Appendix I - Public Consultation - Comments and Correspondence

Comment Tracker – West Aldershot Creek

From Notice of Commencement publication and mail out

Stakeholder	Comment
MNRF – [redacted]	Species at risk to be considered in this area include Butternut (endangered), and endangered bats. You can send environmental study results to me. **received additional letter ([redacted]@PECG) with additional SAR info
MECP – [redacted]	Provided letter
City Heritage	FYI the follow City-identified cultural heritage resources are located in proximity to the study area: Properties listed on Municipal Register of Cultural Heritage Resources: • 944 Lasalle Park Road (listed on the Municipal Register but not designated) • 50 North Shore Blvd East (Lasalle Park Pavilion, designated under Part IV of Ontario Heritage Act) Properties not listed on Municipal Register but otherwise identified by the City as having potential cultural heritage value (this list has not been regularly updated since 2011 so some of these resources may have been demolished): • 26 Fairwood Place West • 928 Lasalle Park Road • 938 Lasalle Park Road • 956 Lasalle Park Road • 976 Lasalle Park Road • 982 Lasalle Park Road
20 North Shore Blvd. La Salle Towers Property Owners for Fred Hageman Holdings Ltd [redacted]	• the NE bank was walked adjacent to the creek on 20 North Shore Blvd • Property owners praised the City for undertaking the study and stated that they fully support this study • [redacted] commented that the erosion on their side of the creek has worsened over time • Two particular areas of concern were identified • The property owners mentioned that they would prefer to see erosion protection along the creek bank. City staff explained that any erosion protection works, as recommended by the study, will be implemented in 2019-20 and will require an easement agreement for the City to perform the works. • A steep erosion scar has developed across from the Halton Pumpling Station building, eroding at the grassed area on the property • [redacted] had no concerns about granting permission to enter • The signed permission form was received shortly after our meeting and it is attached • While on site, GROMA was conducting their drone survey. The property owners had not received any notice that this was going to be taking place and had received many questions from the residents in the apartment building the day before. • Going forward, please ensure notice is provided for aerial surveys • The property owners must be included on all correspondence and notices for the area residents and stakeholders.

	The property owners at 20 Northshore Blvd West are very supportive of the erosion protection study. There are concerned about bank erosion along their property and look forward to protection measures. Please make sure the design team is aware of this and the erosion mitigation recommendations include the stretch along 20 Northshore Blvd W.
Source Water Protection, CH, [redacted]	Thank you for the notice for the Class EA Study in West Aldershot Creek. The source protection plan for the Halton Region Source Protection Area does not include any policies applicable to this study. From a drinking water source protection perspective the erosion controls resulting from this study will benefit water quality and we thank the City of Burlington for beginning this initiative. I have copied [redacted] Supervisor Water Resources Planning with Halton Region as the Region's source protection office could also assist with future projects.
Region Water Resources, Planning, [redacted]	Thanks, [redacted] We provided similar input as part of a consolidated Region response.
Region, Infrastructure Planning & Policy Public Works [redacted]	We have reviewed existing and planned water and wastewater infrastructure in Study Area. The attached maps display: 1) existing water infrastructure, 2) existing wastewater infrastructure, and 3) a future wastewater project along LaSalle Park Rd. (planned construction start 2021). We request that potential impacts to these utilities be considered through the Class EA, and that we continue to be copied on correspondence related to the Study.
[redacted] Network Management Officer Hydro One	In our initial review, we can confirm that there are no Hydro One Transmission (above 115 kV) Facilities in the subject area. Please note there may also be Hydro One Distribution facilities in your study area (ie. Distribution wires operating below 115 kV). In order to cover off the impact to all Hydro One assets, please also forward your EA to the following email address: [redacted] Please be advised that this is only a preliminary assessment based on current information. No further consultation with Hydro One Networks Inc. is required if no changes are made to the current information.
[redacted] MTCS	Provided letter
[redacted] Fairwood Place Condos	• Provided Peto McCallum report from 1984 for ravine work. • Provided storm sewer and headwall drawings
PIC Comments	
[redacted] Principal West Aldershot School	• Could not attend PIC; would like study info • Sent her copy of PIC display boards
[redacted]	• Gave history of erosion problem steaming from development to the north • Identified #1 priority being to get erosion under control

76 Fairwood Place	• Understands trees would need to be removed on both sides of creek; would be an acceptable outcome since many trees will remain.
[redacted]	• Pathway on the east side of the creek from the street to the fence is becoming very dangerous for the students and residents who use it frequently; requires immediate attention • Suggest an alternate solution – install concrete sewer structures, fill sides and overlay with sod making this into a very pleasant small park. • We understand the Halton Region may object because this will be a change in the environment and impact fish and small wildlife. • However in the long term it may be the most cost effective solution (lower maintenance) not subject to erosion, safer environment for students and opening a park for Burlington residents.
[redacted]	• Of 4 options presented, would choose #4 • No doubt the process must move forward ASAP to repair the creek with best resources available. • Condo board was informed that City had this work in budget for 2019 and expect the City to follow through for the safety and wellbeing of this creek bed and the residents who live in the area. • Larger trees leaning on both sides of the bank need to be cut down, but keep the root structure that will help hold the sides of the bank. • Liked the suggestion in the presentation of new trees will regenerate as the canopy is thinned to allow for more light. • Main concern is keeping the project in the City budget so it can move forward this year.
[redacted] on behalf of Fairwood Place East (FPE) Inc.	• Meeting with FPE and FPW boards on Dec 11, 2018 and discussed City presentation. FPE collective board feedback: • Appreciate erosion concern is getting attention and priority with remedial action possible in next few years. • Appreciate that the major erosion in Reach 1 is being significantly corralled in all alternatives • In spite of Reach 1 has the greatest impact to our properties, we felt the applicability of Alternative 3 to all 3 Reaches provides for a consistent and equivalent outcome to full creek length • We support the appropriate removal of trees and growth for the work and that native plants and tress will be used in restoration.
[redacted] on behalf of Fairwood Place Wes (FPW)	• Comments provided on behalf of FPW board of directors • Consider the creek area a valuable asset to the Region and the City and worthy of restoration and preservation. • Of the 4 alternatives listed our preference is for alternative 3 or possibly 4 depending on your findings in Phase 3 of the study. • Taking no action (alternative 1) is considered unacceptable and not worth consideration. • For long term sustainability of the project we suggest steps should be taken to ensure the on-going involvement of Aldershot High School whose property adjoins Reach 1 and Reach 2 so that the creek environment is properly understood and respected by the pupils. • There is some evidence of dumping near where the creek crosses North Shore Blvd and steps should be taken to try to eliminate this including appropriate signage and fines for offences. • In addition, we suggest that sufficient budget should be established to properly maintain the creek and to prevent its condition from deteriorating in future, after restoration.

Andrea LaPlante

From: [redacted]
Sent: Friday, July 27, 2018 9:44 AM
To: Andrea LaPlante
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Hello Andrea,

Species at risk to be considered in this area include Butternut (endangered), and endangered bats.

You can send environmental study results to me.

Regards,

[redacted]
District Planner, Aurora District, Ontario Ministry of Natural Resources and Forestry
50 Bloomington Road, Aurora, Ontario L4G 0L8
[redacted]

From: [redacted] (MNRF)
Sent: July-25-18 4:10 PM
To: [redacted] (MNRF)
Subject: FW: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

From: Andrea LaPlante [mailto:laplantea@ae.ca]
Sent: July-25-18 3:21 PM
To: [redacted]
Subject: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Good afternoon,

Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804

Andrea LaPlante

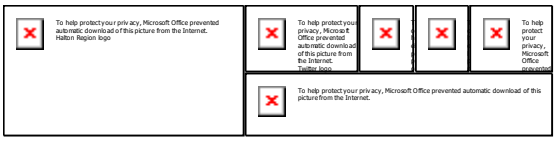
From: [redacted]
Sent: Saturday, August 4, 2018 12:04 PM
To: Andrea LaPlante
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Hi Andrea,

Thank you for sending me the Notice of Study Commencement. We would like to continue to receive information as it becomes available.

[redacted]

[redacted]
Manager, Infrastructure Planning & Policy
Infrastructure Planning & Policy
Public Works
Halton Region
[redacted]



This message, including any attachments, is intended only for the person(s) named above and may contain confidential and/or privileged information. Any use, distribution, copying or disclosure by anyone other than the intended recipient is strictly prohibited. If you are not the intended recipient, please notify us immediately by telephone or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

From: Andrea LaPlante [mailto:laplantea@ae.ca]
Sent: Wednesday, July 25, 2018 4:14 PM
To: [redacted]
Subject: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Good afternoon,

Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.

Andrea LaPlante

From: [redacted]
Sent: Friday, July 27, 2018 2:21 PM
To: umar.malik@burlington.ca
Cc: [redacted] Andrea LaPlante
Subject: West Aldershot Creek Erosion Control Schedule B Municipal Class EA
Attachments: TSS Comments_Notice of Commencement_West Aldershot Creek Erosion Control.pdf

Good afternoon,

Please find attached a letter from the Ministry of the Environment, Conservation and Parks, Central Region Technical Support Section regarding the above mentioned project. Feel free to contact me directly with any questions or concerns you may have.

Sincerely,

[redacted]
Environmental Resource Planner and EA Coordinator
Technical Support Section | Central Region
Ministry of the Environment, Conservation and Parks
5775 Yonge St., 8th Floor
Toronto, ON M2M 4J1
[redacted]

Ministry of the Environment, Conservation and Parks
Central Region
5775 Yonge Street, 8th Floor
North York ON M2M 4J1
Phone: 416.326.6700
Fax: 416.325.6345

Ministère de l'Environnement, de la Protection de la nature et des Parcs
Région du Centre
8e étage, 5775, rue Yonge
North York ON M2M 4J1
Tél : 416 326-6700
Téléc : 416 325-6345

Ontario

July 27, 2018 File No.: EA 01-06-02

Umar Malik, M.Eng., P.Eng.
Project Manager
City of Burlington – City Hall
426 Brant Street; PO Box 5013
Burlington, ON L7R 3Z6
umar.malik@burlington.ca

BY EMAIL ONLY

Re: **West Aldershot Creek Erosion Control**
City of Burlington
Schedule B Municipal Class EA
Response to Notice of Commencement

Dear Mr. Malik,

This letter is in response to the Notice of Commencement for the above noted project. The Ministry of the Environment, Conservation and Parks (MECP) acknowledges that the City of Burlington has indicated that this study is following the approved environmental planning process for a Schedule B project under the Municipal Engineers Association's Municipal Class Environmental Assessment (Class EA).

The attached "Areas of Interest" document provides guidance regarding the Ministry's interests with respect to the Class EA process. Please identify the areas of interest which are applicable to the project and ensure they are addressed. Proponents who address all of the applicable areas of interest can minimize potential delays to the project schedule.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge, real or constructive, of the existence or potential existence of an Aboriginal or treaty right and contemplates conduct that may adversely impact that right. Before authorizing this project, the Crown must ensure that its duty to consult has been fulfilled, where such a duty is triggered. Although the duty to consult with Aboriginal peoples is a duty of the Crown, the Crown may delegate procedural aspects of this duty to project proponents while retaining oversight of the consultation process.

The proposed project may have the potential to affect Aboriginal or treaty rights protected under Section 35 of Canada's *Constitution Act* 1982. Where the Crown's duty to consult is triggered in relation to the proposed project**, the MECP is delegating the procedural aspects of rights-based consultation to the proponent through this letter.** The Crown intends to rely on the delegated consultation process in discharging its duty to consult and maintains the right to participate in the consultation process as it sees fit.

Based on information provided to date and the Crown`s preliminary assessment the proponent is required

to consult with the following communities who have been identified as potentially affected by the proposed project:

- **Six Nations of the Grand River**
- **Haudenosaunee Confederacy Chiefs Council**
- **Mississaugas of the New Credit First Nation**

Steps that the proponent may need to take in relation to Aboriginal consultation for the proposed project are outlined in the "Code of Practice for Consultation in Ontario's Environmental Assessment Process" which can be found at the following link: https://www.ontario.ca/document/consultation-ontarios-environmental-assessment-process
Additional information related to Ontario's Environmental Assessment Act is available online at: www.ontario.ca/environmentalassessments

Please also refer to the attached document "A Proponent's Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities" for further information.

The proponent must contact the Director of Environmental Assessment and Permissions Branch under the following circumstances subsequent to initial discussions with the communities identified by the MECP:

- Aboriginal or treaty rights impacts are identified to the proponent by the communities
- The proponent has reason to believe that the proposed project may adversely affect an Aboriginal or treaty right
- Consultation has reached an impasse
- A Part II Order request or elevation request is expected

The Director of the Environmental Assessment and Permissions Branch can be notified either by email with the subject line "Potential Duty to Consult" to MOECCpermissions@ontario.ca or by mail or fax at the address provided below:

Email:	MOECCpermissions@ontario.ca Subject: Potential Duty to Consult
Fax:	416-314-8452
Address:	Environmental Assessment and Permissions Branch 135 St. Clair Avenue West, 1st Floor Toronto, ON, M4V 1P5

The MECP will then assess the extent of any Crown duty to consult for the circumstances and will consider whether additional steps should be taken, including what role the proponent will be asked to play in them.

A draft copy of the Project File/ESR should be sent to this office prior to the filing of the final report, allowing a minimum of 30 days for the ministry's technical reviewers to provide comments. Please also forward the Notice of Completion and final Project File/ESR to me when completed.

Should you or any members of your project team have any questions regarding the material above, please contact me at trevor.bell@ontario.ca or 416-326-3577.

Sincerely,

[redacted]

[redacted]
Regional Environmental Assessment Coordinator
Air, Pesticides and Environmental Planning

cc: [redacted] Supervisor, Technical Support Section, MECP
[redacted] Manager, Halton Peel District Office, MECP
Andrea LaPlante, Class EA Lead, Associated Engineering (Ont.) Ltd.
Central Region EA File
A & P File

Attach: Areas of Interest
A Proponent's Introduction to the Delegation of Procedural Aspects of consultation with Aboriginal Communities

AREAS OF INTEREST

It is suggested that you check off each applicable area after you have considered / addressed it.

☐ **Source Water Protection (all projects)**

The Clean Water Act, 2006 (CWA) aims to protect existing and future sources of drinking water. To achieve this, several types of vulnerable areas have been delineated around surface water intakes and wellheads for every municipal residential drinking water system that is located in a source protection area. These vulnerable areas are known as a Wellhead Protection Areas (WHPAs) and surface water Intake Protection Zones (IPZs). Other vulnerable areas that have been delineated under the CWA include Highly Vulnerable Aquifers (HVAs), Significant Groundwater Recharge Areas (SGRAs), Event-based modelling areas (EBAs), and Issues Contributing Areas (ICAs). Source protection plans have been developed that include policies to address existing and future risks to sources of municipal drinking water within these vulnerable areas.

Projects that are subject to the Environmental Assessment Act that fall under a Class EA, or one of the Regulations, have the potential to impact sources of drinking water if they occur in designated vulnerable areas or in the vicinity of other at-risk drinking water systems (i.e. systems that are not municipal residential systems). MEA Class EA projects may include activities that, if located in a vulnerable area, could be a threat to sources of drinking water (i.e. have the potential to adversely affect the quality or quantity of drinking water sources) and the activity could therefore be subject to policies in a source protection plan. Where an activity poses a risk to drinking water, policies in the local source protection plan may impact how or where that activity is undertaken. Policies may prohibit certain activities, or they may require risk management measures for these activities. Municipal Official Plans, planning decisions, Class EA projects (where the project includes an activity that is a threat to drinking water) and prescribed instruments must conform with policies that address significant risks to drinking water and must have regard for policies that address moderate or low risks.

- As you may be aware, in October 2015, the MEA Parent Class EA document was amended to include reference to the Clean Water Act (Section A.2.10.6) and indicates that proponents undertaking a Municipal Class EA project must identify early in their process whether a project is or could potentially be occurring with a vulnerable area. **Given this requirement, please include a section in the Project File/ESR on source water protection.**
    - The proponent should identify the source protection area and should clearly document how the proximity of the project to sources of drinking water (municipal or other) and any delineated vulnerable areas was considered and assessed. Specifically the report should discuss whether or not the project is located in a vulnerable area and provide applicable details about the area. If located in a vulnerable area, proponents should document whether any project activities are prescribed drinking water threats and thus pose a risk to drinking water (this should be consulted on with the appropriate Source Protection Authority). Where an activity poses a risk to drinking water, the proponent must document and discuss in the project file or ESR how the project adheres to or has regard to applicable policies in the local source protection plan. This section should then be used to inform and be reflected in other sections of the report, such as the identification of net positive/negative effects of alternatives, mitigation measures, evaluation of alternatives etc.

- While most source protection plans focused on including policies for significant drinking water threats in the WHPAs and IPZs it should be noted that even though source protection plan policies may not apply in HVAs, these are areas where aquifers are sensitive and at risk to impacts and within these areas, activities may impact the quality of sources of drinking water for systems other than municipal residential systems.

- In order to determine if this project is occurring within a vulnerable area, proponents can use this mapping tool: http://www.applications.ene.gov.on.ca/swp/en/index.php.The mapping tool will also provide a link to the appropriate source protection plan in order to identify what policies may be applicable in the vulnerable area.

- For further information on the maps or source protection plan policies which may relate to their project, proponents must contact the appropriate source protection authority. **Please consult with the local source protection authority to discuss potential impacts on drinking water. The contact for this project is [redacted] or [redacted] Please document the results of that consultation within the Report and include all communication documents/correspondence.**

More Information
For more information on the Clean Water Act, source protection areas and plans, including specific information on the vulnerable areas and drinking water threats, please refer to Conservation Ontario's website where you will also find links to the local source protection plan/assessment report.

A list of the prescribed drinking water threats can be found in section 1.1 of Ontario Regulation 287/07 made under the Clean Water Act. In addition to prescribed drinking water threats, some source protection plans may include policies to address additional "local" threat activities, as approved by the MECP.

Climate Change

Ontario is leading the fight against climate change through the Climate Change Action Plan. Recently released, the plan lays out the specific actions Ontario will take in the next five years to meet its 2020 greenhouse gas reduction targets and establishes the framework necessary to meet its long-term targets. As a commitment of the action plan, **the province has now finalized a guide, "Considering Climate Change in the Environmental Assessment Process" (Guide), which is found online at: www.ontario.ca/page/considering-climate-change-environmental-assessment-process**

The Guide is now a part of the Environmental Assessment program's Guides and Codes of Practice. The Guide sets out the MECP's expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA. **Proponents should review this Guide in detail.**

- The MECP expects proponents to:

    1. Take into account during the assessment of alternative solutions and alternative designs, the following:
        a. the project's expected production of greenhouse gas emissions and impacts on carbon sinks (climate change mitigation); and
        b. resilience or vulnerability of the undertaking to changing climatic conditions (climate change adaptation).
    2. Include a discrete section in the Project File/ESR detailing how climate change was considered in the EA.

    How climate change is considered can be qualitative or quantitative in nature, and should be scaled to the project's level of environmental effect. In all instances, both a project's impacts on climate change (mitigation) and impacts of climate change on a project (adaptation) should be considered. Please ensure climate change is considered in the report.

- The MECP has also prepared another guide to support provincial land use planning direction related to the completion of energy and emission plans. The "Community Emissions Reduction Planning: A Guide for Municipalities" document is designed to educate stakeholders on the municipal opportunities to reduce energy and greenhouse gas emissions, and to provide guidance on methods and techniques to incorporate consideration of energy and greenhouse gas emissions into municipal activities of all types. We encourage you to review the Guide for information.

Planning and Policy

- Parts of the study area may be subject to the Oak Ridges Moraine Conservation Plan, Niagara Escarpment Plan, Greenbelt Plan, Lake Simcoe Protection Plan, or Growth Plan for the Greater Golden Horseshoe. Applicable policies should be referenced in the Project File/ESR, and the proponent should describe how the proposed study adheres to the relevant policies in these plans. **The new 2017 provincial plans are now in effect.**

- The Provincial Policy Statement (2014) contains policies that protect Ontario's natural heritage and water resources. Applicable policies should be referenced in the Project File/ESR, and the proponent should describe how this proposed project is consistent with these policies.

Air Quality, Dust and Noise

- If there are sensitive receptors in the surrounding area of this project, an air quality/odour impact assessment will be useful to evaluate alternatives, determine impacts and identify appropriate mitigation measures. The scope of the assessment can be determined based on the potential effects of the proposed alternatives, and typically includes source and receptor characterization and a quantification of local air quality impacts on the sensitive receptors and the environment in the study area. The assessment will compare to all applicable standards or guidelines for all contaminants of concern. **Please contact this office for further consultation on the level of Air Quality Impact Assessment required for this project if not already advised.**

- **If a full Air Quality Impact Assessment is not required for the project, the Project File/ESR should still contain:**
  - A discussion of local air quality including existing activities/sources that significantly impact local air quality and how the project may impact existing conditions;
  - A discussion of the nearby sensitive receptors and the project's potential air quality impacts on present and future sensitive receptors;
  - A discussion of local air quality impacts that could arise from this project during both construction and operation; and
  - A discussion of potential mitigation measures.

- As a common practice, "air quality" should be used an evaluation criterion for all road projects.

- Dust and noise control measures should be addressed and included in the construction plans to ensure that nearby residential and other sensitive land uses within the study area are not adversely affected during construction activities.

- The MECP recommends that non-chloride dust-suppressants be applied. For a comprehensive list of fugitive dust prevention and control measures that could be applied, refer to *Cheminfo Services Inc. Best Practices for the Reduction of Air Emissions from Construction and Demolition Activities.* Report prepared for Environment Canada. March 2005.http://www.bv.transports.gouv.qc.ca/mono/1173259.pdf

- The Project File/ESR should consider the potential impacts of increased noise levels during the operation of the completed project. The proponent should explore all potential measures to mitigate significant noise impacts during the assessment of alternatives.

Ecosystem Protection and Restoration

- Any impacts to ecosystem form and function must be avoided where possible. The Project File/ESR should describe any proposed mitigation measures and how project planning will protect and enhance the local ecosystem.

- All natural heritage features should be identified and described in detail to assess potential impacts and to develop appropriate mitigation measures. The following sensitive environmental features may be

located within or adjacent to the study area:

- Areas of Natural and Scientific Interest (ANSIs)
- Rare Species of flora or fauna
- Watercourses
- Wetlands
- Woodlots

We recommend consulting with the Ministry of Natural Resources and Forestry (MNRF), Fisheries and Oceans Canada (DFO) and your local conservation authority to determine if special measures or additional studies will be necessary to preserve and protect these sensitive features. In addition, you may consider the provisions of the Rouge Park Management Plan if applicable.

Surface Water

- The Project File/ESR must include a sufficient level of information to demonstrate that there will be no negative impacts on the natural features or ecological functions of any watercourses within the study area. Measures should be included in the planning and design process to ensure that any impacts to watercourses from construction or operational activities (e.g. spills, erosion, pollution) are mitigated as part of the proposed undertaking.

- Additional stormwater runoff from new pavement can impact receiving watercourses and flood conditions. Quality and quantity control measures to treat stormwater runoff should be considered for all new impervious areas and, where possible, existing surfaces. The ministry's Stormwater Management Planning and Design Manual (2003) should be referenced in the Project File/ESR and utilized when designing stormwater control methods. **A Stormwater Management Plan should be prepared as part of the Class EA process** that includes:

  - Strategies to address potential water quantity and erosion impacts related to stormwater draining into streams or other sensitive environmental features, and to ensure that adequate (enhanced) water quality is maintained
  - Watershed information, drainage conditions, and other relevant background information
  - Future drainage conditions, stormwater management options, information on erosion and sediment control during construction, and other details of the proposed works
  - Information on maintenance and monitoring commitments.

- Ontario Regulation 60/08 under the Ontario Water Resources Act (OWRA) applies to the Lake Simcoe Basin, which encompasses Lake Simcoe and the lands from which surface water drains into Lake Simcoe. If the proposed sewage treatment plant is listed in Table 1 of the regulation, the Project File/ESR should describe how the proposed project and its mitigation measures are consistent with the requirements of this regulation and the OWRA.

- Any potential approval requirements for surface water taking or discharge should be identified in the Project File/ESR. In particular, a Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information. Additionally, an Environmental Compliance Approval under the OWRA is required for municipal stormwater management works.

Groundwater

- The status of, and potential impacts to any well water supplies should be addressed. If the project involves groundwater takings or changes to drainage patterns, the quantity and quality of groundwater may be affected due to drawdown effects or the redirection of existing contamination flows. In addition, project activities may infringe on existing wells such that they must be reconstructed or sealed and abandoned. Appropriate information to define existing groundwater conditions should be included in the Project File/ESR.

- If the potential construction or decommissioning of water wells is identified as an issue, the Project File/ESR should refer to Ontario Regulation 903, Wells, under the OWRA.

- Potential impacts to groundwater-dependent natural features should be addressed. Any changes to groundwater flow or quality from groundwater taking may interfere with the ecological processes of streams, wetlands or other surficial features. In addition, discharging contaminated or high volumes of groundwater to these features may have direct impacts on their function. Any potential effects should be identified, and appropriate mitigation measures should be recommended. The level of detail required will be dependent on the significance of the potential impacts.

- Any potential approval requirements for groundwater taking or discharge should be identified in the Project File/ESR. In particular, a Permit to Take Water (PTTW) under the OWRA will be required for any water takings that exceed 50,000 L/day, with the exception of certain water taking activities that have been prescribed by the Water Taking EASR Regulation – *O. Reg. 63/16*. These prescribed water-taking activities require registration in the EASR instead of a PTTW. Please review the Water Taking User Guide for EASR for more information.

Contaminated Soils

- Since the removal or movement of soils may be required, appropriate tests to determine contaminant levels from previous land uses or dumping should be undertaken. If the soils are contaminated, you must determine how and where they are to be disposed of, consistent with *Part XV.1 of the Environmental Protection Act* (EPA) and Ontario Regulation 153/04, Records of Site Condition, which details the new requirements related to site assessment and clean up. Please contact the ministry's District Offices for further consultation if contaminated sites are present.

- Any current or historical waste disposal sites should be identified in the Project File/ESR. The status of these sites should be determined to confirm whether approval pursuant to Section 46 of the EPA may be required for land uses on former disposal sites.

- The location of any underground storage tanks should be investigated in the Project File/ESR. Measures should be identified to ensure the integrity of these tanks and to ensure an appropriate response in the event of a spill. The ministry's Spills Action Centre must be contacted in such an event.

- The Project File/ESR should identify any underground transmission lines in the study area. The owners should be consulted to avoid impacts to this infrastructure, including potential spills.

Excess Materials Management

- Activities involving the management of excess soil should be completed in accordance with the MECP's current guidance document titled "Management of Excess Soil – A Guide for Best Management Practices" (2014) available online (http://www.ontario.ca/document/management-excess-soil-guide-best-management-practices).

- All waste generated during construction must be disposed of in accordance with ministry requirements.

Servicing and Facilities

- Any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste must have an Environmental Compliance Approval (ECA) before it can operate lawfully. Please consult with the Environmental Approvals Access and Service Integration Branch (EAASIB) to determine whether a new or amended ECA will be required for any proposed infrastructure.

- We recommend referring to the ministry's "D-Series" guidelines – Land Use Compatibility to ensure

that any potential land use conflicts are considered when planning for any infrastructure or facilities related to wastewater, pipelines, landfills or industrial uses.

Mitigation and Monitoring

Contractors must be made aware of all environmental considerations so that all environmental standards and commitments for both construction and operation are met. Mitigation measures should be clearly referenced in the Project File/ESR and regularly monitored during the construction stage of the project. In addition, we encourage proponents to conduct post-construction monitoring to ensure all mitigation measures have been effective and are functioning properly.

- Design and construction reports and plans should be based on a best management approach that centres on the prevention of impacts, protection of the existing environment, and opportunities for rehabilitation and enhancement of any impacted areas.

- The proponent's construction and post-construction monitoring plans must be documented in the Project File/ESR, as outlined in Section A.2.5 and A.4.1 of the MEA Class EA parent document.

Consultation

- The Project File/ESR must demonstrate how the consultation provisions of the Class EA have been fulfilled, including documentation of all stakeholder consultation efforts undertaken during the planning process. This includes a discussion in the Project File/ESR that identifies concerns that were raised and **describes how they have been addressed by the proponent** throughout the planning process. The Class EA also directs proponents to include copies of comments submitted on the project by interested stakeholders, and the proponent's responses to these comments.

Class EA Process

- The Project File/ESR should provide clear and complete documentation of the planning process in order to allow for transparency in decision-making.

- If this project is a Master Plan: there are several different approaches that can be used to conduct a Master Plan, examples of which are outlined in Appendix 4 of the Class EA. The Master Plan should clearly indicate the selected approach for conducting the plan, in particular by identifying whether the levels of assessment, consultation and documentation are sufficient to fulfill the requirements for Schedule B or C projects. Please note that any Schedule B or C projects identified in the plan would be subject to Part II Order Requests under the *Environmental Assessment Act* (EAA), although the plan itself would not be.

- The Class EA requires the consideration of the effects of each alternative on all aspects of the environment. The Project File/ESR should include a level of detail (e.g. hydrogeological investigations, terrestrial and aquatic assessments) such that all potential impacts can be identified and appropriate mitigation measures can be developed. Any supporting studies conducted during the Class EA process should be referenced and included as part of the Project File/ESR.

- Please include in the Project File/ESR a list of all subsequent permits or approvals that may be required for the implementation of the preferred alternative, including but not limited to, MECP's PTTW, EASR Registrations and ECAs, conservation authority permits, species at risk permits, and approvals under the *Canadian Environmental Assessment Act* (CEAA).

- Ministry guidelines and other information related to the issues above are available at http://www.ontario.ca/environment-and-energy/environment-and-energy. We encourage you to review all the available guides and to reference any relevant information in the Project File/ESR.

DEFINITIONS

The following definitions are specific to this document and may not apply in other contexts:

Aboriginal communities – the First Nation or Métis communities identified by the Crown for the purpose of consultation.

Consultation – the Crown's legal obligation to consult when the Crown has knowledge of an established or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. This is the type of consultation required pursuant to s. 35 of the *Constitution Act, 1982*. Note that this definition does not include consultation with Aboriginal communities for other reasons, such as regulatory requirements.

Crown – the Ontario Crown, acting through a particular ministry or ministries.

Procedural aspects of consultation – those portions of consultation related to the process of consultation, such as notifying an Aboriginal community about a project, providing information about the potential impacts of a project, responding to concerns raised by an Aboriginal community and proposing changes to the project to avoid negative impacts.

Proponent – the person or entity that wants to undertake a project and requires an Ontario Crown decision or approval for the project.

I. PURPOSE

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that may adversely impact that right. In outlining a framework for the duty to consult, the Supreme Court of Canada has stated that the Crown may delegate procedural aspects of consultation to third parties. This document provides general information about the Ontario Crown's approach to delegation of the procedural aspects of consultation to proponents.

This document is not intended to instruct a proponent about an individual project, and it does not constitute legal advice.

II. WHY IS IT NECESSARY TO CONSULT WITH ABORIGINAL COMMUNITIES?

The objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective rights, claims and interests. Consultation is an important component of the reconciliation process.

The Crown has a legal duty to consult Aboriginal communities when it has knowledge of an existing or asserted Aboriginal or treaty right and contemplates conduct that might adversely impact that right. For example, the Crown's duty to consult is triggered when it considers issuing a permit, authorization or approval for a project which has the potential to adversely impact an Aboriginal right, such as the right to hunt, fish, or trap in a particular area.

The scope of consultation required in particular circumstances ranges across a spectrum depending on both the nature of the asserted or established right and the seriousness of the potential adverse impacts on that right.

Depending on the particular circumstances, the Crown may also need to take steps to accommodate the potentially impacted Aboriginal or treaty right. For example, the Crown may be required to avoid or minimize the potential adverse impacts of the project.

III. THE CROWN'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

The Crown has the responsibility for ensuring that the duty to consult, and accommodate where appropriate, is met. However, the Crown may delegate the procedural aspects of consultation to a proponent.

There are different ways in which the Crown may delegate the procedural aspects of consultation to a proponent, including through a letter, a memorandum of understanding, legislation, regulation, policy and codes of practice.

If the Crown decides to delegate procedural aspects of consultation, the Crown will generally:

- Ensure that the delegation of procedural aspects of consultation and the responsibilities of the proponent are clearly communicated to the proponent;
- Identify which Aboriginal communities must be consulted;
- Provide contact information for the Aboriginal communities;
- Revise, as necessary, the list of Aboriginal communities to be consulted as new information becomes available and is assessed by the Crown;
- Assess the scope of consultation owed to the Aboriginal communities;
- Maintain appropriate oversight of the actions taken by the proponent in fulfilling the procedural aspects of consultation;
- Assess the adequacy of consultation that is undertaken and any accommodation that may be required;
- Provide a contact within any responsible ministry in case issues arise that require direction from the Crown; and
- Participate in the consultation process as necessary and as determined by the Crown.

IV. THE PROPONENT'S ROLE AND RESPONSIBILITIES IN THE DELEGATED CONSULTATION PROCESS

Where aspects of the consultation process have been delegated to a proponent, the Crown, in meeting its duty to consult, will rely on the proponent's consultation activities and documentation of those activities. The consultation process informs the Crown's decision of whether or not to approve a proposed project or activity.

A proponent's role and responsibilities will vary depending on a variety of factors including the extent of consultation required in the circumstance and the procedural aspects of consultation the Crown has delegated to it. Proponents are often in a better position than the Crown to discuss a project and its potential impacts with Aboriginal communities and to determine ways to avoid or minimize the adverse impacts of a project.

A proponent can raise issues or questions with the Crown at any time during the consultation process. If issues or concerns arise during the consultation that cannot be addressed by the proponent, the proponent should contact the Crown.

a) What might a proponent be required to do in carrying out the procedural aspects of consultation?

Where the Crown delegates procedural aspects of consultation, it is often the proponent's responsibility to provide notice of the proposed project to the identified Aboriginal communities. The notice should indicate that the Crown has delegated the procedural aspects of consultation to the proponent and should include the following information:

- a description of the proposed project or activity;
- mapping;
- proposed timelines;
- details regarding anticipated environmental and other impacts;
- details regarding opportunities to comment; and
- any changes to the proposed project that have been made for seasonal conditions or other factors, where relevant.

Proponents should provide enough information and time to allow Aboriginal communities to provide meaningful feedback regarding the potential impacts of the project. Depending on the nature of consultation required for a project, a proponent also may be required to:

- provide the Crown with copies of any consultation plans prepared and an opportunity to review and comment;
- ensure that any necessary follow-up discussions with Aboriginal communities take place in a timely manner, including to confirm receipt of information, share and update information and to address questions or concerns that may arise;
- as appropriate, discuss with Aboriginal communities potential mitigation measures and/or changes to the project in response to concerns raised by Aboriginal communities;
- use language that is accessible and not overly technical, and translate material into Aboriginal languages where requested or appropriate;
- bear the reasonable costs associated with the consultation process such as, but not limited to, meeting hall rental, meal costs, document translation(s), or to address technical & capacity issues;
- provide the Crown with all the details about potential impacts on established or asserted Aboriginal or treaty rights, how these concerns have been considered and addressed by the proponent and the Aboriginal communities and any steps taken to mitigate the potential impacts;
- provide the Crown with complete and accurate documentation from these meetings and communications; and
- notify the Crown immediately if an Aboriginal community not identified by the Crown approaches the proponent seeking consultation opportunities.

b) What documentation and reporting does the Crown need from the proponent?

Proponents should keep records of all communications with the Aboriginal communities involved in the consultation process and any information provided to these Aboriginal communities.

As the Crown is required to assess the adequacy of consultation, it needs documentation to satisfy itself that the proponent has fulfilled the procedural aspects of consultation delegated to it. The documentation required would typically include:

- the date of meetings, the agendas, any materials distributed, those in attendance and copies of any minutes prepared;
- the description of the proposed project that was shared at the meeting;
- any and all concerns or other feedback provided by the communities;
- any information that was shared by a community in relation to its asserted or established Aboriginal or treaty rights and any potential adverse impacts of the proposed activity, approval or disposition on such rights;
- any proposed project changes or mitigation measures that were discussed, and feedback from Aboriginal communities about the proposed changes and measures;
- any commitments made by the proponent in response to any concerns raised, and feedback from Aboriginal communities on those commitments;
- copies of correspondence to or from Aboriginal communities, and any materials distributed electronically or by mail;
- information regarding any financial assistance provided by the proponent to enable participation by Aboriginal communities in the consultation;
- periodic consultation progress reports or copies of meeting notes if requested by the Crown;
- a summary of how the delegated aspects of consultation were carried out and the results; and
- a summary of issues raised by the Aboriginal communities, how the issues were addressed and any outstanding issues.

In certain circumstances, the Crown may share and discuss the proponent's consultation record with an Aboriginal community to ensure that it is an accurate reflection of the consultation process.

c) Will the Crown require a proponent to provide information about its commercial arrangements with Aboriginal communities?

The Crown may require a proponent to share information about aspects of commercial arrangements between the proponent and Aboriginal communities where the arrangements:

- include elements that are directed at mitigating or otherwise addressing impacts of the project;
- include securing an Aboriginal community's support for the project; or
- may potentially affect the obligations of the Crown to the Aboriginal communities.

The proponent should make every reasonable effort to exempt the Crown from confidentiality provisions in commercial arrangements with Aboriginal communities to the extent necessary to allow this information to be shared with the Crown.

The Crown cannot guarantee that information shared with the Crown will remain confidential. Confidential commercial information should not be provided to the Crown as part of the consultation record if it is not relevant to the duty to consult or otherwise required to be submitted to the Crown as part of the regulatory process.

V. WHAT ARE THE ROLES AND RESPONSIBILITIES OF ABORIGINAL COMMUNITIES' IN THE CONSULTATION PROCESS?

Like the Crown, Aboriginal communities are expected to engage in consultation in good faith. This includes:

- responding to the consultation notice;
- engaging in the proposed consultation process;
- providing relevant documentation;
- clearly articulating the potential impacts of the proposed project on Aboriginal or treaty rights; and
- discussing ways to mitigates any adverse impacts.

Some Aboriginal communities have developed tools, such as consultation protocols, policies or processes that provide guidance on how they would prefer to be consulted. Although not legally binding, proponents are encouraged to respect these community processes where it is reasonable to do so. Please note that there is no obligation for a proponent to pay a fee to an Aboriginal community in order to enter into a consultation process.

To ensure that the Crown is aware of existing community consultation protocols, proponents should contact the relevant Crown ministry when presented with a consultation protocol by an Aboriginal community or anyone purporting to be a representative of an Aboriginal community.

VI. WHAT IF MORE THAN ONE PROVINCIAL CROWN MINISTRY IS INVOLVED IN APPROVING A PROPONENT'S PROJECT?

Depending on the project and the required permits or approvals, one or more ministries may delegate procedural aspects of the Crown's duty to consult to the proponent. The proponent may contact individual ministries for guidance related to the delegation of procedural aspects of consultation for ministry-specific permits/approvals required for the project in question. Proponents are encouraged to seek input from all involved Crown ministries sooner rather than later.

Andrea LaPlante

From: [redacted]
Sent: Wednesday, July 25, 2018 5:23 PM
To: Andrea LaPlante
Subject: Re: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Thank you for your email below. This will confirm (per the last para of your covering letter) that I wish to continue to receive information pertaining to the study.

I assume there is no objection to my distributing the information to the other 23 residents at Fairwood Place West.

Regards,
[redacted]

On 7/25/2018 4:15:39 PM, Andrea LaPlante <laplantea@ae.ca> wrote:

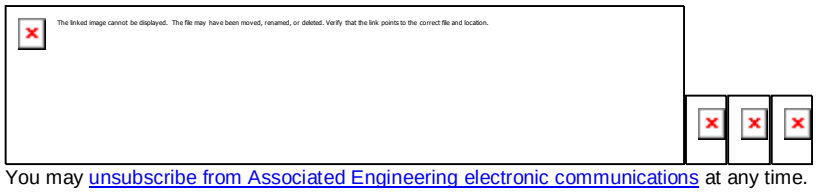
Good afternoon,

Please find attached the Notice of Commencement for the Class EA Study for *West Aldershot Creek Erosion Control* in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804



You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

Andrea LaPlante

From: [redacted]
Sent: Friday, July 27, 2018 4:49 PM
To: Andrea LaPlante
Cc: Umar.malik@burlington.ca
Subject: West Aldershot Creek EA

I would like to receive all pertinent information, ideally via email, pertaining to the West Aldershot Creek Erosion Control Class EA.

I am a resident living within 100m of the study area. Thank you.

[redacted]

Andrea LaPlante

From: [redacted]
Sent: Friday, July 27, 2018 4:19 PM
To: Andrea LaPlante
Cc: Malik, Umar
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Good afternoon,
Thank you for providing this information.
FYI the follow City-identified cultural heritage resources are located in proximity to the study area:
Properties listed on Municipal Register of Cultural Heritage Resources:

- 944 Lasalle Park Road (listed on the Municipal Register but not designated)
- 50 North Shore Blvd East (Lasalle Park Pavilion, designated under Part IV of Ontario Heritage Act)

Properties not listed on Municipal Register but otherwise identified by the City as having potential cultural heritage value (this list has not been regularly updated since 2011 so some of these resources may have been demolished):

- 26 Fairwood Place West
- 928 Lasalle Park Road
- 938 Lasalle Park Road
- 956 Lasalle Park Road
- 976 Lasalle Park Road
- 982 Lasalle Park Road

Please let me know if you have any questions for me.
Regards,

[redacted]
Planner - Development Review & Heritage
Department of City Building - Planning Division
City of Burlington
426 Brant Street, Burlington L7R 3Z6
[redacted]

Please consider the environment before printing this email.

From: Andrea LaPlante [mailto:laplantea@ae.ca]
Sent: Wednesday, July 25, 2018 4:03 PM
To: Mailbox, Heritage
Subject: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Good afternoon,

Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804



You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

This message, including any attachments, is privileged and intended only for the addressee(s) named above. If you are not the intended recipient, you must not read, use or disseminate the information contained in this email/fax. If you have received this email/fax transmission in error, please notify the sender immediately by telephone, fax or email and permanently delete this email from your computer/shred this fax, including any attachments, without making a copy. Access to this email/fax by anyone else is unauthorized. Thank you.

Andrea LaPlante

From: [redacted]
Sent: Monday, July 30, 2018 11:37 AM
To: Andrea LaPlante
Cc: [redacted]
Subject: Re: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Hi Andrea,

Yes, I would like to continue to receive further information pertaining to the Class Environmental Assessment for West Aldershot Creek Erosion Control.

Kind regards,

[redacted]
Principal
Aldershot School
50 Fairwood Place West
Burlington ON L7T 1E5
905 637 2383 Ext 222
[redacted]

On Wed, Jul 25, 2018 at 4:10 PM, Andrea LaPlante <laplantea@ae.ca> wrote:

> Good afternoon,
>
> Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.
>
> Please contact me if you have any questions or would like to receive information as it becomes available.
>
> Regards
>
> **Andrea LaPlante,** P.Eng.
> Class EA Lead
> **Associated Engineering (Ont.) Ltd.**
> Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
> Tel: 905.346.0990 | Dir: 289-434-4804

Andrea LaPlante

From: [redacted]
Sent: Wednesday, July 25, 2018 10:29 PM
To: Andrea LaPlante
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Hi Andrea-As per your request I would like to continue to receive any study information that is available for release to the public. Thanks for current information Regards Bert.

From: Andrea LaPlante [mailto:laplantea@ae.ca]
Sent: 25-Jul-18 4:16 PM
To: [redacted]
Subject: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Good afternoon,

Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804

Associated Engineering GLOBAL PERSPECTIVE. LOCAL FOCUS. CANADA'S BEST MANAGED COMPANIES Platinum member

You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

Andrea LaPlante

From: [redacted]
Sent: Wednesday, July 25, 2018 4:12 PM
To: Andrea LaPlante; [redacted]
Subject: Re: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement
Attachments: image004.gif

Follow Up Flag: Follow up
Flag Status: Completed

Hello Andrea,

I have copied [redacted] our Superintendent of Facilities. You would work with her department on this study.

Thanks,

[redacted]

[redacted]
Superintendent of Education
Halton District School Board
2050 Guelph Line
Burlington, ON, L7R 3Z2
Phone: 905-335-3665

On Wed, Jul 25, 2018, 4:08 PM Andrea LaPlante, <laplantea@ae.ca> wrote:

> Good afternoon,
>
> Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.
>
> Please contact me if you have any questions or would like to receive information as it becomes available.
>
> Regards
>
> **Andrea LaPlante,** P.Eng.
> Class EA Lead
> **Associated Engineering (Ont.) Ltd.**
> Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0

Andrea LaPlante

From: [redacted]
Sent: Wednesday, July 25, 2018 6:55 PM
To: Andrea LaPlante
Subject: Re: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Thank you! It will be distributed to the residents,
Regards,
[redacted]
FP West

On 7/25/2018 5:56:15 PM, Andrea LaPlante <laplantea@ae.ca> wrote:

[redacted]

Yes I have provided the information to yourself and Bert with the hope you will distribute to the residents.

Regards

Andrea LaPlante

Get Outlook for Android

From: [redacted]
Sent: Wednesday, July 25, 5:23 PM
Subject: Re: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement
To: Andrea LaPlante

Thank you for your email below. This will confirm (per the last para of your covering letter) that I wish to continue to receive information pertaining to the study.

I assume there is no objection to my distributing the information to the other 23 residents at Fairwood Place West.

Regards,
[redacted]

> On 7/25/2018 4:15:39 PM, Andrea LaPlante <laplantea@ae.ca> wrote:
> Good afternoon,
>
> Please find attached the Notice of Commencement for the Class EA Study for *West Aldershot Creek Erosion Control* in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804

You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

Andrea LaPlante

From: [redacted]
Sent: Wednesday, August 29, 2018 10:54 AM
To: umar.malik@burlington.ca; Andrea LaPlante
Cc: [redacted]
Subject: EA - West Aldershot Creek Erosion Control _City of Burlingon- Hydro One Not Impact
Attachments: EA_Notice of Commencement_West Aldershot Creek Erosion Control_City of Burlington_Aug 29-2018.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Dear Umar Malik and Andrea LaPlante,

In our initial review, we can confirm that there are no Hydro One Transmission (above 115 kV) Facilities in the subject area. Please note there may also be Hydro One Distribution facilities in your study area (ie. Distribution wires operating below 115 kV). In order to cover off the impact to all Hydro One assets, please also forward your EA to the following email address:

WesternFBCPlanning@hydroone.com

Please be advised that this is only a preliminary assessment based on current information. No further consultation with Hydro One Networks Inc. is required if no changes are made to the current information.

If you have any further questions or concerns, please feel free to contact me.

Regards,

[redacted] Officer, Secondary Land Use

Hydro One Networks Inc.
483 Bay St. | North Tower | 13th Floor
Toronto, ON | M5G 2P5

Tel: 416.345.5676
[redacted]

www.HydroOne.com

On behalf of

Secondary Land Use
Strategy & Integrated Planning
Hydro One Networks

This email and any attached files are privileged and may contain confidential information intended only for the person

Andrea LaPlante

From: [redacted]
Sent: Wednesday, August 22, 2018 4:18 PM
To: Andrea LaPlante
Cc: [redacted]
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement
Attachments: WestAldershotCreekEA_WInfrastructure.pdf; WestAldershotCreekEA_WWInfrastructure.pdf; WestAldershotCreekEA_FutureInfrastructure.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Andrea,

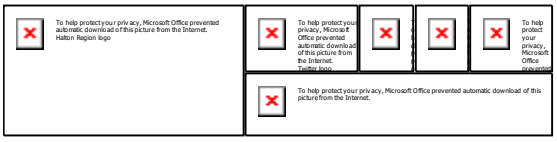
Thank you for the opportunity to participate in the West Aldershot Creek Erosion Control Class EA.

We have reviewed existing and planned water and wastewater infrastructure in Study Area. The attached maps display: 1) existing water infrastructure, 2) existing wastewater infrastructure, and 3) a future wastewater project along LaSalle Park Rd. (planned construction start 2021).

We request that potential impacts to these utilities be considered through the Class EA, and that we continue to be copied on correspondence related to the Study.

Kind regards,
[redacted]

[redacted] [redacted]
Project Manager II
Infrastructure Planning & Policy
Public Works
Halton Region
905-825-6000, ext. [redacted] | 1-866-442-5866



This message, including any attachments, is intended only for the person(s) named above and may contain confidential and/or privileged information. Any use, distribution, copying or disclosure by anyone other than the intended recipient is strictly prohibited. If you are not the intended recipient, please notify us immediately by telephone or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

From: [redacted]
Sent: Saturday, August 04, 2018 12:04 PM

To: 'Andrea LaPlante'
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Hi Andrea,

Thank you for sending me the Notice of Study Commencement. We would like to continue to receive information as it becomes available.

[redacted]

From: Andrea LaPlante [mailto:laplantea@ae.ca]
Sent: Wednesday, July 25, 2018 4:14 PM
To: [redacted]
Subject: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Good afternoon,

Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

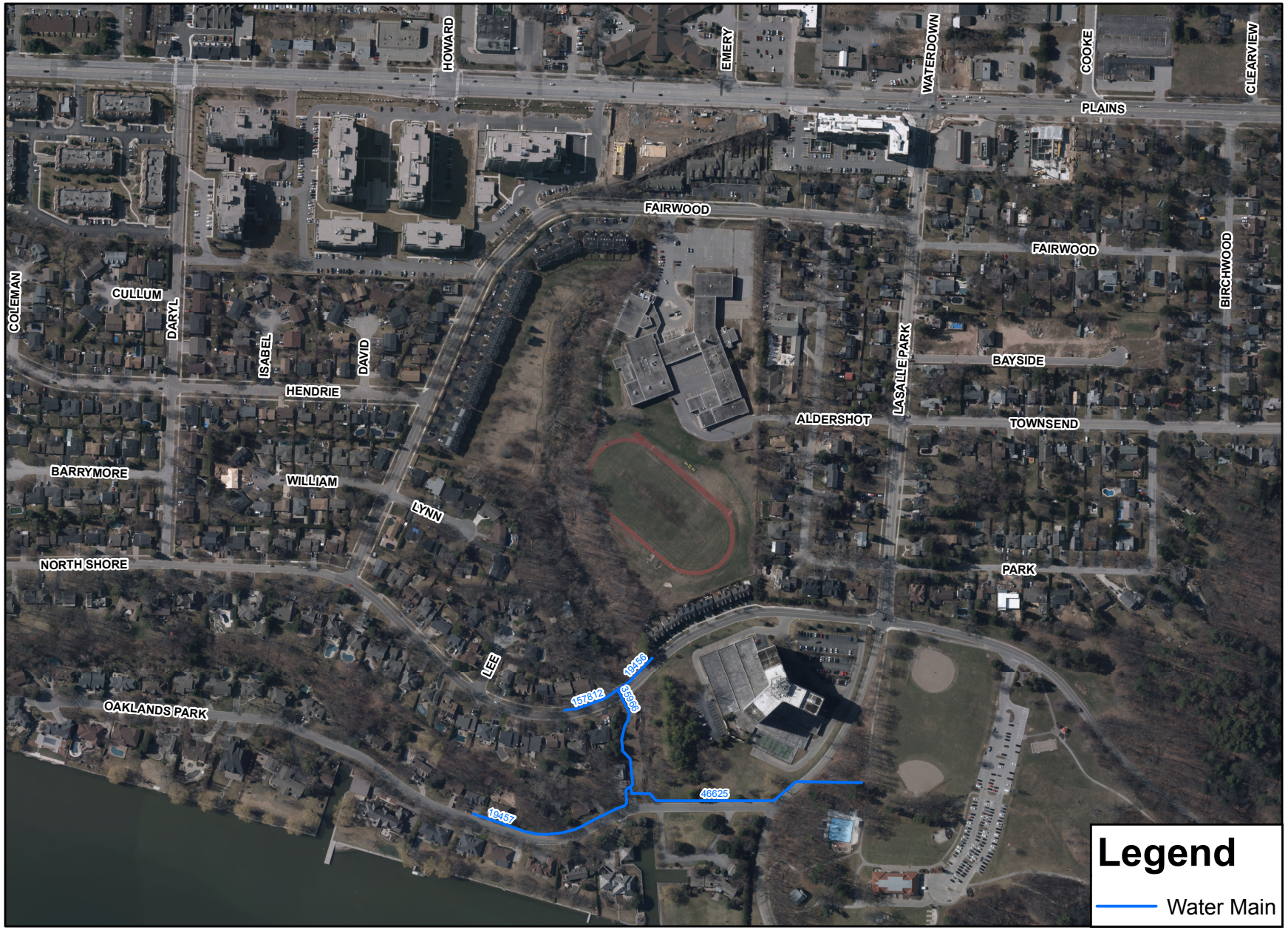
Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804



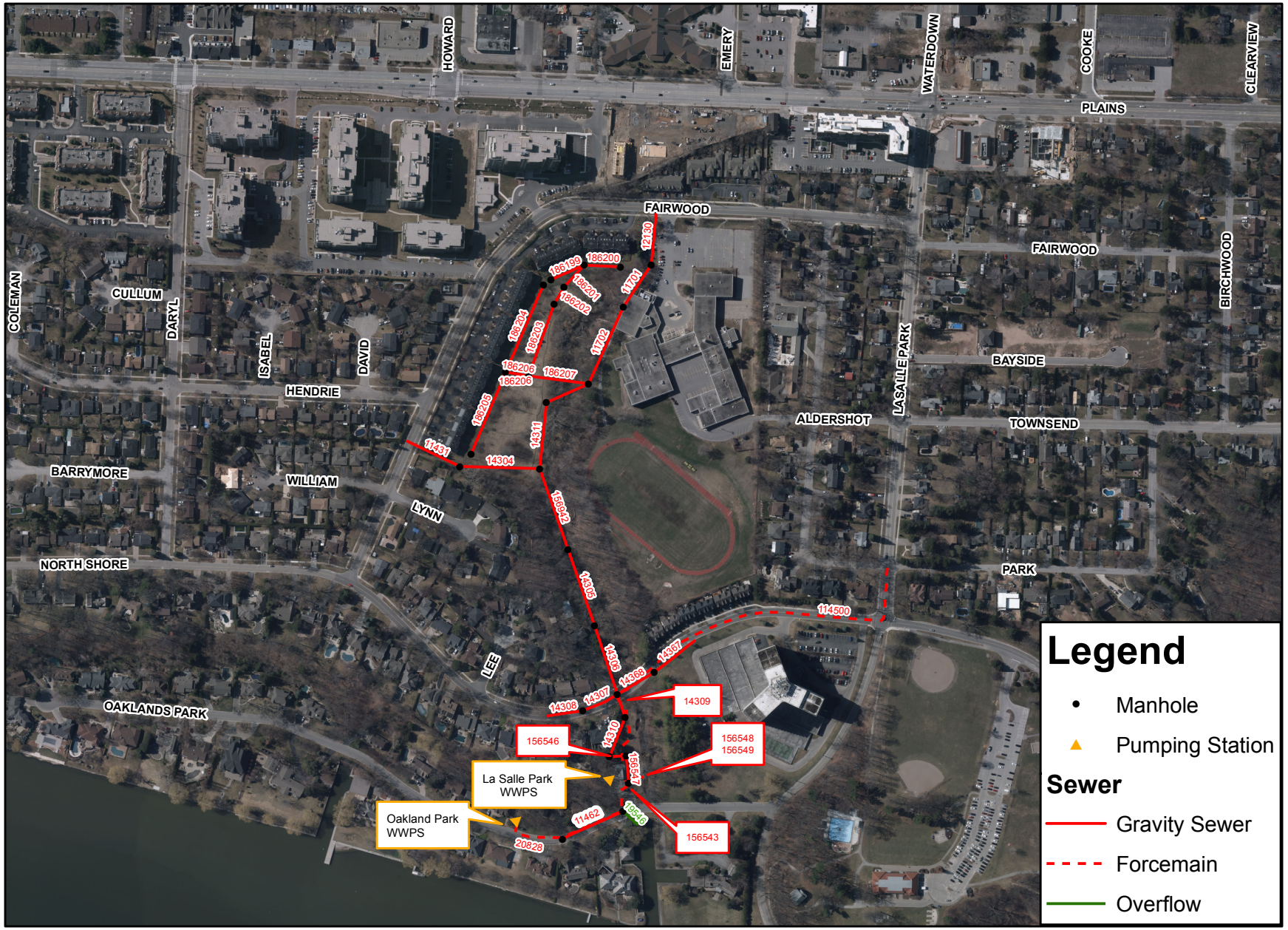
You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

Existing Water Infrastructure



Existing Wastewater Infrastructure



Planned Halton Region Infrastructure



Andrea LaPlante

From: Malik, Umar <Umar.Malik@burlington.ca>
Sent: Friday, August 24, 2018 10:36 AM
To: [redacted]
Cc: Daca, Amy; Stan Mathew; Andrea LaPlante
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA

Good morning [redacted],

I work for the City of Burlington and I am managing the Aldershot Erosion Control Class EA. Thank you for providing Region's infrastructure mapping to the EA study team.

A couple of quick questions please:

1. There appears to be an inconsistency on the Planned Infrastructure map. The planned 375mm WWM is labelled as being on Lasalle Park Road whereas it runs along Fairwood Place and Northshore Blvd

2. Will the new planned infrastructure (375mm WWM) replace any sections of the existing infrastructure shown on the Existing Infrastructure mapping? If true, will any of those replaced sections be decommissioned?

Thank you once again for providing the infrastructure maps. As requested, we will make sure the Region is copied on all correspondence related to the study.

Regards

Umar Malik, M.Eng., P.Eng
Stormwater Engineer
Capital Works Department

P. 905-335-7600, ext 7426| **E.** umar.malik@burlington.ca
Address 426 Brant Street P.O. Box 5013, Burlington, Ontario, L7R 3Z6
City of Burlington | www.burlington.ca

Please consider the environment before printing this e-mail.

From: Andrea LaPlante <laplantea@ae.ca>
Sent: Friday, August 24, 2018 8:59 AM
To: Malik, Umar <Umar.Malik@burlington.ca>
Cc: Daca, Amy <Amy.Daca@burlington.ca>; Stan Mathew <mathews@ae.ca>
Subject: FW: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Umar,

For your information, please find attached mapping from the Region indicating existing watermain and wastewater main infrastructure as well as planned infrastructure. They indicated planned WW infrastructure within our study area to be constructed in 2021. As our study progresses, we need to be aware of this and discuss coordination and details with the Region and how it will affect our undertaking.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804



You may unsubscribe from Associated Engineering electronic communications at any time.

From: [redacted]
Sent: Wednesday, August 22, 2018 4:18 PM
To: Andrea LaPlante <laplantea@ae.ca>
Cc: [redacted]
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Hi Andrea,

Thank you for the opportunity to participate in the West Aldershot Creek Erosion Control Class EA.

We have reviewed existing and planned water and wastewater infrastructure in Study Area. The attached maps display: 1) existing water infrastructure, 2) existing wastewater infrastructure, and 3) a future wastewater project along LaSalle Park Rd. (planned construction start 2021).

We request that potential impacts to these utilities be considered through the Class EA, and that we continue to be copied on correspondence related to the Study.

Kind regards,
[redacted]

[redacted]
Project Manager II
Infrastructure Planning & Policy
Public Works
Halton Region
905-825-6000, ext. [redacted] | 1-866-442-5866

This message, including any attachments, is intended only for the person(s) named above and may contain confidential and/or privileged information. Any use, distribution, copying or disclosure by anyone other than the intended recipient is strictly prohibited. If you are not the intended recipient, please notify us immediately by telephone or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

From: [redacted]
Sent: Saturday, August 04, 2018 12:04 PM
To: 'Andrea LaPlante'
Subject: RE: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Hi Andrea,

Thank you for sending me the Notice of Study Commencement. We would like to continue to receive information as it becomes available.

[redacted]

From: Andrea LaPlante [mailto:laplantea@ae.ca]
Sent: Wednesday, July 25, 2018 4:14 PM
To: [redacted]
Subject: City of Burlington - West Aldershot Creek Erosion Control Class EA - Notice of Commencement

Good afternoon,

Please find attached the Notice of Commencement for the Class EA Study for West Aldershot Creek Erosion Control in the City of Burlington for your information.

Please contact me if you have any questions or would like to receive information as it becomes available.

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804



You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

Andrea LaPlante

From: [redacted]
Sent: Monday, August 20, 2018 10:33 AM
To: Andrea LaPlante
Cc: [redacted]
Subject: RE: West Aldershot Creek Erosion Control Class EA

Follow Up Flag: Follow up
Flag Status: Flagged

Hello Andrea. Thank you for the notice for the Class EA Study in West Aldershot Creek. The source protection plan for the Halton Region Source Protection Area does not include any policies applicable to this study. From a drinking water source protection perspective the erosion controls resulting from this study will benefit water quality and we thank the City of Burlington for beginning this initiative.

I have copied Dan Banks, Supervisor Water Resources Planning with Halton Region as the Region's source protection office could also assist with future projects. Please call if you have any further questions.

[redacted]
Manager, Source Water Protection

2596 Britannia Road West, Burlington, ON L7P 0G3 Please note new address and phone number.
905-336-1158 ext. [redacted] | Cell [redacted] | Fax 905-336-6684
www.protectingwater.ca

Thank you for thinking about the environment before printing this e-mail. If you are not an intended recipient, you must not disclose, copy, or distribute its contents or use them in any way. Please advise the sender immediately and delete this e-mail.

From: Andrea LaPlante <laplantea@ae.ca>
Sent: August-17-18 2:06 PM
To: [redacted]
Cc: [redacted]
Subject: West Aldershot Creek Erosion Control Class EA

Good afternoon Diane,

Associated Engineering (AE) has been retained by the City of Burlington to complete a Class EA Study for West Aldershot Creek Erosion Control. Upon circulation of Notice of Project to the Ministry of Environment, Conservation and Parks (MECP), it was recommended that the local source water protection authority be contacted to discuss impacts of our project on drinking water. You were identified by the MECP as our contact for this project.

Please find attached the Notice of Commencement for the Class EA Study for your information. If you could provide any preliminary information regarding source water protection that would be applicable to our undertaking that would be greatly appreciated.

I have included Heather Dearlove on this email as she is the designated contact between our project team and Conservation Halton.

Please contact me if you have any questions regarding the enclosed information.

Regards,

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804



You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

Andrea LaPlante

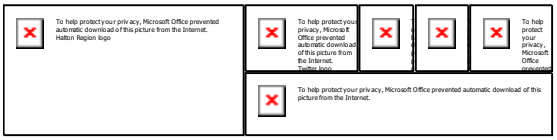
From: [redacted]
Sent: Monday, August 20, 2018 11:53 AM
To: [redacted]; Andrea LaPlante
Cc: [redacted]; umar.malik@burlington.ca; [redacted]
Subject: Re: West Aldershot Creek Erosion Control Class EA

Follow Up Flag: Follow up
Flag Status: Flagged

Thanks, [redacted].
We provided similar input as part of a consolidated Region response.
Regards,
[redacted]

Sent from my BlackBerry 10 smartphone on the Bell network.

[redacted]
Supervisor Water Resources Planning
Infrastructure Planning & Policy
Public Works
Halton Region
905-825-6000, ext. [redacted] | 1-866-442-5866



This message, including any attachments, is intended only for the person(s) named above and may contain confidential and/or privileged information. Any use, distribution, copying or disclosure by anyone other than the intended recipient is strictly prohibited. If you are not the intended recipient, please notify us immediately by telephone or e-mail and permanently delete the original transmission from us, including any attachments, without making a copy.

From: [redacted]
Sent: Monday, August 20, 2018 11:43 AM
To: Andrea LaPlante
Cc: [redacted] umar.malik@burlington.ca
Subject: RE: West Aldershot Creek Erosion Control Class EA

Hello Andrea. Thank you for the notice for the Class EA Study in West Aldershot Creek. The source protection plan for the Halton Region Source Protection Area does not include any policies applicable to this study. From a drinking water source protection perspective the erosion controls resulting from this study will benefit water quality and we thank the City of Burlington for beginning this initiative.

I have copied Dan Banks, Supervisor Water Resources Planning with Halton Region as the Region's source protection office could also assist with future projects. Please call if you have any further questions.

[redacted]

Manager, Source Water Protection

2596 Britannia Road West, Burlington, ON L7P 0G3 Please note new address and phone number.
905-336-1158 ext. [redacted] | Cell [redacted] | Fax 905-336-6684
www.protectingwater.ca

Thank you for thinking about the environment before printing this e-mail. If you are not an intended recipient, you must not disclose, copy, or distribute its contents or use them in any way. Please advise the sender immediately and delete this e-mail.

From: Andrea LaPlante <laplantea@ae.ca>
Sent: August-17-18 2:06 PM
To: [redacted]
Cc: [redacted]
Subject: West Aldershot Creek Erosion Control Class EA

Good afternoon Diane,

Associated Engineering (AE) has been retained by the City of Burlington to complete a Class EA Study for West Aldershot Creek Erosion Control. Upon circulation of Notice of Project to the Ministry of Environment, Conservation and Parks (MECP), it was recommended that the local source water protection authority be contacted to discuss impacts of our project on drinking water. You were identified by the MECP as our contact for this project.

Please find attached the Notice of Commencement for the Class EA Study for your information. If you could provide any preliminary information regarding source water protection that would be applicable to our undertaking that would be greatly appreciated.

I have included Heather Dearlove on this email as she is the designated contact between our project team and Conservation Halton.

Please contact me if you have any questions regarding the enclosed information.

Regards,
Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS. BEST MANAGED COMPANIES Platinum member

You may unsubscribe from Associated Engineering electronic communications at any time.

You may unsubscribe from Associated's electronic communications at any time.

Andrea LaPlante

From: [redacted]
Sent: Tuesday, September 4, 2018 3:12 PM
To: Andrea LaPlante
Cc: umar.malik@burlington.ca
Subject: West Aldershot Creek Erosion Control Municipal Class EA
Attachments: 2018-09-04 - West Aldershot Creek Erosion MTCS comments.pdf

Follow Up Flag: Follow up
Flag Status: Completed

Good afternoon Andrea,

Please find attached a letter from the Ministry of Tourism, Culture and Sport regarding the notice of commencement for the above mentioned project. Thank you for circulating us on the notification.

Regards,

[redacted]
Heritage Planner
Heritage Program | Programs and Services Branch | Ministry of Tourism, Culture and Sport
401 Bay Street Suite 1700 Toronto ON M7A 0A7
Tel. [redacted] | email: [redacted]

Ministry of Tourism, Culture and Sport

Heritage Program Unit
Programs and Services Branch
401 Bay Street, Suite 1700
Toronto ON M7A 0A7
Tel: 416 314 3108

Ministère du Tourisme, de la Culture et du Sport

Unité des programmes patrimoine
Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto ON M7A 0A7
Tél: 416 416 314 3108

Ontario

September 4, 2018 EMAIL ONLY

Andrea LaPlante, Class EA Lead
Associated Engineering (Ont.) Ltd.
509 Glendale Ave E. Suite 300
Niagara-on-the-Lake, ON L0S 1J0
laplantea@ae.ca

MTCS File #	**:**	**0009396**
Proponent	**:**	**City of Burlington**
Subject	**:**	**Notice of Commencement – Municipal Class EA**
Project	**:**	**West Aldershot Creek Erosion Control**
Location	**:**	**City of Burlington**

Dear Andrea LaPlante:

Thank you for providing the Ministry of Tourism, Culture and Sport (MTCS) with the Notice of Commencement for the above-referenced project. MTCS's interest in this Environmental Assessment (EA) project relates to its mandate of conserving Ontario's cultural heritage, which includes:

- Archaeological resources, including land and marine;
- Built heritage resources, including bridges and monuments; and,
- Cultural heritage landscapes.

Under the EA process, the proponent is required to determine a project's potential impact on cultural heritage resources. The recommendations below are for a Schedule B Municipal Class EA project, as described in the notice of study commencement. If any municipal bridges may be impacted by this project, we can provide additional screening documentation as formulated by the Municipal Engineers Association in consultation with MTCS.

Project Summary
This Class EA will identify the needs and opportunities for the implementation of erosion control mitigation measures for West Aldershot Creek between Fairwood Place and Lake Ontario in the City of Burlington. This section of West Aldershot Creek is experiencing accelerated erosion along the bed and banks of the creek, including severe undercuts resulting in loss of trees and bank material, due to rapid routing of surface runoff and floodwater during storm events.

Identifying Cultural Heritage Resources
While some cultural heritage resources may have already been formally identified, others may be identified through screening and evaluation. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to these communities. Municipal Heritage Committees, historical societies and other local heritage organizations may also have knowledge that contributes to the identification of cultural heritage resources.

Archaeological Resources
This EA project may impact archaeological resources and you should screen the project with the MTCS *Criteria for Evaluating Archaeological Potential* to determine if an archaeological assessment is needed. MTCS archaeological sites data are available at *archaeology@ontario.ca*. If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licenced under the *OHA*, who is responsible for submitting the report directly to MTCS for review.

Built Heritage and Cultural Heritage Landscapes
The MTCS *Criteria for Evaluating Potential for Built Heritage Resources and Cultural Heritage Landscapes* should be completed to help determine whether this EA project may impact cultural heritage resources. The Clerk for the City of Burlington can provide information on property registered or designated under the *Ontario Heritage Act*. Municipal Heritage Planners can also provide information that will assist you in completing the checklist.

If potential or known heritage resources exist, MTCS recommends that a Heritage Impact Assessment (HIA), prepared by a qualified consultant, should be completed to assess potential project impacts. Our Ministry's *Info Sheet #5: Heritage Impact Assessments and Conservation Plans* outlines the scope of HIAs. Please send the HIA to MTCS for review, and make it available to local organizations or individuals who have expressed interest in review.

Environmental Assessment Reporting
All technical cultural heritage studies and their recommendations are to be addressed and incorporated into EA projects. Please advise MTCS whether any technical heritage studies will be completed for this EA project, and provide them to MTCS before issuing a Notice of Completion. If screening has identified no known or potential cultural heritage resources, or no impacts to these resources, please include the completed checklists and supporting documentation in the EA report or file.

Thank you for consulting MTCS on this project and please continue to do so throughout the EA process. If you have any questions or require clarification, do not hesitate to contact me.

Sincerely,

[redacted]
Heritage Planner
[redacted]

Copied to: Umar Malik, Project Manager, City of Burlington

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MTCS makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MTCS be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MTCS if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the *Standards and Guidelines for Consultant Archaeologists*.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services (416-326-8800) must be contacted. In situations where human remains are associated with archaeological resources, MTCS should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

Andrea LaPlante

From:	Stan Mathew
Sent:	Wednesday, August 22, 2018 6:57 PM
To:	Malik, Umar; Daca, Amy
Cc:	Andrea LaPlante
Subject:	FW: MNRF Data Request for Aldershot Creek Erosion Control EA (PECG 140326)
Attachments:	MNRF Letter.pdf

Hi all,

For your records, attached is recent correspondence with MNRF.
Austin (Palmer) also provides his current status and action items below.

Regards,
Stan

From: Austin Adams <austin@pecg.ca>
Sent: Wednesday, August 22, 2018 11:49 AM
To: Stan Mathew <mathews@ae.ca>
Cc: Robin McKillop <robin@pecg.ca>
Subject: FW: MNRF Data Request for Aldershot Creek Erosion Control EA (PECG 140326)

Hi Stan,

In addition to a response sent to Andrea from Bohdan Kowalyk (MNRF) regarding the Notice of Commencement, attached is a formal MNRF response. It's a bit more robust than Mr. Kowalyk's email; however, it's still a manageable list. Most are bird species that were not observed. We will assess potential bird habitat preferences and treat/act accordingly. I think we'll have to make an effort to do follow up surveys in the proper windows next year (2019).

The eel and mussel species could potentially affect in-water works – Mike/Larry from Palmer are headed out soon (potentially tomorrow) to assess aquatic habitat(s).

The bats Mr. Kowalyk mentioned are echoed in this letter. When I was on-site, I completed an assessment of bat maternity habitat potential. There is some potential, but I feel we can avoid most potential impacts through timing and assessing the need to clear any bigger trees when evaluating access routes.

Mr. Kowalyk also mentioned butternut – as mentioned previously, no butternut were observed on-site.

Please feel free to contact me should you want to discuss this further.

Regards,
Austin Adams, M.Sc., EP
Senior Terrestrial Ecologist

Palmer Environmental Consulting Group Inc.
74 Berkeley Street, Toronto, ON M5A 2W7
t 647 795 8153 ext 147 **c** 647 461 2372 **e** austin@pecg.ca
www.pecg.ca

From: [redacted]
Sent: August 16, 2018 4:41 PM
To: Austin Adams <austin@pecg.ca>
Subject: RE: MNRF Data Request for Aldershot Creek Erosion Control EA (PECG 140326)

Hello Austin,

Please see the attached MNRF letter in response to your request for information.

Thanks
April

[redacted]
Management Biologist | Ontario Ministry of Natural Resources and Forestry | Aurora District Office
50 Bloomington Road, Aurora, Ontario, L4G 0L8 | [redacted]

From: Austin Adams [mailto:austin@pecg.ca]
Sent: Thursday, July 12, 2018 1:12 PM
To: [redacted]
Subject: MNRF Data Request for Aldershot Creek Erosion Control EA (PECG 140326)

Hello,

Please find attached the IRF and companion letter and maps for the proposed erosion control engineering for Aldershot Creek in Burlington. Please let me know if any information is required from my side. I look forward to receipt of the data from the MNRF; it will go along way to enhance project design towards existing and potential species.

Regards,
Austin Adams, M.Sc., EP
Senior Terrestrial Ecologist

Palmer Environmental Consulting Group Inc.
74 Berkeley Street, Toronto, ON M5A 2W7
t 647 795 8153 ext 147 **c** 647 461 2372 **e** austin@pecg.ca
www.pecg.ca

Ministry of
Natural Resources
and Forestry
Aurora District Office
50 Bloomington Road
Aurora, Ontario L4G 0L8

Ministère des
Richesses naturelles
et des Forets

Telephone: (905) 713-7400
Facsimile: (905) 713-7361

Ontario

August 16, 2018

Austin Adams
Palmer Environmental Consulting Group Inc.
74 Berkeley Street, Toronto, ON M5A 2W7
austin@pecg.ca

Re: Request for Information for Aldershot Creek in Burlington

Dear Austin,

In your email dated July 12, 2018 you requested information on Species at Risk and rare species occurring on or adjacent to the above mentioned location. There are Species at Risk recorded for your study area. As of the date of this letter, MNRF has records of:

- BARN SWALLOW (Threatened)
- BANK SWALLOW (Threatened)
- EASTERN MEADOWLARK (Threatened)
- PROTHONONTARY WARBLER (Endangered)
- CANADA WARBLER (Special Concern)
- HORNED GREBE (Special Concern)
- AMERIACNA EEL (Endangered)
- EASTERN POND MUSSEL (Special Concern)
- EASTERN HOG-NOSED SANKE (Threatened)

Additionally, the species listed below have the potential to occur in your study area and may require further assessment or field studies to determine presence:

- EASTERN SMALL-FOOTED MYOTIS (Endangered)
- LITTLE BROWN MYOTIS (Endangered)
- NORTHERN MYOTIS (Endangered)
- TRI-COLOURED BAT (Endangered)

The species listed above may receive protection under the *Endangered Species Act, 2007* (ESA) and thus, an approval from MNRF may be required if the work you are proposing could cause harm to these species or their habitats. If the Species at Risk in Ontario List is amended, additional species may be listed and protected under the ESA or the status and protection levels of currently listed species may change.

Additional natural heritage information including information on wetlands and Areas of Natural and Scientific Interest (ANSIs) can be accessed through Land Information Ontario or through NHIC's Make-a-Map.

Absence of information provided by MNRF for a given geographic area, or lack of current information for a given area or element, does not categorically mean the absence of sensitive species or features. Many areas in Ontario have never been surveyed and new plant and animal species records are still being discovered for many localities. For these reasons, the MNRF cannot provide a definitive statement on the presence, absence or condition of biological elements in any part of Ontario.

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 our office. This will assist with updating our database and facilitate early consultation regarding your project.

If you have any questions or comments, please do not hesitate to contact ESA.aurora@ontario.ca .

[redacted]
[redacted]
[redacted]
[redacted]
Ontario Ministry of Natural Resources and Forestry | Aurora District

Andrea LaPlante

From: Daca, Amy <Amy.Daca@burlington.ca>
Sent: Friday, August 3, 2018 1:31 PM
To: Stan Mathew; Andrea LaPlante
Cc: Malik, Umar
Subject: FW: West Aldershot Erosion Control EA -- property owner meeting
Attachments: 20 North Shore Blvd PTE form.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good afternoon Andrea and Stan

Umar and I met with [redacted], representatives of Fred Hageman Holdings Ltd, who are the owners of the property at 20 North Shore Blvd West this morning to discuss the EA. I've provided a brief summary of our meeting below:

Time & Date: 9 – 9:30 am, August 3, 2018
Present: Umar Malik (COB), Amy Daca (COB), [redacted] (Property Owner)

- the NE bank was walked adjacent to the creek on 20 North Shore Blvd
- Property owners praised the City for undertaking the study and stated that they fully support this study
- [redacted] commented that the erosion on their side of the creek has worsened over time
- Two particular areas of concern were identified
- The property owners mentioned that they would prefer to see erosion protection along the creek bank. City staff explained that any erosion protection works, as recommended by the study, will be implemented in 2019-20 and will require an easement agreement for the City to perform the works.
- A steep erosion scar has developed across from the Halton Pumpling Station building, eroding at the grassed area on the property
- [redacted] had no concerns about granting permission to enter
- The signed permission form was received shortly after our meeting and it is attached
- While on site, GROMA was conducting their drone survey. The property owners had not received any notice that this was going to be taking place and had received many questions from the residents in the apartment building the day before.
- Going forward, please ensure notice is provided for aerial surveys
- The property owners must be included on all correspondence and notices for the area residents and stakeholders.

Kind regards, and have a great long weekend,
Amy

Amy Daca, M.Sc.
Stormwater Management Technologist
Capital Works Department

WEST ALDERSHOT CREEK EROSION CONTROL
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BURLINGTON

Public Information Centre – December 3, 2018

COMMENT SHEET

Contact Information:

Name: [redacted] Organization: Fairwood Place East Inc. (FPE)

Street Address: Care of "76 Fairwood Place West"

City: Burlington Province: ON Postal Code: L7T 4B6

Phone: [redacted] Fax: _____ E-Mail: [redacted]

Comments:

The respective boards of FPE and FPW met on Dec 11th and discussed the city presentations. FPE collective Board feedback is as follows:

(a) We appreciate our erosion concern is getting attention and priority with remedial action possible in next few years.

(b) We appreciate that the major erosion in Reach 1 is being significantly coralled in all alternatives.

(c) In spite of Reach 1, has the greatest impact to our properties, we felt the applicability of Alterative 3 to all 3 Reaches provides for a consistant and equivalent outcome to full creek length.

(d) We support the appropriate removal of trees and growth for the work and that native plants and trees will be used in restorations.

Please place your comment sheet in the drop box provided, or return by mail or email by **December 17, 2018**

Umar Malik, P.Eng.
Stormwater Engineer

City of Burlington – City Hall
426 Brant St., P.O.Box 5013
Burlington, ON L7R 3Z6
Tel.: 905-335-7600 x7426
Email: umar.malik@burlington.ca

Andrea LaPlante, P.Eng.
Class EA Lead

Associated Engineering (Ont.) Ltd.
509 Glendale Ave E. Suite 300
Niagara-on-the-Lake, ON L0S 1J0
Tel.: 905-346-0990
Email: laplantea@ae.ca

WEST ALDERSHOT CREEK EROSION CONTROL
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BURLINGTON

Public Information Centre – December 3, 2018

COMMENT SHEET

Contact Information:

Name: [redacted] Organization: Fairwood Place West Inc.

Street Address: 120, Fairwood Place West

City: Burlington Province: ON Postal Code: L7T 4B6

Phone: [redacted] Fax: E-Mail [redacted]

Comments:

These comments are from the board of directors of "Fairwood Place West Inc." which corporation has management responsibility for #'s 84 through 130 Fairwood Place West including the property's common lands adjoining the creek, specifically adjacent to "Reach 1" in the study Phase 2 report. This responsibility is shared with our neighbour corporation "Fairwood Place East Inc." covering numbers 54 through 80. Individual home owners may offer their own comments directly.

We consider the creek area a valuable asset to the region and the City and worthy of restoration and preservation. We therefore welcome the report and highly commend the City for undertaking the project and their staff for their professional manner and clarity of communications.

The report presentation at the PIC on December 3rd and on the website is very clear. Of the four Alternatives listed our preference is for Alternative 3 or possibly 4 depending on your findings in Phase 3. Taking no action (Alternative 1) is considered unacceptable and not worth consideration.

For long term sustainability of the project we suggest steps should be taken to ensure the on going involvement of Aldershot High School whose property adjoins Reach 1 and 2 so that the creek environment is properly understood and respected by the pupils.

There is some evidence of dumping near where the creek crosses North Shore Blvd and steps should be taken to try to eliminate this including appropriate signage and fines for offences.

In addition we suggest that sufficient budget should be established to properly maintain the creek and to prevent its condition from deteriorating in future, after restoration.

Please place your comment sheet in the drop box provided, or return by mail or email by **December 17, 2018**

Umar Malik, P.Eng.
Stormwater Engineer

City of Burlington – City Hall
426 Brant St., P.O.Box 5013
Burlington, ON L7R 3Z6
Tel.: 905-335-7600 x7426
Email: umar.malik@burlington.ca

Andrea LaPlante, P.Eng.
Class EA Lead

Associated Engineering (Ont.) Ltd.
509 Glendale Ave E. Suite 300
Niagara-on-the-Lake, ON L0S 1J0
Tel.: 905-346-0990
Email: laplantea@ae.ca

CITY OF Burlington

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

WEST ALDERSHOT CREEK EROSION CONTROL
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BURLINGTON

Public Information Centre – December 3, 2018

COMMENT SHEET

Contact Information:

Name: [redacted] Organization: _____

Street Address: 76 Fairwood Place W.

City: Burlington Province: ON Postal Code: L7T 4B6

Phone [redacted] Fax: _____ E-Mail [redacted]

Comments:

(a) Thank you for the presentation - Dec 3/-2018

(b) The erosion issue has its roots in ongoing development to the North and more and more area being paved over. Therefore the rapid flow frequency continues to get worse and for longer periods after each major rain event.

(c) The 8 to 10 feet of erosion has happened in 30 years with most of it in last 10 years as outfall now has a drop (water fall) of ~10' and growing.

(d) For me #1 priority is to get erosion under control.

(e) On personal note - I understand trees would be removed on both sides of creek. This would be an acceptable outcome. Don't see this as a issue - since many trees will continue.

Please place your comment sheet in the drop box provided, or return by mail or email by **December 17, 2018**

Umar Malik, P.Eng.
Stormwater Engineer

City of Burlington – City Hall
426 Brant St., P.O.Box 5013
Burlington, ON L7R 3Z6
Tel.: 905-335-7600 x7426
Email: umar.malik@burlington.ca

Andrea LaPlante, P.Eng.
Class EA Lead

Associated Engineering (Ont.) Ltd.
509 Glendale Ave E. Suite 300
Niagara-on-the-Lake, ON L0S 1J0
Tel.: 905-346-0990
Email: laplantea@ae.ca

CITY OF Burlington

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

WEST ALDERSHOT CREEK EROSION CONTROL
MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BURLINGTON

Public Information Centre – December 3, 2018

COMMENT SHEET

Contact Information:

Name [redacted] Organization: N/A

Street Address: [redacted]

City: BURLINGTON Province: ONTARIO Postal Code: L7T 4G1

Phone: [redacted] Fax: N/A E-Mail: [redacted]

Comments:

① THE PATHWAY ON THE EAST SIDE OF THE CREEK FROM THE STREET TO THE FENCE IS BECOMING VERY DANGEROUS FOR THE STUDENTS AND RESIDENTS WHO USE IT FREQUENTLY. - IT REQUIRES IMMEDIATE ATTENTION

② WE SUGGEST AN ALTERNATIVE SOLUTION - NAMELY INSTALL CONCRETE SEWER STRUCTURES, FILL SIDES AND OVERLAY WITH SOD MAKING THIS INTO A VERY PLEASANT SMALL PARK. WE UNDERSTAND THAT HALTON REGION MAY OBJECT BECAUSE THIS WILL BE A CHANGE IN THE ENVIRONMENT AND IMPACT FISH AND SMALL WILDLIFE. HOWEVER IN THE LONG TERM IT WOULD MAY BE THE MOST COST EFFECTIVE SOLUTION - IE LOWER MAINTENANCE, NOT SUBJECT TO EROSION, SAFER ENVIRONMENT FOR STUDENTS AND OPENING A PARK FOR BURLINGTON RESIDENTS.

Please place your comment sheet in the drop box provided, or return by mail or email by **December 17, 2018**

Umar Malik, P.Eng.
Stormwater Engineer

City of Burlington – City Hall
426 Brant St., P.O.Box 5013
Burlington, ON L7R 3Z6
Tel.: 905-335-7600 x7426
Email: umar.malik@burlington.ca

Andrea LaPlante, P.Eng.
Class EA Lead

Associated Engineering (Ont.) Ltd.
509 Glendale Ave E. Suite 300
Niagara-on-the-Lake, ON L0S 1J0
Tel.: 905-346-0990
Email: laplantea@ae.ca

CITY OF Burlington

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

WEST ALDERSHOT CREEK EROSION CONTROL MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

CITY OF BURLINGTON

Public Information Centre – December 3, 2018

COMMENT SHEET

Contact Information:

Name: [redacted] Organization: —

Street Address: [redacted]

City: BURLINGTON Province: ON Postal Code: L7T 4B6

Phone: [redacted] Fax: — E-Mail: [redacted]

Comments:

Thank you for the opportunity to make a few comments. I live in the redbrick townhouses on Fairwood Place West bordering the west edge of the creek, and am the Past President of our Board of Directors. However, these comments are strictly my own.

I appreciate the efforts made by the City to address the erosion in the creek, especially Mr. Malik and his staff who initially met with the Board of Fairwood Place West in May of 2017 to assess the situation. We met in the meadow beside the creek on the property of Fairwood Place West. Our concern at the time was the erosion of the creek bed and the safety of kids from the Aldershot School who "hang out" near the outflow at the head of the creek adjacent to the school. Since that time, a huge fallen tree has been removed and the safety fence around the outflow repaired, with thanks to the City.

The presentation was well researched and most informative of the steps needed to be taken to mitigate problems in the future. Of the four options (solutions) presented, I would choose #4. There is no doubt that the process ***must move forward asap*** to repair the creek with the best resources available. The Board of Fairwood Place West was informed back in 2017 that this project was in the City budget for 2019, and expect the City to follow through for the safety and wellbeing of this creek bed, and the residents who live around the area. We cannot afford to overlook the consequences or repeat the potential flood damage that occurred in the creeks of central Burlington a few years ago – 2016?

The larger trees on both sides of the bank ***that are leaning over the creek*** need to be cut down, but ***keep the root structure*** that will help hold the sides of the bank. Nobody wants to lose trees, but new ones will regenerate as the canopy is thinned to allow more light. That was one of the suggestions in the presentation and I think it is an excellent one and not too costly. The standing tree trunks would "go back to nature". I defer to the experts in environmental and storm water control as to the overall approach, but feel encouraged by this presentation that the City and staff are on the right track. The main issue is keeping this project ***in the City budget*** so it can move forward this year.

Thank you again, and I look forward to future presentations and shared solutions.

City of Burlington – City Hall
426 Brant St., P.O.Box 5013
Burlington, ON L7R 3Z6
Tel.: 905-335-7600 x7426
Email: umar.malik@burlington.ca

Associated Engineering (Ont.) Ltd.
509 Glendale Ave E. Suite 300
Niagara-on-the-Lake, ON L0S 1J0
Tel.: 905-348-0990
Email: ae.antea@ae.ca

Andrea LaPlante

From: Malik, Umar <Umar.Malik@burlington.ca>
Sent: Tuesday, December 11, 2018 11:39 AM
To: [redacted]
Cc: Andrea LaPlante
Subject: RE: Aldershot Creek Control

Good morning [redacted],

Thank you very much for attending the PIC and providing your valuable comments and suggestions. We will make your comment letter part of the project file. It is my pleasure to work with an excellent group of people within the condominium and I am sure the coordination and resident involvement will greatly assist in finding the best solution to the erosion problems within the creek system. The City will continue to work with all the stakeholders as we move forward with this project to meet the 2019-20 construction timelines.

Once again thank you for your comments. Hope you and the rest of the residents within the townhouse block have an excellent holiday season.

Sincere regards

Umar Malik, M.Eng., P.Eng
Stormwater Engineer
Capital Works Department

P. 905-335-7600, ext 7426| **E.** umar.malik@burlington.ca
Address 426 Brant Street P.O. Box 5013, Burlington, Ontario, L7R 3Z6
City of Burlington | www.burlington.ca

Please consider the environment before printing this e-mail.

From: [redacted]
Sent: Monday, December 10, 2018 9:44 PM
To: Malik, Umar <Umar.Malik@burlington.ca>; laplantea@ae.ca
Subject: Aldershot Creek Control

TO: Ms. Andrea LaPlante and Mr. Umar Malik;

Attached please find my comments re the West Aldershot Creek Control public meeting on December 3rd, 2018.
Thank you for the presentation to the community, and the opportunity to make comments.

Best regards,
[redacted]
Burlington, ON
L7T 4B6

[redacted]

This message, including any attachments, is privileged and intended only for the addressee(s) named above. If you are not the intended recipient, you must not read, use or disseminate the information contained in this email/fax. If you have received this email/fax transmission in error, please notify the sender immediately by telephone, fax or email and permanently delete this email from your computer/shred this fax, including any attachments, without making a copy. Access to this email/fax by anyone else is unauthorized. Thank you.

Andrea LaPlante

From: Stan Mathew
Sent: Wednesday, November 14, 2018 4:05 PM
To: Andrea LaPlante
Subject: FW: RE: West Aldershot Creek Erosion Control EA
Attachments: PIC # 1 - Public Notice (Nov 14, 2018).pdf

Follow Up Flag: Follow up
Flag Status: Completed

FYI

From: Malik, Umar <Umar.Malik@burlington.ca>
Sent: Wednesday, November 14, 2018 12:58 PM
To: [redacted]
Cc: Daca, Amy <Amy.Daca@burlington.ca>; Stan Mathew <mathews@ae.ca>
Subject: RE: RE: West Aldershot Creek Erosion Control EA

Good morning [redacted],

This is in reference to the West Aldershot Creek Erosion Control Environmental Assessment. The study team has been working diligently on this project, and we are pleased to inform you that we are close to our first major milestone to meet the residents and stakeholders to discuss study progress and the potential remedial options.

We have completed data collection and have prepared preliminary design concepts based on the findings. This is the appropriate time to meet to discuss the results so far, and the different alternatives available to achieve the study objectives. We have arranged a Public Information Center (PIC) in the Community Room at Aldershot Pool (50 Fairwood Place W) on December 3rd at 6 pm. The public notice for this gathering shall appear in the Burlington Post this week.

Copy of the public notice is attached. May I request your assistance in circulating this notice to the condominium residents, either through email or by posting it on a community notice board? If you need printed copies, please let me know how many and I can get those delivered next week. We will like having good attendance at the PIC to obtain feedback and input.

As always, I am available by email or through phone for further information.

Regards

Umar Malik, M.Eng., P.Eng
Stormwater Engineer
Capital Works Department

P. 905-335-7600, ext 7426| **E.** umar.malik@burlington.ca
Address 426 Brant Street P.O. Box 5013, Burlington, Ontario, L7R 3Z6
City of Burlington | www.burlington.ca

Andrea LaPlante

From: Andrea LaPlante
Sent: Wednesday, December 12, 2018 1:31 PM
To: [redacted]
Cc: Stan Mathew; 'Malik, Umar'; 'Daca, Amy'
Subject: RE: PIC on December 3/18 - West Aldershot Creek

Good afternoon [redacted],

My apologies for the delay in responding. I'm sorry you were not able to attend the PIC on Dec 3 for the West Aldershot Creek Study. I am providing you with a copy of the display boards that were presented during the open house for public viewing. Please use the link below to access a digital copy of the display boards. After review if you have any questions or concerns please do not hesitate to reach out to myself, Stan Mathew (AE Project Manager) or Umar (City Project Manager) for additional information.

https://assoceng-my.sharepoint.com/:b:/g/personal/laplantea_ae_ca/Ea22b99hdZFLrWwI801oo4UBYCJVnPBBBiwPxxhI-NM-sA?e=fLuYDi

Regards

Andrea LaPlante, P.Eng.
Class EA Lead
Associated Engineering (Ont.) Ltd.
Suite 300 – 509 Glendale Ave East, Niagara-on-the-Lake, ON L0S 1J0
Tel: 905.346.0990 | Dir: 289-434-4804

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS. | BEST MANAGED COMPANIES Platinum member

You may unsubscribe from Associated Engineering electronic communications at any time.

From: [redacted]
Sent: Friday, November 30, 2018 11:56 AM
To: Andrea LaPlante <laplantea@ae.ca>
Subject: PIC on December 3/18

Hello Ms. LaPlante.

I am unable to attend the Public Information Centre on Monday evening, but I am interested in viewing the study information. Could you please advise of another opportunity for this to occur?

Kind regards,

[redacted]
Principal
Aldershot School
50 Fairwood Place West
Burlington ON L7T 1E5
[redacted]



This e-mail and any attachments are the property of the Halton District School Board and are intended only for the use of the addressee(s) and may contain information that is privileged and/or confidential and/or protected under the Education Act, the Municipal Freedom of Information and Protection of Privacy Act and/or the Personal Health Information Protection Act. Unauthorized review, distribution, copying or disclosure is strictly prohibited. If you are not the intended recipient please notify the sender, delete this message and do not print, copy, distribute or disclose it further.

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

Date:	December 3, 2018	**File:**	2018-5251
Time:	3:00 pm	**Page:**	1 of 2
Project:	Municipal Class EA - West Aldershot Creek Erosion Control		
Subject:	Preliminary Project Scope/Approach		
Client:	City of Burlington		
Location:	Conservation Halton (2596 Britannia Road)		
Present:	Amy Daca (City of Burlington) Umar Malik (CB) Mike Brierley (Palmer Environmental Consulting Group) Robin McKillop (PECG) Stan Mathew (Associated Engineering) Emma Defields (Conservation Halton) Angelin Satgunarajah (CH) Elisa Bernier (CH)		
Distribution:	Those Present		

RECORD OF MEETING

This Record of Meeting is considered to be complete and correct. Please advise the writer within one week of any errors or omissions, otherwise this Record of Meeting will be considered to be an accurate record of the discussions

Action By:	Discussion:
ED/SM	Introductions. Umar Malik is the City Project Manager; Stan Mathew is the consultant Project Manager. Emma Defields is taking over the file as planner, on behalf of CH: correspondence to go through Emma.

BACKGROUND ON THE PROJECT

Palmer and AE provided some background on the project.

Project Scope: West Aldershot Creek, between Fairwood Place West and Lake Ontario.

Creek can be described as three (3) distinct reaches.

The first reach, Reach 1 (top end of the system) is seen to have heavy evidence of erosion.

Reach 2 has widened bottoms, woody debris from upstream

Reach 3 is largely unnatural, likely a man-made watercourse (based on historical aerial images)

There is a known undersized culvert at North Shore Blvd. The project team will make recommendations as part of scope, but the replacement of the culvert is not part of this project scope.

Reach 1 is taking most of the erosive energy from upstream contributions, which has manifested in large pools, vertical cuts, and heavy visual erosion.

Reach 1 has no sediments sources (storm water); more energy effect than usual due to lack of sediment replacement.

Reach 1 has vertical drops of as much as 2 metres; bed has eroded quite significantly – bed degradation.

There are notable infrastructure impacts – sanitary sewer, main headwall structure, minor storm outfalls

If hardening occurs in Reach 1, energy dissipation will transfer to Reach 2 (pushing the problem)

CANADA BEST MANAGED COMPANIES Platinum member

Action By: **Discussion:**

The City did some required dredging of the boat slip (2010-2011) at the bottom end reach (i.e. Reach 3) – this action is one of the triggers for the erosion study.

DISCUSSION OF ALTERNATIVES

Some general alternative considerations were discussed:

- Restore the bed to pre-existing elevation, or work with existing grades. Increasing the bed could influence the increase in flood line (reduce flood storage in flood conveyance), and also would remove the energy dissipation that has naturally occurred.
- A major change in Reach 1, would require a fair bit of reconstruction of cross-section. Sections of the Reach are 4.0 m vertical to floodplain
- A major concern of the neighbouring residents (Townhouse development) is tree protection. They desire to keep tree loss to a minimum. Project team can provide tree offset locations (i.e. Townhouse development area) - if lost during cross-section reconstruction
- Discussed bookend alternatives - Alternative 1 < Alternative 2 < Alterative 3
- Alternative 1 - no shifting of hazards; not switching of top of bank (moving slope stability)

AE
- CH explained that we need to show property lines to understand if hazards are moving in locations that wouldn't be supporting. AE to ensure PL are provided on drawings.

- City's design storm is minimum 5-year, after that the levels of protection will be dictated by the stone size requirements, balancing with fish passage, aesthetics, constructability and other aspects.
- [CH confirmed after meeting that the minimum CH design storm is 25 mm, 4-hour design storm]
- Submission should show improved velocities for fish passage, i.e. low flow channel.
- It is possible to justify a changed floodplain with improved hydraulics.

CH Comments

AE
- CH requested the project ensures MNRF 2002 standards (HEC-RAS, check hydrology requirements)

AE
- CH requested that the decision criteria matrix (Environmental Assessment process) - ensure the environmental is reflected appropriately. Weighing of criteria should ensure environmental is balanced scoring.

AE
- CH explained the Environmental checklist per the RFP has been completed and still stands. AE to submit approvals with the checklist in consideration.

AE
- Make recommendations for LIDs from runoff on school yards (comment on the majority of the runoff coming from upstream storm sewer)

AE
- Need to quantify tree removal. Note - seeps, skunk cabbage is protected.

Conservation Halton

905.336.1158
Fax: 905.336.7014
2596 Britannia Road West
Burlington, Ontario L7P 0G3
conservationhalton.ca

Protecting the Natural Environment from Lake to Escarpment

July 31, 2019

Umar Malik
City of Burlington
426 Brant Street, P.O. Box 5013
Burlington, ON L7R 3Z6

BY MAIL AND EMAIL

Dear Mr. Malik:

Re: West Aldershot Creek Erosion Control Municipal Class Environmental Assessment – Draft Project File Report
City of Burlington
CH File: MPR 723

Conservation Halton (CH) have reviewed the Draft Project File Report – West Aldershot Creek Erosion Control Municipal Class EA – Draft Project File Report (Associated Engineering, April 2019). A general summary of comments is provided below with more detailed comments in Appendix A.

General Comments

1. Although the hydrologic and hydraulic model's findings are largely supported from a risk perspective, several minor comments and concerns should be addressed, and updates incorporated accordingly, prior to the submission of the Final Project File Report.
2. Consideration and revisions should be made to the Evaluation Matrices to better reflect the benefits, challenges, and consequences within each reach, for each alternative.
3. Staff are requesting further evaluation of a few additional alternatives which were not assessed within the Draft Project File Report. These include, but are not limited to, discussion on softer and vegetated engineering treatments; replacement of the undersized culverts; and, low impact development aspects.

Recommendation

We thank you for this opportunity to comment on the Project File prior to filing. As noted above and further outlined in Appendix A, CH has provided comments that should be considered prior to finalization of the Class EA. We look forward to the upcoming meeting August 8, 2019 to discuss the comments contained in this correspondence in advance of the next submission.

If you require additional information, please contact me at extension 2301.

Yours truly,

Cassandra Connolly
Regulations Officer

Appendix A: Conservation Halton Detailed Comments

Draft Project File Report

Hydrological Analysis, Table 4-2, page 20:

1. Staff appreciate the efforts put forward in preparing a detailed hydrologic model for the purposes of this EA. Please clarify which synthetic storm hyetograph (duration and distribution) was used to calculate the peak flows identified within Table 4-2 (e.g. 24 hour – Chicago). Staff note that the distribution identified within *Appendix B* seems to suggest a 24 hour distribution was used however the SWM model only included a 4 hour hyetograph.

Section 4.1.3 Fluvial Geomorphology, page 30:

2. Include a discussion on why the undersized culverts under North Shore Boulevard and Oaklands Park Court are not being explored as part of these works. Staff note that upgrading the undersized culverts was raised in the North Shore Watershed Study (2006).
3. The existing stone gradation should be included as this will inform the future proposed in-water restoration works. In instances where the existing substrates would not be appropriate for replicating, a reference reach should be determined that could be used to guide detailed design.

Section 4.1.4 Aquatic and Fish Habitat, page 39:

4. Please provide figures to accompany this section identifying the location of the features noted in the CH Environmental Assessment Checklist dated February 26, 2018. The fieldsheets of the MTO's Protocol Environmental Guide for Fish and Fish Habitat should also be provided.
5. As per CH's February 26, 2018 email with comments on the Terms of Reference, please provide information on aquatic ecology including benthic community information from all potential sources (including CH Long-Term Monitoring Program). Impacts on the benthic aquatic community should be included as part of the evaluation matrices.

Section 4.1.5 Terrestrial, page 39:

6. Fieldsheets should be included to supplement the discussions within the report. *Note:* All sensitive information regarding species at risk should be excluded from the final EA.
7. Staff advise that FOD7-4 Moist Black Walnut Lowland Deciduous Forest is a provincially rare vegetation community ranked S2S3. As such, further discussion on measures which will be taken to demonstrate no negative impact to this vegetation community should be included.
8. Significant wildlife habitat has not been completely considered. Please discuss impacts to seeps (as noted throughout the report) and rare vegetation communities. Staff note that the installation of the slope drain, extent of vegetation, and proposed hardening do not currently demonstrate no negative impact.
9. The breeding bird results which were to be completed in June-July of 2019 should be included.
10. Mitigation measures for any potential impacts to bat maternity roost colonies/habitat such as retaining mature trees, cavity trees etc. should be considered and discussed within the report.

Section 5: Alternative Solutions, page 50:

11. As part of reviewing all feasible and reasonable alternatives, staff question if consideration should be made to acquiring hazardous lands into public ownership as a means of mitigating risks and impacts to adjacent private properties.

Section 5: Alternative Solutions - Exposed Sanitary Manholes, pages 50 -64:

12. The Draft Project File Report has considered armouring the existing at risk infrastructure. Staff request that other approaches for managing these erosion sites also be considered such as relocating this infrastructure to a more suitable location away from the steep banks, a sanitary sewer bypass, etc. These alternatives should also be considered by the assessment.

    Please clarify whether the new sanitary sewer being proposed by the Region (ref. Figure 4-27, page 46) would allow removal of any infrastructure considered to be at-risk.

13. Consideration and discussion on the potential for low impact development measures to be incorporated in the various alternatives, as a means to provide point source controls, should be included.

14. The feasibility of installing softer soil bioengineering options and creek bed restoration options that do not involve installing amourstone throughout the system should be further explored. This was raised in CH's review of the Terms of Reference. Staff is of the opinion that the removal of mature woodland, as proposed in some alternatives and reaches, may not be justified and/or required. staff continue to recommend this be explored at this time as a more naturalized channel design will be identified as a requirement through CH's permitting processes.

Section 5.2: Alternatives for Reach 1, pages 51 -55:

15. Alternatives 2, 3 and 4 propose armourstone steps downstream of the perched outfall. Staff request that other approaches for managing this erosion site also be considered. At a minimum, please evaluate reconstructing the outfall such that it is not perched.

16. Alternative 2 proposes a vegetated boulder revetment or armourstone bank treatment for erosion Site B. Staff request that consideration be given to the use of vegetated crib walls. This approach may also be applicable for similar circumstances downstream. Please consider the approach accordingly.

Section 5.2: Alternatives for Reach 3, pages 60 -64:

17. The culvert beneath North Shore Boulevard was determined to be undersized (ref. Page 22 and Appendix C - Page 11) and having a sharp meander immediately upstream (Figure 4-3, page 13). Consideration should be made to upgrading the undersized culvert to address these concerns (i.e. fluvial geomorphology, conveyance, fish and wildlife passage, etc.). Alternatively, suitable justification should be provided as to why upgrading undersized culverts should not be considered.

Section 5.5: Evaluation Criteria, Table 5.5, page 65:

18. Further consideration should be given to the weighting assigned to "Maintenance Requirements" and "Maintenance Costs" as well as if these criteria should be combined. Their combined weighting of twelve (12) percent appears high considering weightings of other criteria (e.g Public Safety) was only assigned ten (10) percent.

Section 5.6: Table 5-4 to Table 5-6 Evaluation Matrix for Reach 1-3, pages 67 to 69:

Staff raise the following with respect to the various Evaluation Matrix for all reaches:

19. The school "amphitheatre" feature is referenced in the evaluation matrices for all reaches; however, it is only identified within the FOD5-3 community of Reach 2. Please note that CH is not supportive of infrastructure within the valley and recommend the amphitheatre be relocated as an opportunity for restoring the site and promoting public safety.

20. Further information regarding how pathways/trails will be enhanced as part of these works is required.

21. Please elaborate on the meaning of safety grating as described under the *Objectives - Social* category.

22. Please elaborate on how access to the creek will be limited as part of any selected alternative. Staff recommend installing a fence at the dripline or regulated limits to prevent public access into areas that are not stable and/or ecologically sensitive as a component of any selected alternative.

23. Alternatives to hardscaping which will maintain and/or enhance the natural environment of the creek should be explored and discussed.
24. Clarification is required as to how installing raised riffle armourstone grade control measures will allow for fish passage of representative species in the system. Staff raise concern that fish passage may not be maintained and/or enhanced in either alternative.
25. Further assessment of the long-term impacts of sub-reach works should be included. Specifically if the hardening of features along portions of the banks would have the potential to cause future erosion along the stretches that are proposed to remain natural.

Section 6.4 Detailed Design Commitments and Additional Works, page 74:

26. Staff note that restoration works shall be completed to the greater of either CH's guidelines or COB By-Law requirements. This should be included in this section for detailed design.

Section 7.1.2 Potential Effects on the Receiving Watercourse, page 75:

27. The aquatic wildlife and habitat impacts were not covered in this section or elsewhere. Staff request further discussion on potential effects to aquatic habitat not limited to loss of overhanging vegetation, thermal impacts, barriers to fish passage, etc. be included.

Section 7.1.3 Erosion and Sediment Control, page 75:

28. Given that West Aldershot Creek discharges into Hamilton Harbour, staff recommend the report highlight Hamilton Harbour Remedial Action Plan (RAP). *Note:* The Evaluation Matrix should also be updated to include/discuss how the various alternatives are in keeping with the Hamilton Harbour Remedial Action Plan.

Section 7.4 Construction Considerations, page 79:

29. Similar to the above, this section should be updated to acknowledge that all landscaping and rehabilitation works within CH's regulated area are to follow the greater of either CH's most up-to-date landscaping guidelines or COB By-Law requirements.

Appendix A: Integrated Geotechnical and Hydrogeological Assessment Report

Section 5.1: Existing Conditions and Methodology, page 5

30. Please be advised that CH accepts a minimum safety factor of 1.5 for normal slope conditions, with a minimum safety factor of 1.3 accepted for temporary slope conditions (e.g. elevated groundwater, etc.).

Appendix B: Hydrology and Hydraulics Technical Memorandum

Table 3-1, page 4:

31. Please clarify the source and accuracy of the topographic data used to create the hydraulic models cross sections. Specifically was the data obtained via drone survey, etc.

Hydraulic Model Details, page 12:

32. Staff wish to clarify that the Regulatory Storm is the greater of the 100 year design storm or the Regional Storm. Please clarify this within the report (ref. page 12); as the Regional Storm (Hurricane Hazel) may not be the Regulatory Storm in this circumstance.

Appendix D: Terrestrial and Aquatic Ecology Report

Section 2.4: Conservation Authority Regulation (O. Reg. 162/06), page 5:

33. CH regulates a 7.5 metre regulatory allowance from the greater of the flooding or erosion hazards associated with West Aldershot Creek.

Figure 2 - Ecological Land Classification and Natural Heritage Features, page 11:

34. This section should be updated to include Figure 2.

Section 4.1.4: Fresh – Moist Black Walnut Lowland Deciduous Forest (FOD7-4), page 14:

35. Further to comment #7, this section should be updated to include vegetation rarity and appropriate actions to reduce impacts.

Appendix F: Conceptual Drawings

Creek Erosion Control Plan/Profile, Sheets 1- 3:

36. The profile drawings suggest that the existing sanitary sewer is located above the creek's invert in numerous locations. Please clarify within the report whether this is in fact the case; at creek crossing locations this is of particular concern.

37. Where warranted, staff recommend additional subsurface utility investigation(s) be undertaken to more precisely determine location/elevation of existing infrastructure to more confidently define the current risk of exposure. Alternatively, these assessment should be identified as a requirements for Detailed Design.

Hydrologic Modelling - Digital Submission

38. All 'flooding' within the hydrologic model should be eliminated to ensure all flows are accounted for within the system. This may be accomplished by increasing surcharge depth at the flooded junctions and/or addition of a 'high flow' conduit to the downstream junction.

Hydraulic Modelling – Digital Submission

39. Staff note that several cross sections (e.g. 377 through 277) may have inadvertently over-estimated channel widths, which may misrepresent the channels' roughness. Please review cross sections coding to ensure bank stations represent observed channel widths. This will ensure reasonable roughness coefficients have been assigned to overbanks.

40. A review of aerial imagery suggests the culvert for North Shore Boulevard may be longer than what was coded into the model (i.e. Culvert is coded as 26 meters; aerial imagery suggests ± 46 meter length). Please confirm the culvert length coded into the modelling.

41. Crossing structures should be modelled per the standard HEC-RAS modelling approach. This includes use of ineffective flow areas upstream and downstream of crossing structures as appropriate, as well as adjustment of the expansion and contraction coefficients at relevant cross sections.

42. Staff typically apply the 'Pressure and Weir' high flow calculation method for crossing structures. If the 'Energy only' method will be utilized for this assessment, please include additional discussion accordingly.

Associated Engineering | GLOBAL PERSPECTIVE. LOCAL FOCUS.

Associated Engineering (Ont.) Ltd.
Suite 300 - 509 Glendale Avenue East
Niagara-on-the-Lake, ON, Canada, L0S 1J0

TEL: 905.346.0990
FAX: 905.346.0992
www.ae.ca

August 21, 2019
File: 20185251.00.A.04.00

Cassandra Connolly
Regulations Officer
Conservation Halton
2596 Britannia Road West
Burlington ON L7P 0G3

Re: WEST ALDERSHOT CREEK EROSION CONTROL MUNICIPAL CLASS EA - DRAFT PROJECT FILE REPORT RESPONSE MATRIX
CITY OF BURLINGTON
CH FILE: MPR 723

Dear Ms. Connolly:

Associated Engineering and Palmer Environmental, with our client the City of Burlington, have reviewed the comments provided via letter dated July 31, 2019 from Conservation Halton (CH) from the review of the draft Project File Report for West Aldershot Creek Erosion Control Municipal Class EA. Based on our review of CH comments, along with discussions had during the meeting held on August 8, 2019 with representatives from CH, we are providing a matrix outlining our response to each of CH comments. All necessary revisions to the Project File Report will be made and a copy of the final Project File Report along with the Notice of Study Completion will be provided to CH at the start of the 30-Day Public Review Period.

Upon completion of the 30-Day Public Review Period, barring any unforeseen issues, Associated Engineering and Palmer Environmental will begin detailed design of the preferred solution(s). As discussed during our meeting on August 8, please forward a completed detailed design checklist identifying all necessary requirements to apply for and secure a CH permit for the proposed works.

If you have any questions with the enclosed, please do not hesitate to contact one of the undersigned at 905.346.0990.

Yours truly,

Andrea LaPlante, P.Eng.
Environmental Assessment Coordinator

Stan Mathew, P.Eng,
Project Manager

Encl: Response Matrix

Cc: Umar Malik, City of Burlington, Project Manager

A Carbon Neutral Company

CANADA BEST MANAGED COMPANIES Platinum member

Response Matrix to Conservation Halton's (CH) review comments summarized in letter dated July 31, 2019

Item #	Reference Section(s)	Page(s)	Conservation Halton (CH) Comment	Consultant Team Response
General Comments				
1			Although the hydrologic and hydraulic model's findings are largely supported from a risk perspective, several minor comments and concerns should be addressed, and updates incorporated accordingly, prior to the submission of the Final Project File Report.	• AE has reviewed and provided responses to all comments pertaining to the hydrologic and hydraulic model. Updates to the model, PFR and/or technical memo have been made as noted below (see response to comments #1, 31, 32 & 38 – 42).
2			Consideration and revisions should be made to the Evaluation Matrices to better reflect the benefits, challenges and consequences within each reach, for each alternative.	• Revisions to the Evaluation Matrices will be made as indicated in our responses below. • Key features will be identified in the evaluation matrices, where applicable, and will be preserved to the extent possible.
3			Staff are requesting further evaluation of a few additional alternatives which were not assessed within the Draft Project File Report. These include, but are not limited to, discussion on softer and vegetated engineering treatments; replacement of the undersized culverts; and, low impact development aspects.	• As discussed in our responses below, additional alternatives such as softer engineering treatments, replacement of culverts and inclusion of LIDs will be discussed within the PFR; however, they need not be identified as specific alternatives for evaluation.
Draft Project File Report				
1	Hydrological Analysis Table 4-2	page 20	Staff appreciate the efforts put forward in preparing a detailed hydrologic model for the purposes of this EA. Please clarify which synthetic storm hyetograph (duration and distribution) was used to calculate the peak flows identified within Table 4-2 (e.g. 24 hour – Chicago). Staff note that the distribution identified within Appendix B seems to suggest a	• AE acknowledges that this was not explicit in the write up, which has been updated within the text of the PFR and technical memo to identify the synthetic storm used in hydrologic (PCSWMM) modelling (4-hour Chicago). Table 4-2 pertains to climate change sensitivities which uses the MTO's climate change influenced IDF curves. These curves are produced for typical 5, 10, 15, and 30 minute plus 1, 2, 6, 12, and 24 hour

			24 hour distribution was used however the SWM model only included a 4 hour hyetograph.	durations. Since values for a 4-hour storm were not available, a comparison was made using another duration. Admittedly, the 24-hour duration storm was perhaps not the best selection so the analysis was updated to reflect the 6-hour duration.
2	Section 4.1.3 Fluvial Geomorphology	page 30	Include a discussion on why the undersized culverts under North Shore Boulevard and Oaklands Park Court are not being explored as part of these works. Staff note that upgrading the undersized culverts was raised in the North Shore Watershed Study (2006).	• As specified in the original Terms of Reference issued by the City for this study, and further clarification provided during project meetings, culvert replacement was not part of the scope of work for the Class EA study and subsequent detailed design and construction. It is City policy to not replace culverts until they have reached the end of their service life. At that time, replacement and upsizing (if deemed necessary) will be proposed, designed, permitted and implemented. • Even though the culverts were identified as being undersized (according to MTO design criteria), they are offering flood attenuation, flow control, and velocity reduction in Reach 2 and 3. From an erosion perspective, the undersized culverts are actually favourable. While AE appreciates a holistic approach to solving Aldershot Creek erosion problems, culvert upsizing was considered outside of this scope of work and may be considered during future design at the end of the culvert's life. • Reference to the North Shore Watershed study (2006) and why the recommendation of culvert upsizing is excluded will be made in the PFR .
3			The existing stone gradation should be included as this will inform the future proposed in-water	• The results of pebble counts completed during initial field work to substantiate visual

			restoration works. In instances where the existing substrates would not be appropriate for replicating, a reference reach should be determined that could be used to guide detailed design.	characterization of substrates will be appended. Existing substrates are alluvium overlying glaciolacustrine silt and sand, both of which are readily entrained by moderate to high flows. As such, larger-diameter materials will need to be incorporated into erosion mitigation designs. Proposed stone gradations will be based on hydraulic and shear stress analysis, the results of which will be acknowledged in association with detailed design, to ensure the appropriate level of stability during the design range of flows. A reference reach is not appropriate for stone sizing along such a channel.
4	Section 4.1.4 Aquatic and Fish Habitat	page 39	Please provide figures to accompany this section identifying the location of the features noted in the CH Environmental Assessment Checklist dated February 26, 2018. The fieldsheets of the MTO's Protocol Environmental Guide for Fish and Fish Habitat should also be provided.	• A figure, and original pencil sketches/fieldsheets (to be appended), will be included to better represent the existing distribution of fish habitat features along all three reaches. The key elements of MTO's protocol will be identified.
5			As per CH'S February 26, 2018 email with comments on the Terms of Reference, please provide information on aquatic ecology including benthic community information from all potential sources (including CH Long—Term Monitoring Program). Impacts on the benthic aquatic community should be included as part of the evaluation matrices.	• Baseline information on the aquatic benthic community will be added to the report, assuming CH is able to share whatever background information it has in this regard. Potential impacts/benefits to the benthic community will be acknowledged in the evaluation of alternatives.
6	Section 4.1.5 Terrestrial	page 39	Fieldsheets should be included to supplement the discussions within the report. Note: All sensitive information regarding species at risk should be excluded from the final EA.	• Field sheets will be included in the revised report.
7			Staff advise that FOD7-4 Moist Black Walnut Lowland Deciduous Forest is a provincially rare	• For clarity, this polygon is a cultural type that resembles an FOD7 type due to the presence of

			vegetation community ranked S2S3. As such, further discussion on measures which will be taken to demonstrate no negative impact to this vegetation community should be included.	Black Walnut. The report will be revised to more clearly describe the community, including the potential re-designation of the area as a cultural type, such as CUT (Cultural Thicket).
8			Significant wildlife habitat has not been completely considered. Please discuss impacts to seeps (as noted throughout the report) and rare vegetation communities. Staff note that the installation of the slope drain, extent of vegetation, and proposed hardening do not currently demonstrate no negative impact.	• A discussion of Seeps and Springs will be included in the revised report. Impacts and potential mitigation will be discussed in light of the overall project objectives and design considerations. • Per Comment 6 (above) there are no rare vegetation communities in the project area.
9			The breeding bird results which were to be completed in June-July of 2019 should be included.	• The Spring 2019 survey has been completed and results will be incorporated into the revised report.
10			Mitigation measures for any potential impacts to bat maternity roost colonies/habitat such as retaining mature trees, cavity trees etc. should be considered and discussed within the report.	• The report discusses mitigation in pre-construction and construction stages (e.g., avoidance, timing windows). A general discussion of post-construction mitigation will be included in the revised report. Specifics will be detailed once the trees to be impacted are identified (as part of the Arborist work).
11	Section 5: Alternative Solutions	page 50	As part of reviewing all feasible and reasonable alternatives, staff question if consideration should be made to acquiring hazardous lands into public ownership as a means of mitigating risks and impacts to adjacent private properties.	• As identified on page 74 of the PFR, the City will be securing easements on privately owned property where necessary to facilitate construction works as well to provide permanent City access to the creek in the future. By obtaining easements, the City is responsible for the maintenance of that portion of land.
12	Section 5: Alternative Solutions – Exposed	pages 50 – 64	The Draft Project File Report has considered armouring the existing at risk infrastructure. Staff request that other approaches for managing these erosion sites also be considered such as relocating this infrastructure to a more	• The Region's planned sanitary sewer (as identified in Figure 4-27) could potentially allow for the removal of at-risk infrastructure (ie: manholes). However, interim relocation of infrastructure is not a reasonable alternative due

	Sanitary Manholes		suitable location away from the steep banks, a sanitary sewer bypass, etc. These alternatives should also be considered by the assessment. Please clarify whether the new sanitary sewer being proposed by the Region (ref. Figure 4-27, page 46) would allow removal of any infrastructure considered to be at-risk.	to the pending abandonment of the infrastructure. • Continued communication with the Region during detailed design regarding their planned sewer works will occur. However, unless timing of the Region's works aligns with the City's works, the creek rehabilitation works will proceed with the proposed at-risk infrastructure protection.
13			Consideration and discussion on the potential for low impact development measures to be incorporated in the various alternatives, as a means to provide point source controls, should be included.	• The Hamilton Harbour Remedial Action Plan (HHRAP) provides recommendations for incorporation of LIDs and source control measures. As the study area is within the Hamilton Harbour area, the City is actively implementing the HHRAP recommendations where feasible. Therefore, LIDs and source control measures is outside the scope of this Class EA Study. • Additional information regarding the HHRAP recommendations and initiatives will be added to the PFR.
14			The feasibility of installing softer soil bioengineering options and creek bed restoration options that do not involve installing amourstone throughout the system should be further explored. This was raised in CH's review of the Terms of Reference. Staff is of the opinion that the removal of mature woodland, as proposed in some alternatives and reaches, may not be justified and/or required. Staff continue to recommend this be explored at this time as a more naturalized channel design will be identified as a requirement through CH's permitting processes.	• Priority has been, and will continue to be, given to the use of "softer, bioengineering options" for erosion mitigation and creek restoration. The hierarchy of preferred approaches, from most to least favourable, is: 1) vegetative protection (e.g. brush layer, live stakes); 2) mixed woody/stone protection (e.g. crib wall, rootwads, vegetated boulder revetment); 3) riprap protection; and 4) armourstone protection. • The majority of proposed treatments involve application of Option 2 (mixed woody/stone protection). We will revisit potential opportunities to use Option 1 (vegetative

				protection) along sections of Reaches 2 and 3, where infrastructure is not at immediate risk. Along the upper portion of Reach 1, in particular, the channel is deeply entrenched (up to ~4 m) with little to no floodplain access. Infrastructure is at risk. Option 4 (armourstone) has been proposed only where re-grading banks to a more stable angle that would allow "softer" treatments would necessitate significant cut-backs and loss of mature trees/shrubs. • Erosion mitigation treatments along Reach 1 will take advantage of existing topographic lows alongside the channel to allow for lower, softer approaches to the extent possible. A clearer illustration of the nature and extent of proposed works along Reach 1 will be provided.
15	Section 5.2: Alternatives for Reach 1	pages 51 – 55	Alternatives 2, 3 and 4 propose armourstone steps downstream of the perched outfall. Staff request that other approaches for managing this erosion site also be considered. At a minimum, please evaluate reconstructing the outfall such that it is not perched.	• The PFR will be updated to discuss the possibility of reconstructing the outfall. It is noted that based on site observations, the existing outfall structure is structurally sound and does not require replacement due to structural deficiencies. Replacing the structure will be explored during detailed design. • Also, it is noted that regardless of outfall structure replacement, armourstone (hard surface) bank stabilization measures will still be required at the upstream end of the creek system at the outfall structure to avoid a wide cut for bank re-grading and associated loss of mature trees.
16			Alternative 2 proposes a vegetated boulder revetment or armourstone bank treatment for erosion Site B. Staff request that consideration	• As per our response to comment #14, priority has been given to using softer approaches to the extent possible. At Site B, a sanitary sewer

			be given to the use of vegetated crib walls. This approach may also be applicable for similar circumstances downstream. Please consider the approach accordingly.	manhole is exposed along the outer bank of a slight bend in the entrenched channel. In comparison to armourstone, a crib wall would occupy more space (channel width), thereby further narrowing the already-narrow channel. A crib wall would also have a shorter lifespan of effectiveness than properly engineered armourstone (woody material decays), and the intended strength enhancement by plantings may be compromised by near-complete summertime shading by the high, dense tree canopy overhanging the creek. We will reconsider the possibility of crib wall treatments on a site by site basis.
17	Section 5.2: Alternatives for Reach 3	pages 60 – 64	The culvert beneath North Shore Boulevard was determined to be undersized (ref. Page 22 and Appendix C – Page 11) and having a sharp meander immediately upstream (Figure 4-3, page 13). Consideration should be made to upgrading the undersized culvert to address these concerns (i.e. fluvial geomorphology, conveyance, fish and wildlife passage, etc.). Alternatively, suitable justification should be provided as to why upgrading undersized culverts should not be considered.	• See response to comment #2.
18	Section 5.5: Evaluation Criteria, Table 5.5	page 65	Further consideration should be given to the weighting assigned to “Maintenance Requirements” and “Maintenance Costs” as well as if these criteria should be combined. Their combined weighting of twelve (12) percent appears high considering weightings of other criteria (e.g Public Safety) was only assigned ten (10) percent.	• Our evaluation matrix reflects the approach used by Toronto and Region Conservation Authority, which separates Maintenance requirements and costs. However, AE can combine these two criteria into one category such that less weight gets assigned overall. • The evaluation matrices will be updated.

19	Section 5.6: Table 5-4 to Table 5-6 Evaluation Matrix for Reach 1-3	pages 67 – 69	The school "amphitheatre" feature is referenced in the evaluation matrices for all reaches; however, it is only identified within the FOD5a3 community of Reach 2. Please note that CH is not supportive of infrastructure within the valley and recommend the amphitheatre be relocated as an opportunity for restoring the site and promoting public safety.	• Clarification in the PFR and evaluation matrices as to the nature of the amphitheatre (some rotten logs and earthen benches between) as well as the removal of its reference in matrices other than for Reach 2.
20			Further information regarding how pathways/trails will be enhanced as part of these works is required.	• Evaluation matrices will be updated to not include reference to trails as the creek only has informal access routes/points – not properly delineated trails/pathways.
21			Please elaborate on the meaning of safety grating as described under the Objectives - Social category.	• Evaluation matrices will be updated to elaborate on inclusion of safety grating, etc.
22			Please elaborate on how access to the creek will be limited as part of any selected alternative. Staff recommend installing a fence at the dripline or regulated limits to prevent public access into areas that are not stable and/or ecologically sensitive as a component of any selected alternative.	• As per discussions, fencing installation will not be included as part of the rehabilitation works on City property. • However, the City will reach out to the school property to discuss the possibility of the school board installing fencing along the top of the valley slope. • Fencing installation will be explored during detailed design.
23			Alternatives to hardscaping which will maintain and/or enhance the natural environment of the creek should be explored and discussed.	• See response to comment #14. We will elaborate on opportunities/constraints in the report.
24			Clarification is required as to how installing raised riffle armourstone grade control measures will allow for fish passage of representative species in the system. Staff raise concern that fish passage may not be maintained and/or enhanced in either alternative.	• Armourstone 'ribs' amongst riffle stone are proposed as a means of improving long-term bed stability in the ravine-like section of Reach 1. The 'ribs' are not intended to be raised above the bed; rather, they are flush with the bed and help maintain stability of the riffle stone in between.

				The 'ribs' will not compromise fish passage, as they will not form significant steps on the channel bed.
25			Further assessment of the long-term impacts of sub-reach works should be included. Specifically if the hardening of features along portions of the banks would have the potential to cause future erosion along the stretches that are proposed to remain natural.	• The potential for downstream energy transfer along 'hardened' sections of channel is an important consideration in the design and implementation of bed and/or bank stabilization measures. Roughness elements (e.g. shrub plantings, large woody debris) will be incorporated into all bed/bank stabilization measures, to the extent possible, thereby mitigating downstream energy transfer. One important clarification, however, is that the intention of this project is not to mitigate all erosion. Instead, it is to mitigate excessive erosion (mostly along Reach 1). As such, it is acceptable and desirable to allow bank erosion to occur in some locations, so that the creek does not become 'starved' of sediment and accelerate erosion of its bed in response.
26	Section 6.4 Detailed Design Commitments and Additional Works	page 74	Staff note that restoration works shall be completed to the greater of either CH's guidelines or COB By-Law requirements. This should be included in this section for detailed design.	• Noted. This information will be included in the PFR and applied during detailed design.
27	Section 7.1.2 Potential Effects on the Receiving Watercourse	page 75	The aquatic wildlife and habitat impacts were not covered in this section or elsewhere. Staff request further discussion on potential effects to aquatic habitat not limited to loss of overhanging vegetation, thermal impacts, barriers to fish passage, etc. be included.	• Potential impacts to the aquatic ecosystem (e.g. overhanging vegetation, thermal regime, fish passage barriers) will be more explicitly evaluated and discussed.

28	Section 7.1.3 Erosion and Sediment Control	page 75	Given that West Aldershot Creek discharges into Hamilton Harbour, staff recommend the report highlight Hamilton Harbour Remedial Action Plan (RAP). Note: The Evaluation Matrix should also be updated to include/discuss how the various alternatives are in keeping with the Hamilton Harbour Remedial Action Plan.	• Noted. Information regarding the HHRAP will be included in the PFR and discussions regarding City implementation of recommendations.
29	Section 7.4 Construction Considerations	page 79	Similar to the above, this section should be updated to acknowledge that all landscaping and rehabilitation works within CH's regulated area are to follow the greater of either CH's most up-to-date landscaping guidelines or COB By—Law requirements.	• Noted. This information will be included in the PFR and applied during detailed design.
Appendix A: Integrated Geotechnical and Hydrogeological Assessment Report				
30	Section 5.1: Existing Conditions and Methodology	page 5	Please be advised that CH accepts a minimum safety factor of 1.5 for normal slope conditions, with a minimum safety factor of 1.3 accepted for temporary slope conditions (e.g. elevated groundwater, etc.)	• Noted.
Appendix B: Hydrology and Hydraulics Technical Memo				
31	Table 3-1	page 4	Please clarify the source and accuracy of the topographic data used to create the hydraulic models cross sections. Specifically, was the data obtained via drone survey, etc.	• The topographic data used to create the RAS model was derived from a combination of LiDAR drone survey and on-ground bathymetric survey (for in-river values) completed by our subconsultant, Groma. The point cloud was post-processed, the traditional bathymetric survey was merged with the topographic survey, and a 3D surface was created. From there, AE cut cross sections from the surface which include the channel and floodplain. • The accuracy of the drone survey is ± 5cm. The bathymetric survey was collected consistent with traditional survey methods and levels of

				accuracy. The interpolated TIN survey will vary in accuracy depending on the density of the point cloud.
32	Hydraulic Model Details	page 12	Staff wish to clarify that the Regulatory Storm is the greater of the 100 year design storm or the Regional Storm. Please clarify this within the report (ref. page 12); as the Regional Storm (Hurricane Hazel) may not be the Regulatory Storm in this circumstance.	• Noted. Clarified in the PFR and tech memo.
Appendix D: Terrestrial and Aquatic Ecology Report				
33	Section 2.4: Conservation Authority Regulation (O. Reg. 162/06)	page 5	CH regulates a 7.5 metre regulatory allowance from the greater of the flooding or erosion hazards associated with West Aldershot Creek.	• Noted.
34	Figure 2- Ecological Land Classification and Natural Heritage Features	page 11	This section should be updated to include Figure 2.	• Noted. Report will be updated.
35	Section 4.1.4: Fresh – Moist Black Walnut Lowland Deciduous Forest (FOD7-4)	page 14	Further to comment #7, this section should be updated to include vegetation rarity and appropriate actions to reduce impacts.	• Noted. Report will be updated.
Appendix F: Conceptual Drawings				
36	Creek Erosion Control Plan/Profile	sheets 1-3	The profile drawings suggest that the existing sanitary sewer is located above the creek's invert in numerous locations. Please clarify within the report whether this is in fact the case;	• We confirm the existing sanitary sewer is not above the creek's invert. AE will review the plan and profile drawings and update accordingly.

			at creek crossing locations this is of particular concern.	
37			Where warranted, staff recommend additional subsurface utility investigation(s) be undertaken to more precisely determine location/elevation of existing infrastructure to more confidently define the current risk of exposure. Alternatively, these assessment should be identified as a requirements for Detailed Design.	• During detailed design impacts to utilities/infrastructure will be confirmed and, if required, coordination with affected owners will be completed.
Hydrologic Modelling – Digital Submission				
38	N/A	N/A	All '<u>flooding</u>' within the hydrologic model should be eliminated to ensure all flows are accounted for within the system. This may be accomplished by increasing surcharge depth at the flooded junctions and/or addition of a 'high flow' conduit to the downstream junction.	• AE's hydrologic model accounted for all flows within the system by adding an open channel flow route to the downstream junction (conceptually similar to the suggested approach of a 'high flow' conduit to the downstream junction). We realize this was not sufficiently described in the memo, so we have updated the memo (page 7) however no modifications were made to the hydrologic model.
Hydraulic Modelling – Digital Submission				
39	N/A	N/A	Staff note that several cross sections (e.g. 377 through 277) may have inadvertently over-estimated channel widths, which may misrepresent the channels' roughness. Please review cross sections coding to ensure bank stations represent observed channel widths. This will ensure reasonable roughness coefficients have been assigned to overbanks.	• Top of bank was not surveyed using traditional methods. Therefore, channel widths were estimated based on aerial imagery and judgement when looking at the existing channel cross sections. The bank stations between 277 and 377 have been modified slightly but are intentionally kept wider than the upstream channel based on observations made by the drainage & hydrology team during their site visit.
40	N/A	N/A	A review of aerial imagery suggests the culvert for North Shore Boulevard may be longer than what was coded into the model (i.e. Culvert is coded as 26 meters; aerial imagery suggests ±	• The 26m culvert is on Oaklands Park Crt (per OSIM inspection forms). The culvert on North Shore Boulevard was 27m long plus 13.7m and 14.0m extensions for a total length of 54.7m (per

			46 meter length). Please confirm the culvert length coded into the modelling.	City revised as-builts from 1978). This has been updated in the HEC-RAS model.
41	N/A	N/A	Crossing structures should be modelled per the standard HEC-RAS modelling approach. This includes the use of ineffective flow areas upstream and downstream of crossing structures as appropriate, as well as adjustment of the expansion and contraction coefficients at relevant cross sections.	• Model has been updated.
42	N/A	N/A	Staff typically apply the 'Pressure and Weir' high flow calculation method for crossing structures. If the 'Energy only' method will be utilized for this assessment, please include additional discussion accordingly.	• Model has been updated.

Andrea LaPlante

From: Malik, Umar <Umar.Malik@burlington.ca>
Sent: Thursday, June 27, 2019 4:01 PM
To: [redacted]
Cc: Andrea LaPlante; Stan Mathew; [redacted]
Subject: RE: West Aldershot Creek Erosion Control - Schedule B Municipal Class EA

Good afternoon [redacted]

Thank you for your email and for reviewing the draft Project File Report. We appreciate the quick turn-around. Thank you also for advice regarding the species at Risk. We will initiate consultations immediately.

Regards

Umar Malik, M.Eng., P.Eng
Stormwater Engineer
Capital Works Department

P. 905-335-7600, ext 7426| **E.** umar.malik@burlington.ca
Address 426 Brant Street P.O. Box 5013, Burlington, Ontario, L7R 3Z6
City of Burlington | www.burlington.ca

Please consider the environment before printing this e-mail.

From: [redacted]
Sent: Thursday, June 27, 2019 3:51 PM
To: Malik, Umar <Umar.Malik@burlington.ca>
Cc: 'laplantea@ae.ca' <laplantea@ae.ca>; Stan Mathew <mathews@ae.ca>; [redacted]
Subject: West Aldershot Creek Erosion Control - Schedule B Municipal Class EA

Dear Mr. Malik,

The Ministry of the Environment, Conservation and Parks has reviewed the draft Project File Report (draft PFR) for the above mentioned project. The ministry understands that the preferred solution consists of various reach-scale and sub-reach-scale erosion control measures for the three identified reaches of the creek. The work represents naturalized approaches to stabilize and restore the creek, enhance aquatic habitat and reduce risk to public and private property from excessive creek erosion.

The ministry is satisfied with the draft PFR, and has no concerns and no technical comments to offer at this time. We note that the project will require further consultation with the ministry with respect to mitigation for potential impacts to Species at Risk. Consultation for Species at Risk can be initiated by contacting the Species at Risk Branch through the centralized email address, SAROntario@ontario.ca. We recommend contacting the Species at Risk Branch at your earliest convenience to commence consultation discussions.

Thank you for the opportunity to review the draft PFR. We look forward to receiving the final report when it is available.

As always, please feel free to contact me directly with any questions or concerns you may have.

Sincerely,

[redacted]
Environmental Resource Planner and EA Coordinator
Technical Support Section | Central Region
Ministry of the Environment, Conservation and Parks
5775 Yonge St., 8th Floor
Toronto, ON M2M 4J1
[redacted]

This message, including any attachments, is privileged and intended only for the addressee(s) named above. If you are not the intended recipient, you must not read, use or disseminate the information contained in this email/fax. If you have received this email/fax transmission in error, please notify the sender immediately by telephone, fax or email and permanently delete this email from your computer/shred this fax, including any attachments, without making a copy. Access to this email/fax by anyone else is unauthorized. Thank you.