m. – 5:00 p.m.

#### Comments

Further information may be obtained by contacting

Ms. Alicia Jakaitis, Project Manager, Halton Region, 905825-6000 ext. 7556. Please provide any written comments
to Halton Region by Monday November 10, 2014 (within 30
days of this Notice). If concerns regarding this project cannot
be resolved in discussion with Halton Region, a person
or party may request that the Minister of Environment
make an order for the project to comply with Part II of the
Environmental Assessment Act (referred to as a Part II Order).
Requests for a Part II Order must be received by the Minister,
at the address below by Monday November 10, 2014. A
copy of the request must also be sent to the Region's Project
Manager. If no request is received by Monday November
10, 2014, Halton Region intends to proceed with detailed
design and construction of this project as outlined in the ESR.

Minister of the Environment and Climate Change Environmental Approvals Branch

2 St. Clair Avenue West, Floor 12A Toronto ON, M4V 1L5



This Notice first issued on October 9, 2014 www.halton.ca/EAprojects

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TITLE	FIRST NAME	LAST NAME	FIRST NATION	ADDRESS 1	CITY	PROVINCE	PROVINCE POSTAL CODE
Chief	James	Marsden	Alderville First Nation	PO Box 46	Roseneath	Ontario	KOK 2X0
Chief	Lauri	Carr	Hiawatha First Nation	123 Paudish Street, R.R.#2	Кеепе	Ontario	KOL 2G0
Chief	Willam	K. Montour	Six Nations of the Grand River	1953 Fourth Line, P.O.Box 5000	Ohsweken	Ontario	NOA 1H0
Chief	Keith	Knott	Curve Lake First Nation	22 Winookeeda Road	Curve Lake	Ontario	KOL 1RO
Ms.	Margaret	Sault	Mississaugas of the New Credit First Nation	2789 Mississauga Road, R.R.#6	Hagersville	Ontario	NOA 1H0
Chief	Tracy	Gauthier	Mississaugas of Scugog Island First Nation	22521 Island Road	Port Perry	Ontario	L9L 1B6
Chief	Joel	Abram	Oneida Nation of the Thames	2212 Elm Avenue	Southwold	Ontario	NOL 2GO
Sub-Chtef	Leroy	Hill	Six Nations Haudenosaunee Confederacy Council	RR2	Ohsweken	Ontario	NOA 1MO
Chief	R. Donald	Maracle	The Mohawks of the Bay of Quinte First Nation	Box 98, 48B Bayshore Road	Tyendinaga	Ontario	KOK 1XO
Grand Chief	Thompson	Dooley	Mohawk Council of Akwesasne	P.O. Box 579	Cornwall	Ontario	К6Н 5Т3
Chief	Blaine	Commandant	Wahta Mohawk Territory	Box 260	Bala	Ontario	POC 1AO

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## NOTICE OF STUDY COMPLETION

### CLASS ENVIRONMENTAL ASSESSMENT STUDY

Britannia Road (Regional Road 6) Transportation Corridor Improvements Highway 407 to Tremaine Road (Regional Road 22), Town of Milton PR-2667

#### Study

Halton Region has completed a Class Environmental Assessment (EA) Study to address future travel demands on Britannia Road (Regional Road 6) from Highway 407 to Tremaine Road (Regional Road 22), within the Town of Milton. The study has been conducted in compliance with Schedule C of the Municipal Class Environmental Assessment (October 2000, amended 2007 & 2011), which is approved under the Ontario Environmental Assessment Act.

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Minister of the Environment and Climate Change Environmental Approvals Branch

2 St. Clair Avenue West, Floor 12A Toronto ON, M4V 1L5



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www.halton.ca/EAprojects