



Comment Index

Highway 102 Aerotech Connector Road Project

Additional Information Addendum

Publication date: November 6, 2020

Government

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13	Nova Scotia Environment – Inspection Compliance and Enforcement Division	December 7, 2020



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Mi'kmaq of Nova Scotia

Number	Source	Date Received
	Outside Comment period	
1	Kwilmu'kw Maw-Klusuaqn Negotiation Office (KMKNO)	December 8, 2020

Public

Number	Source	Date Received
1	Anonymous	November 27, 2020
2	Anonymous	December 4, 2020
3	Anonymous	December 4, 2020

From:

Sent: November 23, 2020 10:07 AM

To: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>

Subject: TIR's Aerotech Connector Highway EA

Hi Renata,

The Air Quality Unit has no comments on the additional information submitted for the Aerotech Connector EA.

Thanks,

From: <@novascotia.ca>

Sent: November 25, 2020 9:00 AM

To: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>

Subject: RE: Question re: Highway 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration

Hi Renata,

I had the chance to review the maps and compared to the previous EA filing. There is a bit more loss associated with the large bog (W28) and potentially to W17; W28 was assessed in the EA as not having high function and benefit for songbirds, raptors, and mammal habitat (Appendix B). Two SAR species (Common Nighthawk and Canada Warbler) were identified during bird surveys at PCO4, the survey point closest to this complex of wetlands and the W28. The same mitigations as a condition of approval provided in the original EA are applicable to the addendum.

Wildlife Division, Department of Lands and Forestry

From: <@dfo-mpo.gc.ca>
Sent: November 27, 2020 3:41 PM
To: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>
Subject: RE: Hwy 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration - Comments Due Dec 6, 2020

**** EXTERNAL EMAIL / COURRIEL EXTERNE ****

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Hi Renata,

DFO has no concerns regarding the Addendum.

Should the EA be granted conditional approval, DFO will be requesting additional information be provided through the Nova Scotia of Environment Watercourse Alteration Approval process to determine if the project will result in the harmful alteration, destruction or disruption to fish and fish habitat and require an authorization under the *Fisheries Act*.

Please let me know if you have any questions, or require any further information.

Best,

Regulatory Reviews Biologist | Biologiste de l'Examens Réglementaires
Telephone | Téléphone 902-237-8553

Regulatory Reviews | Examens Réglementaires
Ecosystem Management | Gestion des Ecosystemes
Maritimes Region | Region des Maritimes
Fisheries and Oceans Canada | Pêches et Océans Canada
Government of Canada | Gouvernement du Canada
PO Box 1006, Station P510, Dartmouth, NS B2Y 4A2 | CP 1006, Station P510, Dartmouth, N-É B2Y 4A2

From: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>
Sent: Wednesday, November 25, 2020 3:14 PM
To: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>
Subject: RE: Hwy 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration - Comments Due Dec 6, 2020

Hi everyone,

This is a reminder that if you have not already submitted comments to the EA Branch, comments on the **Addendum** for the Highway 102 Aerotech Connector Road Project must be provided by **December 6**,

2020, to be considered in this environmental assessment. **Comments are requested to be provided via e-mail if possible and if you have no comments, please indicate this in writing.** Again, attached is a memo template for providing your comments for use if you wish.

Stay safe!
Renata

From: Mageste da Silva, Renata
Sent: November 2, 2020 12:08 PM
To: Mageste da Silva, Renata (Renata.MagestedaSilva@novascotia.ca)
<Renata.MagestedaSilva@novascotia.ca>
Subject: Hwy 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration - Comments Due Dec 6, 2020
Importance: High

Hello everyone,

This is to advise that on November 6, 2020, the Nova Scotia Department of Transportation and Infrastructure Renewal (NSTIR) will register the **Additional Information Addendum** for the Highway 102 Aerotech Connector Road Project for environmental assessment (EA), in accordance with Part IV of the *Environment Act*.

On September 10, 2019, NSTIR registered the proposed Project for EA. **The Minister of Environment determined on October 30, 2019, that the registration information was insufficient to make a decision on the project and that additional information regarding alternative road routes, water resources and acid drainage is required. Therefore, the EA Branch is requesting comments on the Additional Information Addendum only.**

The Addendum can be downloaded from the Nova Scotia Government FTP site which link will be sent to you in the next email. If you're a NS government's employee, use your personal login and password to sign on. Other reviewers should use email as username and the provided temporary password (if this is the first-time assessing NS FTP website) to sign on; if you have accessed NS FTP in the past, use your previous password (an option to reset your password should also be available).

GIS data regarding project location and environmental feature shapefile data can also be downloaded from the above-mentioned FTP site. This GIS data must not be distributed outside of the government and should be used only for this review.

If you have any problems at all accessing the documents on the FTP site please do not hesitate to contact me. These documents will also be posted on our website (<https://www.novascotia.ca/nse/ea/projects.asp>) on November 6, 2020.

Comments on the Additional Information Addendum must be provided by **December 6, 2020**, to be considered in this EA. Comments are requested to be provided via e-mail if possible. If there are no comments, please reply indicating so. As well, attached is a reviewer's guide and a response template for your information and use.

On or before January 5, 2021, the Minister of Environment will decide if the project can be granted conditional EA approval. **Your comments along with public comments provided on the EA registration document, will be published on our EA website on the decision day.**

If you have any questions, please do not hesitate to contact me.

Kind regards,

Renata Mageste da Silva (She/Her)

Environmental Assessment Officer
Environmental Assessment Branch
Nova Scotia Environment
1903 Barrington Street, Suite 2085
PO Box 442
Halifax, NS B3J 2P8
Tel: (902) 456-6563

Mageste da Silva, Renata

From: Wade, Suzanne (EC) <suzanne.wade@canada.ca>
Sent: December 2, 2020 11:16 AM
To: Mageste da Silva, Renata
Cc: Wade, Suzanne (EC); Breau, Monique (EC); Mailhiot, Joshua (EC); Hingston, Michael (EC); SCF-EE-RCN / CWS-EA-NCR (EC)
Subject: FW: Hwy 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration (EAS# 2019-083C)

Follow Up Flag: Follow up
Flag Status: Flagged

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Hello Renata,

The Canadian Wildlife Service (CWS) of Environment and Climate Change Canada (ECCC) does not have additional comments specific to the project EIA addendum for the Hwy 102 Aerotech Connector Road project, Wellington (HRM), NS. As per the *Federal Policy on Wetland Conservation in Canada*, ECCC-CWS awaits the draft Wetland Compensation Plan (WCP) for review. The WCP should focus on mitigating wetland functions loss, including the loss of wetland habitats used by species at risk such as Canada Warbler, Olive-sided Flycatcher, and Barn Swallow listed as Threatened on Schedule 1 of the federal *Species at Risk Act*.

If you have any questions, please let me know.

Suzanne Wade

Environmental Assessment Analyst, Environmental Stewardship Branch
Environment and Climate Change Canada/Government of Canada
Suzanne.Wade@canada.ca / Tel: 902 426-5035

Analyste d'évaluation environnementale, Direction générale de l'intendance Environnementale
Environnement et Changement climatique Canada / Gouvernement du Canada
Suzanne.Wade@canada.ca / Tél: 902 426-5035

From: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>
Sent: November 25, 2020 3:14 PM
To: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>
Subject: RE: Hwy 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration - Comments Due Dec 6, 2020

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Renata

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Sent: November 2, 2020 12:08 PM
To: Mageste da Silva, Renata (Renata.MagestedaSilva@novascotia.ca)
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Importance: High

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If you have any questions, please do not hesitate to contact me.

Kind regards,

Renata Mageste da Silva (She/Her)

Environmental Assessment Officer
Environmental Assessment Branch
Nova Scotia Environment
1903 Barrington Street, Suite 2085
PO Box 442
Halifax, NS B3J 2P8
Tel: (902) 456-6563

Environment

Date: December 3, 2020

To: Renata Mageste da Silva, Nova Scotia Environment - EA Branch

From: Wetland & Water Resources Specialist, Water Resources Management Unit

Subject: Aerotech Connector Project: Environmental Assessment Addendum -
Wetlands

Scope of Review:

The following review of the Addendum to the Highway 102 Aerotech Connector Road Project Environmental Assessment Registration Document (EARD) (NSTIR, October 2020) is specific to the mandate of the NSE Wetlands Program within the Sustainability and Applied Sciences (SAS) Division. The review considers whether the environmental concerns associated with wetlands and the proposed mitigation measures to be applied have been adequately addressed within the EARD and associated Addendum. The recommendations provided below are meant to supplement the actions outlined in the EARD and associated Addendum.

Reviewed Documents:

- Wood. 2020. *Environmental Assessment Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington Environmental Assessment Registration – Addendum Report*. Nova Scotia Department of Transportation and Infrastructure Renewal.

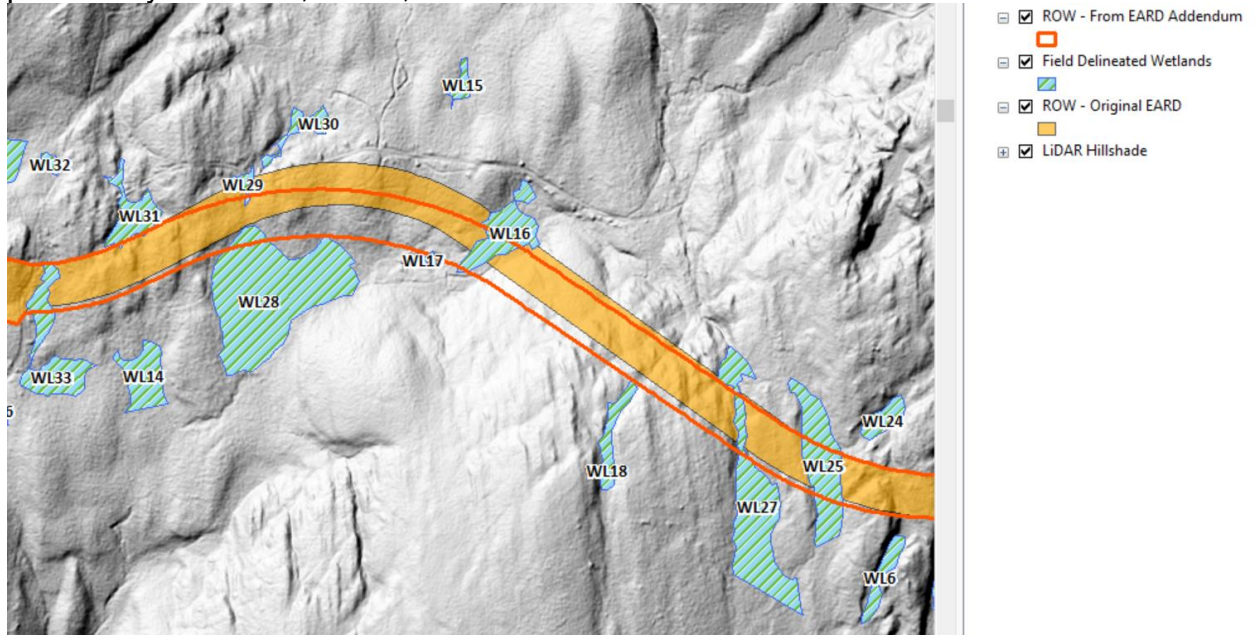
General Comments:

1. Additional Information Request - 2a-ii states “*Summarize how impacts to local drainage and maintaining hydrologic functions of wetlands will be mitigated.*”

The Response in the EARD Addendum states: “*Figure C1 shows the wetlands along the Connector Road corridor as well as the proposed cross-drainage culvert locations. It was estimated that approximately 6 ha of wetlands are located within the Connector Road ROW and are expected to be lost because of excavation and fill activities (Wood 2019, EA Report, Section 6.6.2 – Table 6.6.1). However, inflow into and outflow from the remaining wetlands are preserved by the planned cross-drain culverts. For the wetlands separated by the Connector Road, the hydraulic connection is maintained for the wetland areas through these cross-drain culverts.*”

With reference to the above response – The provided drawings are high-level, and do not show site-specific details illustrating the maintenance of wetland hydrology through installation of cross culverts.

2. *Alignment Change and Wetland Losses:* A change in alignment is noted for a portion of the proposed Right-of-Way (ROW) between the original EARD submission and the Addendum, as shown in the image below. This will result in various changes to wetland impacts from what was noted in the original EARD; particularly for WL16, WL28, and WL29.



Conclusions & Recommendations:

1. Should the Project receive approval, detailed design drawings showing cross-drain culvert configurations shall be submitted by the proponent as a component of Wetland Alteration Permit applications.
2. Should the Project receive approval, areas of wetland loss for Wetland Alteration Permit applications shall be calculated based upon the most current ROW, and the associated detailed design drawings referenced above.
3. All previous comments and recommendations by the NSE Wetland Specialist on the original EARD submission remain applicable.

Environment

Date: December 3, 2020

To: Renata Mageste da Silva, Environmental Assessment Officer

From: Greenhouse Gas Engineer, Climate Change Unit

Subject: Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington Project

Greenhouse Gas Mitigation

There are no further comments on this project based on the addendum for greenhouse gas mitigation.

Impact of Climate Change on the Project and Anticipated Risks

It is not clear if the anticipated impacts (e.g. on water supplies) are based on current climate data or projected climate data. It is recommended that the proponent account for projected changes in climate when assessing potential impacts and interventions (i.e. culvert sizing). Projections for climate data can be found at climatedata.ca. For advice on which climate projections to use for this context, please contact the Canadian Centre for Climate Services at Environment and Climate Change Canada. <https://www.canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services.html> Other guidance on climate change adaptation considerations can be found in the Nova Scotia Climate Change EA Guide (2011).



Environmental Health Program
Regulatory Operations and Regions Branch
1505 Barrington Street, Suite 1817
Halifax, NS B3J 3Y6

December 3, 2020

Renata Mageste da Silva
Environmental Assessment Branch
Nova Scotia Environment
1903 Barrington Street, Suite 2085
PO Box 442
Halifax, NS, B3J 2P8

Subject: Health Canada's Response – Review of the Highway 102 Aerotech Connector Road Environmental Assessment Registration Addendum Report¹

Dear Ms. Mageste da Silva,

Thank you for your e-mail dated November 2, 2020 requesting Health Canada's review of the above-mentioned Environmental Assessment (EA) Registration document¹ with respect to issues of relevance to human health. Health Canada has reviewed the document and is providing the following information with respect to atmospheric environment and recreational water quality.

Atmospheric environment:

The addendum report discusses the Sulphide Bearing Rock (SBR) Management Plan in Section 4.0, stating: "*SBR excavated during the project will be transported to and disposed of at the Fairview Cove Sequestration Facility in the Bedford Basin.*"

Table 4-5 lists possible effects on Valued Ecosystem Components. The *Atmospheric Environment* section lists: "*GHG emissions related to construction truck haulage (SBR material to disposal site; cover material to exposed rock faces; fill material to fill locations along roadbed)*". However, the document does not discuss potential noise and air quality (including dust and fumes) impacts from machinery and trucks used in the transport of SBR, cover, and fill material during the construction phase.

¹ Nova Scotia Department of Transportation and Infrastructure Renewal and Wood Environmental Assessment Registration Addendum Report for the Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington. 2020. October.

- If there is the potential for impacts to human receptors from additional noise and/or air quality changes resulting from the transport and disposal of SBR at the Fairview Cove Sequestration Facility identified in this addendum, additional noise and air quality mitigation measures may be required.

Recreational Water Quality:

The addendum report discusses the Drinking Water Supply Protection Plan in Appendix E. Table E2-2 discusses mitigation measures for surface water and states: “*Provide for training, equipment, and implementation of response procedures-based spill contingency response planning detailed in TIR’s Generic Environmental Protection Plan (EPP).*” under *Accident Scenarios*.

- As the project has the potential to impact surface water, if any potentially impacted surface water is used for recreational activities such as swimming or fishing, the proponent should establish a communication plan to ensure all recreational water users are notified of impacts to water quality in the event of a spill or accident.

If you have any comments/questions, please contact the undersigned at your convenience.

Sincerely,



Ellen Chappell, BSc., MES
Physical Sciences Officer
Health Canada, Atlantic Region
email: ellen.chappell@canada.ca

cc: Rick O’Leary, Manager, Environmental Health Program, Health Canada, Atlantic Region

Environment

Date: December 4, 2020

To: Environmental Assessment Officer

From: Environmental Health Consultant, Sustainability and Applied Science

Subject: Addendum to Highway 102 Aerotech Connector Road Environmental Assessment

Scope of review:

The focus of this Environmental Assessment review from the NSE Sustainability and Applied Science Division's Regional Environmental Health Consultant is potential impacts on human health. In general, the scope of this review includes the assessment of the potential for the proposed undertaking/project to adversely affect human health in all phases of the project. Any recommendations provided below are meant to supplement the actions that are outlined in the EA submission documents.

Documents reviewed:

The documents outlined below formed the basis for this EA review, and is referred to as the 'EA submission' through the rest of this memorandum:

- Addendum to the Environmental Assessment Registration Document – Nova Scotia Department of Transportation and Infrastructure Renewal, Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington. Including Appendices A - E. Report Prepared by Wood Environment & Infrastructure Solutions a Division of Wood Canada Limited. Registered on November 6, 2020, and accessed from <https://novascotia.ca/nse/ea/Highway.102.Aerotech.Connector.Road.Project/>

Comments re: Addendum to the EARD – Highway 102 Aerotech Connector Road Project:

The NSE Environmental Health Consultant (EHC) offers no additional comments beyond those provided for the original EARD.

Date: December 4, 2020

To: Renata Mageste da Silva, Environmental Assessment Officer

From: Nova Scotia Office of Aboriginal Affairs

Subject: Highway 102 Aerotech Connector Road – Addendum

The Nova Scotia Office of Aboriginal Affairs (OAA) has reviewed the Additional Information Addendum Report for the proposed Highway 102 Aerotech Connector Road Project, submitted by Nova Scotia Department of Transportation and Infrastructure Renewal (NSTIR) on November 6, 2020. The following review considers whether the information provided will assist the Province in assessing the potential of the proposed project to adversely impact established and/or asserted Mi'kmaq Aboriginal and Treaty rights.

Section 3.0 Surface Water Resources

Section 3.1.2 – Impacts on Local Drainage and Wetland Hydrology notes that it has been estimated that approximately 6 ha of wetlands are located within the Connector Road ROW and are expected to be lost because of excavation and fill activities.

The proposed Project is located within the Shubenacadie watershed, which has been identified as an important water system to the Mi'kmaq in the area as there are many historical activities tied to it. The MEKS undertaken for the proposed Project noted that various plant species were found to be harvested in the area. Based on the information presented in the MEKS, there is potential for the proposed Project to adversely impact Aboriginal and Treaty rights. Although the potential effects of the proposed Project could be minimal, to accommodate any potential adverse impacts to Aboriginal and Treaty rights, it is recommended that the Proponent work with the Mi'kmaq Conservation Group (MCG) to develop and implement any Wetland Habitat Compensation Plans required for the proposed Project.

Environment

Date: December 5, 2020

To: Renata Mageste da Silva, Environmental Assessment

From: Surface Water Quality Specialist, Water Resources Management Unit

Subject: Review Comments & Recommendations per EA Registration Addendum Report: Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington

Scope of Review

As Surface Water Quality Specialist with the Nova Scotia Environment Sustainability and Applied Science Division, the following Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington Environmental Assessment (EA) Addendum Report review focuses on the following subjects:

- The Proponent's response to the Minister's Decision (Letter dated Oct. 30, 2019) specifying requirements for additional information
- Surface water quality & its management
- General surface and groundwater resources & their management

The following review considers whether the environmental concerns associated with the above subjects and the proposed mitigation measures have been adequately addressed in the Environmental Assessment Addendum Report. The comments below are meant to confirm if the Addendum Report adequately responds to the Minister's requirements for additional information pertaining to surface water quality and general surface water and groundwater resource management.

While general comments on fish and fish habitat, wetlands, surface water quantity, and groundwater quality and quantity may be included below, applicable technical specialists should be consulted for specific review and comment.

Reviewed Documents

The following document was the basis for this EA review:

Wood. 2020. *Environmental Assessment Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington*. Environmental Assessment Registration – Addendum Report. Nova Scotia Department of Transportation and Infrastructure Renewal. TV184002

Comments

Impacts to Drainage and Watercourses

- Section 3.1 provides adequate details regarding the planned watercourse crossing locations and clarifies that cross-drainage culverts are proposed for all watercourses. It also clarifies that, since all watercourse crossings are proposed to have culverts, there are no potential impacts to crossings without such culverts, and therefore no mitigations of such impacts are required.
- Section 3.1.2 describes a proposed mechanism by which the highway drainage ditches and cross-culverts will work together to direct surface runoff to watercourses where the natural runoff flows. Figure C1 shows the relative position of the alternative road pathways, watercourses, and wetlands, but does not demonstrate how the proposed infrastructure will function to achieve the negligible impact on local hydrology proposed in the Addendum.
- Section 3.1.3 identifies that the Proponent has revised their approach to managing Sulphide Bearing Rock from the Registration document and that, as a result, there are no permanent stream diversions currently proposed, under either of the alternative road routes (Option A or Option B).

Management of Surface Water Runoff

- Section 3.2 provides a detailed description of the run-off management measures proposed, with significant emphasis on runoff from potentially acid-bearing rock. Table 3-2 provides detailed mitigation measures for runoff for all applicable steps and activities within the Construction and Operation phases of the roadway.
- Active treatment for acidic waters prior to their disposal into wetlands or watercourses is proposed (Table 3-2) if their presence is detected by monitoring results and as required. Neither the nature of this active treatment, nor the means by which to determine whether it is necessary, or effective, are proposed.
- Section 3 only addresses mitigation measures for two potential contaminant of concern – acid-bearing rock and sediment. It does not address chloride, petroleum oils and lubricants (POL), or herbicides / pesticides, such as identified in the Registration document. Chlorides are identified as residual hazards, but no mitigation is proposed for this contaminant. The use or non-use of herbicides / pesticides is not identified or discussed at all. Consequently, it is impossible to discern if the Proponent intends to use these materials as part of their Integrated Roadside Vegetation Management program at all, and if so under what condition, and what mitigation measures may be employed to limit the potential impacts thereof.

Acid Rock Drainage (ARD) / Sulphide Bearing Rock (SBR) Management Plan

- Section 4.3.1 identifies the location and volumes of potential acid generating rock (PAG) along sections of the proposed route, but not the depth of the cuts in these sections, primarily through the presentation of Table 4-2 (Estimated Excavation Volumes by Segment), Figure 4-1 (Cut and Fill Locations), and Table 4-4 (Geochemical Results).
- The report does not correlate the positions of boreholes, test pits, or monitoring wells (Table 4-4) with the locations of road segments shown in Figure 4-1, although they are shown in relation to road sections on in Figures C3, C4, and C5 in Appendix C.
- Only 13 of 35 samples analyzed exceeded the NS Sulphide Bearing Material

Disposal Regulations screening criteria of 0.4% sulphide sulphur.

- The SBR management plan is proposed for all cut surfaces regardless of the geochemical results encountered for individual segments and/or sections

ARD mitigation measures

- The Addendum proposes a novel approach to ARD management compared to the Registration document, in that it identifies the use of an approved marine disposal facility as the preferred approach, rather than PAG encapsulation within the roadbed. A detailed analysis of the operational feasibility and effectiveness of the proposed measures, in comparison to alternative measures, is presented, and demonstrates the adequacy of the newly proposed approach.
- Section 4.4 addresses the proposed ARD mitigation measures of exposed rock faces. Only one mitigation measure was proposed to address water quality exceedances – lining of collection ditches with limestone – without regard to volume, residual impacts of limestone deposition on sediment loads, or ditch remediation following the end of the construction phase.

ML/ARD Generation & Impacts on VECs

- Section 4.4 implies that any ML/ARD generation will be short-lived due to the design, installation, and effectiveness of a vegetative cover system intended to limit SBR exposure to oxygen. The report does not clearly identify when the cover system installation will begin within the project schedule or estimate the periods during which SBR may be exposed to oxygen prior to the installation of the cover system, and any lag periods between its installation and when it becomes effective.
- Section 4.5, and in particular Table 4-5, identifies detailed mitigative measures for potential impacts on VECs. Again, mitigative measures for impacts of ML/ARD on groundwater and surface water are referenced but not identified or discussed.
- Impacts on wetlands are treated as aquatic environments but they have unique requirements, such as soil / sediment quality, that may be impacted differently than aquatic environments. Consequently, mitigation measures specific to wetlands should be developed and implemented as required.
- No list of long-term conditions necessary to maintain was presented, reviewed, or evaluated.

Public Drinking water supply protection

- Section 5 and Appendix E present a comprehensive plan for public and community private drinking water supplies in the Collins' Park and BoMont public drinking water source watersheds systems and in the community of Wellington.
- Although the Addendum Report did not specifically reference the public drinking water supply for East Hants drawn from Shubenacadie Grand Lake, this public drinking supply lies wholly within the BoMont public supply watershed. Consequently, the measures taken to protect the BoMont water supply are expected to provide similar protection to the East Hants water supply.
- Table 4-6 presents a preliminary surface water quality monitoring program. No details were given to confirm how pH and conductivity measurements would be collected in association with precipitation events.

- Table E2-2 presents a suite of mitigation measures for surface water and references several procedures to be adopted by the Proponent. These procedures (listed below) were not provided and cannot be assessed for their adequacy as proposed mitigative measures.
 - TIR's Standard (Erosion and Sedimentation Control) Specifications
 - TIR's Generic Environmental Protection Plan (EPP)
 - TIR's Salt Management Plan
- Appendix E presents details on the surface water monitoring program and specifies the collection of baseline water quality data. The timing, duration, and any conditions qualifying associated data as effective baseline data have not been provided.
- Table E2-3 presents detailed surface water quality monitoring and identifies that acidity will be monitored during construction and operational phases. The specific analytical method for acidity was not specified.

Private Drinking water supply protection

- Within a 500m buffer of the proposed roadway, a high proportion of wells are at a depth which is considered vulnerable to potential impacts of Project related impacts.

Recommendations

The following recommendations could be developed as conditions in support of potential approvals for the Project:

Operational Issues/Other Permitting Processes

General

- The site-specific EPP should be provided to the Nova Scotia Department of Environment for review and comment prior to commencement of the Project.
- A detailed description of proposed active treatment of acidic waters should be provided to the Nova Scotia Department of Environment for review and comment prior to commencement of the Project.

Surface Water Quality

- As acid rock drainage and metal leaching are expected to occur due to Project activities and local geology, the proposed development of a management and monitoring plan in consultation with the Department of Environment should be completed. Detailed design of site-specific mitigation measures should be developed by a qualified professional engineer licensed to practice in the Province of Nova Scotia and submitted to the Department of Environment for review and approval.
- The potential use of herbicides within the Project area for vegetation management should be confirmed with the Proponent and their integrated vegetation management plan with respect to the separation distance from protected and private drinking water supplies.
- The preliminary surface water monitoring program presented in the Addendum Report for this Project (Table 4-6, and as generally described in Appendix E) during the construction phase should be developed into a monitoring plan and submitted to the Department of Environment for review and comment prior to implementation. The proposed program should address

all identified contaminants of concern, that is, chloride, petroleum oil and lubricants (POL), herbicides (if applied), in addition to SBR. Activities related to monitoring parameters and frequency, interpretation of monitoring results (e.g., action criteria), and actions and mitigation measures that will be implemented if criteria are exceeded. As part of the monitoring program plan methods, details on the establishment of water quality sample sites and sampling frequency should be indicated and associated analysis requirements included, particularly for the Project identified contaminants of concern (e.g., sediment, acid rock drainage, metals, salt, herbicides, hydrocarbons). Pre- and post-construction monitoring plans with respect to acid rock drainage and metal leaching should be included as part of the overall surface water monitoring plan.

- The proponent should provide detailed and specific mitigation measures for contaminants of concern that were not addressed in the Addendum report, including chloride, POL, and herbicides.
- The Proponent's salt management plan should be submitted to the Nova Scotia Department of Environment for review and comment prior to commencement of the Project.
- Prior to commencement of the Project, the Proponent should submit an erosion and sediment control plan, developed by a qualified professional engineer or geoscientist licensed to practice in the Province of Nova Scotia, to the Department of Environment for review and approval.
- The Proponent proposes to have no direct connection of surface water runoff from the highway area to existing watercourses (Section 2.2.3), this approach would be expected to require mitigation measures to treat surface water runoff for potential contaminants of concern (e.g., hydrocarbons, suspended solids) prior to discharge into a watercourse. Development of mitigation measures as part of this no direct connection approach should be completed by a qualified professional engineer licensed to practice in the Province of Nova Scotia and submitted to the Department of Environment for review and approval.

Surface Water Quantity

- A project operational phase drainage plan presenting changes to local surface water runoff drainage patterns, including changes in drainage areas from pre- and post-construction conditions, should be submitted for review and acceptance by the Department of Environment. The plan should be developed to minimize changes to local watershed drainage areas to the extent feasible for the post-construction condition.

MEMORANDUM

To: Renata Mageste da Silva, Manager, EA Branch

From: Hydrologist, Industrial Management Unit, Sustainability and Applied Science Division

Date: December 6, 2020

Subject: Highway 102 EA Review Comments

Scope of review:

The scope of this Environmental Assessment review from the NSE Sustainability and Applied Science Division Hydrologist is to assess the potential environmental impacts and proposed mitigations of the proposed undertaking on surface water quantity and management. While comments may also include considerations for impacts on general surface water quality, groundwater, freshwater fish habitat, and wetlands, appropriate technical specialists for these areas should be consulted for specific review and comment.

Documents reviewed:

The documents outlined below formed the basis for this EA review, and is referred to as the 'the submission' through the rest of this memorandum:

- Environmental Assessment – Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington – Environmental Assessment Registration – Addendum Report. Report Prepared by wood.. Dated October, 2020, and accessed from <https://www.novascotia.ca/nse/ea/Highway.102.Aerotech.Connector.Road.Project/>

Comments and recommendations re: the submission:

Surface water quantity:

- The submission outlines the general locations of watercourse crossings on Figure C1
- It is outlined that '...culverts are all located in depressions and will preserve the minor local drainage features and their hydrological characteristics'.

- The amount of information provided is high-level, but does provide some additional information to support the proposed activity.
- It is clarified that “The construction of the Connector Road will require no watercourse diversions.”
- It is not clear in the document how much permanent loss to fish and fish habitat will occur as a result of the proposed works

Conclusions & Recommendations:

Please see below for a summary of issues and recommendations:

Planning/Design Issues:

-

Operational Issues/Other Permitting Processes

- Final road drainage designs to be completed by a professional engineer and to be considerate of potential impacts on local drainage patterns resulting from the proposed works;
- A detailed sediment and erosion control plan for the overall project is to be developed by a qualified professional and is required to be submitted as part of any industrial approval application for NSE review and approval prior to construction activities, including clearing, grubbing, and stripping, take place.
- Any necessary approvals for the watercourse alterations associated with the proposed works must be obtained prior to project commencement, and applications must include:
 - Details associated with the loss of fish and fish habitat associated with the proposed works, including consideration for any partial infilling of associated wetlands for review by NSE and DFO;
 - Details associated with potential interaction between structures that may be in place for both the active transportation trail and connector road; and
 - Details surrounding plans for drainage ditch flow treatment prior to entering any watercourse
 - How structures will be designed to incorporate climate change, as was mentioned in the original submission (‘Culverts designed to address potential climate change impacts on stream flow (implementation of the 1:100-year storm event design).
 - For those crossings that are associated with wetland alterations, sufficient details to outline how ensuring effective hydraulic connection between the upstream and downstream wetlands has been considered in the proposed design

Date: December 6, 2020

To: Environmental Assessment Officer
Cc: Manager, Water Management Unit, Sustainability and Applied Science Division

From: Senior Hydrogeologist, Sustainability and Applied Science Division

Subject: Environmental Assessment Review of Highway 102 Aerotech Connector Road Project – Addendum Report October 2020

Reviews for EA's from the Sustainability and Applied Science Division Senior Hydrogeologist focus on the potential for the proposed undertaking/project to adversely affect groundwater resources, including general groundwater quality, local water wells/water supply and groundwater discharge to surface water.

The proposed Project involves the construction, maintenance and post-construction monitoring of a 5-kilometer (km) Connector Road from Highway 102 Aerotech Interchange (Exit 5A) to Trunk 2 in Wellington near Sunnylea Road.

The following recommendations follow an initial EA Project review by the SAS Senior Hydrogeologist conducted in October 2019. The focus here will be on adherence of the EA Addendum report to the requested groundwater/drinking water related information and any follow-up recommendations resulting.

Comments:

The information requested by the Minister in his Decision most relevant to groundwater in this review is:

“4. Provide a comprehensive plan to protect public and community private drinking water supplies including mitigative options to address potential impacts associated within the Collin's Park drinking water supply watershed area and the residential homeowners relying on groundwater wells in the western end of the route (Wellington) as presented in the EA registration. These options must include groundwater and surface water supply protection plans, contingency plans, and monitoring and reporting plans.”

Discussion

The Addendum work related to Item 4. (above) is primarily found in Appendix E

“Drinking Water Supply Protection Plan” (the DW Protection Plan). This Plan includes discussion of:

- Public and private (community) drinking water supplies (surface water and groundwater)
- Identification of Potential Impacts and Contaminants
- Assessment of Risk to the Groundwater Water Drinking Water Supply Area
- Mitigation and Contingency Plans for Identified Risks
 - Including a well owner complaint procedure and potential well replacement procedure
- Groundwater Monitoring Program Details, including Reporting

While all the required components seem to be present, there are a few details of the Plan that require clarification or may need more details given at the potential Operational phase.

- Table E 3-2 mentions TIRs Salt Management Plan – request that this plan be provided to NSE
- Table E 3-2 mentions in Construction – “Conduct a pre-blast survey of potable water wells within 500 m of a blast site”; NSE in the past, and in the Pre-Blast Survey Guidance typically requires a pre-blast survey distance of 800 metres. The rationale for using 500 metres should be provided to NSE
- Clarification that in Table 3-3 “Bi-annual” groundwater monitoring during Construction should mean every 6 months
- The DW Protection Plan in Table 3-3 seems to mention only 3 long-term monitoring wells. This number seems to be too low given the location and situation and should be expanded on. For example, a more comprehensive monitoring network would have at least 1 upgradient ambient monitoring well and 2 wells on either side of the corridor (as residential wells are on both sides), for a combined total of 5 monitoring wells.
- Clarification that in Table 3-3 “Standard Water Analysis” should include Standard/General ionic chemistry and other chemistry (turbidity, conductivity etc) as well as the full standard ICP-MS metals list.
- In Table 3-3, all Groundwater Monitoring events should include Standard/General ionic chemistry and other chemistry (turbidity, conductivity etc) as well as the full standard ICP-MS metals list.
- The Plan in Table 3-3 specifically highlights Lithium as an addition to the Standard Water Analysis. This seems unusual as there are no known issues for Lithium in the groundwater that the reviewer is aware of. Is there a reason why the emphasis on Lithium?

- In Table 3-3 Groundwater effects monitoring should be considered part of Mitigation and Contingency planning and regular Operational monitoring should be implemented (suggest every 2 years) – not only linked to surface water issues determinations
- In Table 3-3 consideration should be given to providing a community private drinking water supply wells monitoring for water quality following 5 years of Operation. This would help assess and mitigate any potential long-term impacts from the project.
- The DW Protection Plan should include providing information sources and guidance to residential homeowners regarding their well water quality and mitigation actions that may be needed – even if not due to TIR activities – as these likely will be noted during the Drinking Water (Well Water) Baseline survey (for example it is typical that at least 40% of water wells may have some bacterial presence at some time)

Recommendations

The following recommendations are suggested based on the EA Addendum the for proposed Highway 102 Aerotech Connector Road Project.

Planning/Design Issues

- None

Operational Issues/Other Permitting Processes

- Proponent to provide rational for 500m vs 800 m distance for pre-blast survey of water wells
- Proponent to provide the TIR Salt Management Plan
- All monitoring plans (Groundwater, Surface Water, Residential Well Survey) to be provided to NSE for review and acceptance prior to implementation of construction
- TIR should provide community updates related to groundwater/surface water monitoring results during the construction phase
- Include education on information sources and mitigating general water well issues for homeowners

Other Observations

From: Crnec, Sarah <Sarah.Crnec@novascotia.ca>
Sent: December 7, 2020 9:23 AM
To: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>
Subject: Re: Hwy 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration - Comments Due Dec 6, 2020

Hi Renata
I have no additional comments to make.
Thanks
Sarah

Sent from my iPhone

From: Mageste da Silva, Renata <Renata.MagestedaSilva@novascotia.ca>
Sent: December 7, 2020 8:54 AM
To: Matlock, Bernard <Bernard.Matlock@novascotia.ca>; Crnec, Sarah <Sarah.Crnec@novascotia.ca>
Subject: RE: Hwy 102 Aerotech Connector Road EA Project - Additional Information Addendum Registration - Comments Due Dec 6, 2020

Good morning Bernie and Sarah,

Just checking if ICE is going to submit comments on the above noted Addendum. Comments were due yesterday Dec 6th.

I kindly ask you that if you have no comments, please indicate this in writing.

Thank you very much!

Renata

Environment

Date: December 7, 2020

To: Renata Mageste da Silva, Environmental Assessment Officer

From: NSE Inspection Compliance and Enforcement (ICE) Division

Subject: Environmental Assessment for Proposed NSTIR Connector Road Between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington
EA Addendum Information

Nova Scotia Environment's (NSE) Inspection, Compliance and Enforcement (ICE) Division has reviewed the following document in relation to a proposed controlled access minor arterial connector road designed to link Highway 102 at Exit 5A and Trunk 2 in Wellington:

- Environmental Assessment, Addendum Report, Connector Road Between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington; prepared by Wood Canada Limited for Nova Scotia Department of Transportation and Infrastructure Renewal (TIR); dated October 2020.

NSE's role in land development is legislated pursuant to the *Environment Act*, regulations and associated policies, guidelines, and standards, which can be obtained from the Regional or District offices of NSE, or by accessing the following Department links:

Environment Act: <http://nslegislature.ca/legc/statutes/environment.pdf>

Regulations: <https://novascotia.ca/just/regulations/rxaa-l.htm#env>

ICE Division (Central Region, Bedford) would like to offer the following comments related to the response to the Minister's Information Request dated October 3, 2019.

A major favorable mitigation strategy proposed in the addendum is the plan for the removal and marine disposal of sulphide bearing materials at the Fairview Cove sequestration facility. This should be considered as a condition of Approval

1. Only a general comparison of the environmental impacts associated with both routes appeared to be provided. A full comparison of impacts associated with Alternate Route B did not appear to be provided. For example; the number of

dwellings with wells within 500 meters was not provided for Route B, although visibly understood to be substantially lower. Impacts associated with blasting could be substantially lower using Alternative Route B, but the cut and fill volumes not provided for this option.

2. Full mitigation strategies have not been provided for reduction of acid rock drainage from surfaces of rock which have been exposed from development, including blasting. This could include a blast design to reduce fractures and overbreak on rock. Mitigation strategies should be provided in a plan submitted to the Department for approval. The plan, along with design drawings and specifications, should be prepared by a professional engineer licensed to practice in the Province of Nova Scotia.

There is currently no ADR trigger for an Industrial Approval on the project since there is no plan for disposal of sulphide bearing materials. As a result, there will be a need to establish a condition for discharge limits for drainage from the project into wetlands and watercourses. The compliance with limits will determine the need for additional mitigative measures beyond what is established in the plans described above. If additional, non-passive measures are required then they may need an approval for an ARD wastewater treatment system.

Recommended Minimum Discharge Limits

TSS – CCME Freshwater Aquatic Limits

Aluminum – 0.8 mg/l

Conductivity – 500 micromhos per cm

pH 6-9 units Average

Toxicity – Non- acutely lethal

Flexibility for the NSE to revise limits if monitoring determines adverse environmental impacts

3. Additional details are required in the surface water monitoring plans which have been submitted. I recommend that a detailed surface water monitoring plan be submitted to the Department that clearly identifies monitoring stations, parameters, and frequency of monitoring for each key stage of the project. Total suspended solids and acid extractable metals should be considered in the program.
4. I recommend that the proponent establish a Community Liaison Committee to facilitate a means of communication between the NSTIR, the community and stakeholders which have a potential to be potentially impacted by blasting, traffic and runoff.
5. Establish a condition to accept the proposal for a 90 foot right of way to assist in mitigation of potential impacts.



November 27, 2020

Honourable Minister Wilson
Environmental Assessment Branch
Nova Scotia Environment
PO Box 442
Halifax, NS
B3J 2P8

Re: East Hants (Regional) Public Drinking Water Source regarding the Aerotech Connector Road Project

Dear Honourable Minister Wilson,

On behalf of the East Hants Source Water Protection Advisory Committee (EH SWPAC), comments were submitted on September 20, 2019, requesting the East Hants (Regional) Public Drinking Water Source (Grand Lake Watershed) be considered during the Environmental Assessment.

Your request for additional information (as per NS Decision October 30, 2019) includes:

“4. Provide a comprehensive plan to protect public and community private drinking water supplies including mitigative options to address potential impacts associated within the Collin's Park drinking water supply watershed area and the residential homeowners relying on groundwater wells in the western end of the route (Wellington) as presented in the EA registration. These options must include groundwater and surface water supply protection plans, contingency plans, and monitoring and reporting plans.”

The addendum report failed to mention Grand Lake as an East Hants Regional Public Drinking Water Source when discussing drinking water supply protection in the area. We would ask that, at minimum, the environmental assessment recognize that East Hants draws from Grand Lake (via Shubenacadie River) as the Regional Public Drinking Water Source.

Thank you for considering the Committee's comments and I look forward to your response.

On behalf of the EH SWPAC,

Environmental Engineering Technician
Municipality of East Hants

cc. Honourable Margaret Miller, MLA for Hants East



Native Council of Nova Scotia

The Self-Governing Authority for Mi'kmaq/Aboriginal Peoples residing Off-Reserve in Nova Scotia throughout traditional Mi'kmaq Territory

"Going Forward to a Better Future"

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Aboriginal/Treaty Rights
Negotiations Facilitating
Directorate

NCNS Citizenship
Information Office

Education & Student
Services

Rural & Native
Housing Group

Aboriginal Peoples
Training & Employment
Commission (APTEC)

Netukulimkew'e'l
Commission

Wenjikwom Housing
Commission

Social Assistance
Recipient Support for
Employment & Training
(SARSET)

Micmac Language
Program

Native Social
Counselling Agency

Child Help Initiative
Program (CHIP)

E'pit Nuji Ilmuet
Program (Prenatal)

Reaching Home
Indigenous Program

Parenting Journey
Program

Youth Outreach Program

Mi'Kma'ki Environments
Resource Developments
Secretariat (MERDS)

Aboriginal Connections
in Trades & Apprenticeship
(ACITA)

December 4, 2020

Environmental Analyst
Environmental Services
NS Transpiration and Infrastructure Renewal
1672 Granville Street
PO Box 186
Halifax, Nova Scotia
B3J 2N2

RE: Environmental Assessment of Connector Road between Highway 102 Aerotech Interchange (Exit 5A) and Trunk 2 at Wellington

The Native Council of Nova Scotia was organized in 1974 and represents the interests, needs, and rights of Off-Reserve Status and Non-Status Section 91(24) Indians/Mi'kmaq/Aboriginal Peoples continuing on our Traditional Ancestral Homelands throughout Nova Scotia as Hairs to Treaty Rights, Beneficiaries of Aboriginal Rights, with Interests to Other Rights, including Land Claim Rights.

The Native Council of Nova Scotia Community of Off-Reserve Status and Non-Status Indians/Mi'kmaq/Aboriginal Peoples supports projects, works, activities and undertakings which do not significantly alter, destroy, impact, or affect the sustainable natural life ecosystems or natural eco-scapes formed as hills, mountains, wetlands, meadows, woodlands, shores, beaches, coasts, brooks, streams, rivers, lakes, bays, inland waters, and the near-shore, mid-shore and off-shore waters, to list a few, with their multitude of in-situ biodiversity.

Our NCNS Community has continued to access and use natural life within those ecosystems and eco-scapes where the equitable sharing of benefits arising from projects and undertakings serve a beneficial purpose towards progress in general and demonstrate the sustainable use of the natural wealth of Mother Earth, with respect for the Constitutional Treaty Rights, Aboriginal Rights, and Other Rights of the Native Council of Nova Scotia Community continuing throughout our Traditional Ancestral Homeland in the part of the Mi'kma'ki now known as Nova Scotia.

We would like to reassert that as heirs to treaty rights and beneficiaries of Aboriginal rights, there is indeed an obligation to consult with the Native Council of Nova Scotia and our communities, just as there is an obligation to consult with the *Indian Act* Bands. We hope that future dealings with the provincial department will include the Native Council of Nova Scotia where these sorts of consultations are necessary.

In our previous comment, we had written about the disingenuous “residual effects” table that misleads one to “think that these wetlands are going to be carefully picked up and placed outside the project area, with no evidence of the change.” We know this to not be the case. These wetlands that are to be infilled and split in half will not necessarily rebound to their pre-disturbance states. The wetlands adjacent to those that will be disturbed will also bear adverse impacts. This highway threatens to close off corridors between these valuable ecosystems and be a detriment to biodiversity in the area. As stated before, and as newly reflected in the alternative purposed route, “reducing wetland area by ~17%, changing hydrology, removing vegetation and potentially introducing sediment and nutrients will certainly cause a permanent net loss of flora and wetland function, regardless of mitigation measures.”

It is a slippery slope to justify the removal of valuable wetlands by claiming that there is “similar habitat and priority plants in the region,” or by claiming that the area was “affected by past adjacent human activity” and is no longer pristine. As we have observed with the recent twinning of Highway 101 by the Windsor Causeway, the Causeway’s construction in 1970 caused a significant change in the ecosystem, removing the original habitat and replacing it with a saltmarsh-mudflat system. This new saltmarsh-mudflat system, while given time to prosper, turned into a productive habitat that was biologically rich with flora, benthic invertebrates, and all the creatures that subsisted off of them. With the twinning of the highway, construction could only be completed if the saltmarsh-mudflat system was infilled. Despite being a productive ecosystem, because the mudflats were the result of previous human disturbance, they were determined not to be “pristine” and have now been infilled. As a result, the newly productive mudflats by the causeway have been nearly eliminated. This is how habitat loss is allowed to happen. It’s chipped away a few hectares at a time, until one day there is no longer “similar habitat” in the region. If it is decided that this project should proceed, the proponent should at least be forthcoming when making an account of the ecological cost.

If this project is to proceed, it is our recommendation that a more localized offset project be done to compensate for wildlife and wetland disturbance. We conclude that if this project is to proceed, then the damage to the wetlands and surrounding area will be cause for future proponents to also claim the area has been “affected by past adjacent human activity,” and continue to develop over what we considered to be a productive habitat that houses endangered species such as the *myotis* and the snapping turtle. We would also like to revise our previous invitation to visit our Truro Heights Office to discuss this and any future projects in light of COVID-19. Instead, we invite you to a conference or video call for the same purpose, and so that we may share the background of the Native Council of Nova Scotia and the Maritime Aboriginal Peoples Council, as well as the history of the Off-Reservation Indigenous Community of Nova Scotia.

Going Forward To
A Better Future

Habitat Impact Assessment Manager
Maritime Aboriginal Peoples Council

Cc: Chief and President, NCNS
Commissioner, Netukulimkewe'l Commission
, Director of Intergovernmental Affairs, MAPC

2 Park Ave., Lower Sackville
PO Box 8388, RPO CSC
Halifax, NS B3K 5M1



December 4, 2020

Honourable Gordon Wilson
Minister of Environment
Nova Scotia Environment
PO Box 442
Halifax, NS B3J 2P8

**Re: Addendum to Highway 102 Aerotech Connector Road Project Environmental Assessment
With respect to the Collin's Park Public Drinking Water Supply Area.**

Dear Honourable Gordon Wilson:

On behalf of the Collins Park Watershed Advisory Committee (CPWAC/Committee), thank you for the opportunity to comment on the Addendum to the Environmental Assessment of the proposed Highway 102 Aerotech Connector Road Project (Aerotech Connector). The Committee was pleased to see that the recommendations made in our original Environmental Assessment (EA) response submission were included in your October 30, 2019 decision for additional information from the proponent, the Nova Scotia Department of Transportation and Infrastructure Renewal (NSTIR).

On November 27, 2020, NSTIR's EA consultant, Wood. PLC and staff of NSTIR (the proponents) met with our Committee in regard to their EA Addendum submission. The ensuing discussion proved to be very beneficial to the CPAWC and we believe to the proponents as well. We respectfully submit this letter in light of this meeting and in response to the proponent's EA Addendum submission, which solidifies our recommendations to safeguard the water quality in the CPAWC watershed, should the proposed Aerotech Connector move forward.

1. Alternate routes.

We recognize that traffic congestion, in terms of safety, is a problem in the area and that improvements to the road infrastructure are needed to make our roads safer. However, studies have shown that the proposed [Highway 107 Sackville-Bedford-Burnside Connector \(Highway 107 Extension\)](#) would have the greatest impact on relieving congestion in the Fall River area and at Exit 5 by approximately 75%, while the Aerotech Connector would relieve approximately 25% of the current congestion. Our preference would be to see the Highway 107 Extension completed first, followed by a reassessment of the need for the Aerotech Connector, once traffic flows are established.

Of the two Aerotech Connector routes the proponents considered, route "A" will have the greatest potential impact on the Collin's Park Watershed Area (CPWA). Alternatively, we understand moving the proposed route north to Option B, which would remove a good portion of the Connector out of the CPWA, would not fully optimize the new connector and therefore question its need. Further, two other municipal drinking water supplies that lie further north on the Shubenacadie River system; i.e., the East Hants Grand Lake Municipal water supply and the Halifax Water BoMont water supply would be impacted with either option. By taking the approach mentioned in the previous paragraph, the province would be strongly demonstrating its commitment to balance the public's need between safer highways and safe drinking water.

Recommendation: Delay construction of Route A until the impact of the Highway 107 Extension is established.

2. Sulphide Bearing Rock Management Plan

The original EA submission called for the on-site burial of Sulphide Bearing Rock (SBR). The addendum abandons this strategy in favour of disposal at a licensed marine disposal site. The CPWAC endorses this change, reducing the potential exposure to SBR in the future.

Committee members noted during the meeting with the proponents that the large volumes of SBR that will be generated will be transported to the Bedford Basin. We emphasize the importance of minimizing truck traffic on Route 2 and avoiding trucking the SBR alongside the direct water supply of Collin's Park; i.e., Lake Fletcher. This will greatly reduce any risk to the water supply associated with trucking the material off-site. Therefore, we strongly recommend that all truck traffic enter and exit the construction site at the Exit 5A overpass site.

Further, we are concerned with Acid Rock Drainage (ARD) in areas where SBR has been exposed to the natural elements due to construction activities such as grubbing and blasting. We recommend that mitigation measures, not less than those implemented in the Highway 102/103 interchange project, be considered. The Highway 102/103 interchange implemented techniques that covered exposed areas of SBR with inert natural soils and then rough-seeding, which minimized exposure and neutralized any ARD runoff that materialized.

Recommendation: To reduce impact on the watershed and community, we recommend that construction access be gained from Highway 102 and not Highway 2 and that any exposed areas of SBR be effectively covered throughout the construction process.

3. Surface water resources.

The proponents have given careful consideration to managing the wetlands in the area. Ditching, and culverting should ensure adequate controls are established during construction and operation to maintain flows. However, six hectares of wetlands (see attached maps) will be lost from the catchment. These specific wetlands are an important filter to the water supply to maintain good water quality within the Collin's Park water supply catchment area. While the [Nova Scotia Wetland Conservation Policy](#) intent is to prevent or mitigate the net loss of provincial wetlands, it also acknowledges reliance on the stewardship of groups such as ours to protect them. In that vein, the Committee is concerned that in the event the identified wetlands are destroyed in favour of the Aerotech Connector, that the Collin's Park water supply catchment be compensated such that any habitat restoration take place within the directly impacted catchment area, to avoid long term deterioration in water quality. We appreciate in such a small catchment area that the options are limited but urge your department to consider engineered wetlands as an alternative rather than restoring or creating replacement wetlands in other catchment areas.

Recommendation: Adopt a habitat restoration program within the CPWA catchment.

4. Drinking water supply protection.

The CPWAC's mandate is to advise Halifax Water and other agencies such as NSE and HRM on issues impacting water quality. The Committee's concerns are twofold: 1. the significant impact that land disturbances can have on water quality during construction and development projects; and 2. how longer-term more incipient changes over time, due to land use changes and human activity, put negative pressure on water systems. The experience gained in the recently completed Chain Lake 102/103 interchange development exposed a communication gap between the developer and Halifax Water – the custodian of HRM's municipal drinking water supplies. We expect the communications between the proponent, NSE and Halifax Water, to be improved, to reduce or avoid the impact to the water supply by allowing Halifax Water time to effectively respond to it.

Recommendation: That the results of water sampling during construction and post construction of the Aerotech Connector monitoring be made available to Halifax Water. The expectation in the event of a release or other such occurrence during construction with the potential to impact water quality would be for the proponent to be responsible for directly contacting Halifax Water, to allow them the opportunity to respond appropriately to the event and to protect its customers, which is a requirement under its approval to operate, as ordered by NSE. The expectation for scheduled reports (monthly/annual/ or any other) would be for the proponent to provide a copy of the water quality reports to Halifax Water once they have been reviewed by them. This information is considered vital supplemental data that would aid Halifax Water in any future operational considerations for the Collin's Park Water Supply System.

As community members who live in the neighbourhood, we understand the importance of protecting our water resources as well as the need for safe roads in the Fall River Wellington area.

We applaud the province for providing us with the opportunity to make recommendations to help achieve a balance between development and preserving raw water quality for current and future generations.

Respectfully,

Original signed

Chair, Collin's Park Watershed Advisory Committee

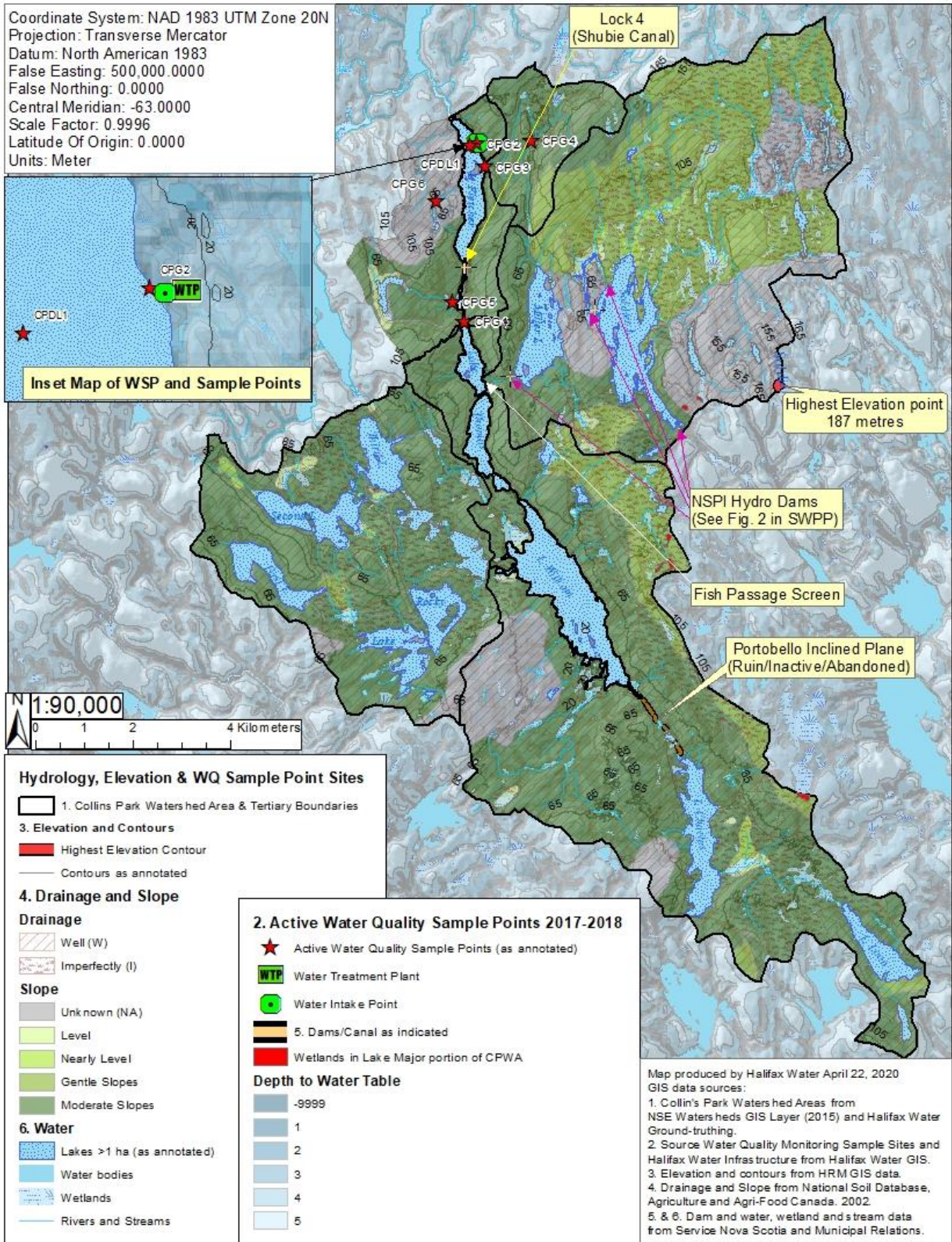
c. Environmental Assessment Branch, Nova Scotia Environment

Subcatchment area
where road is proposed
showing wetlands.

Lock 4
(Shubie Canal)

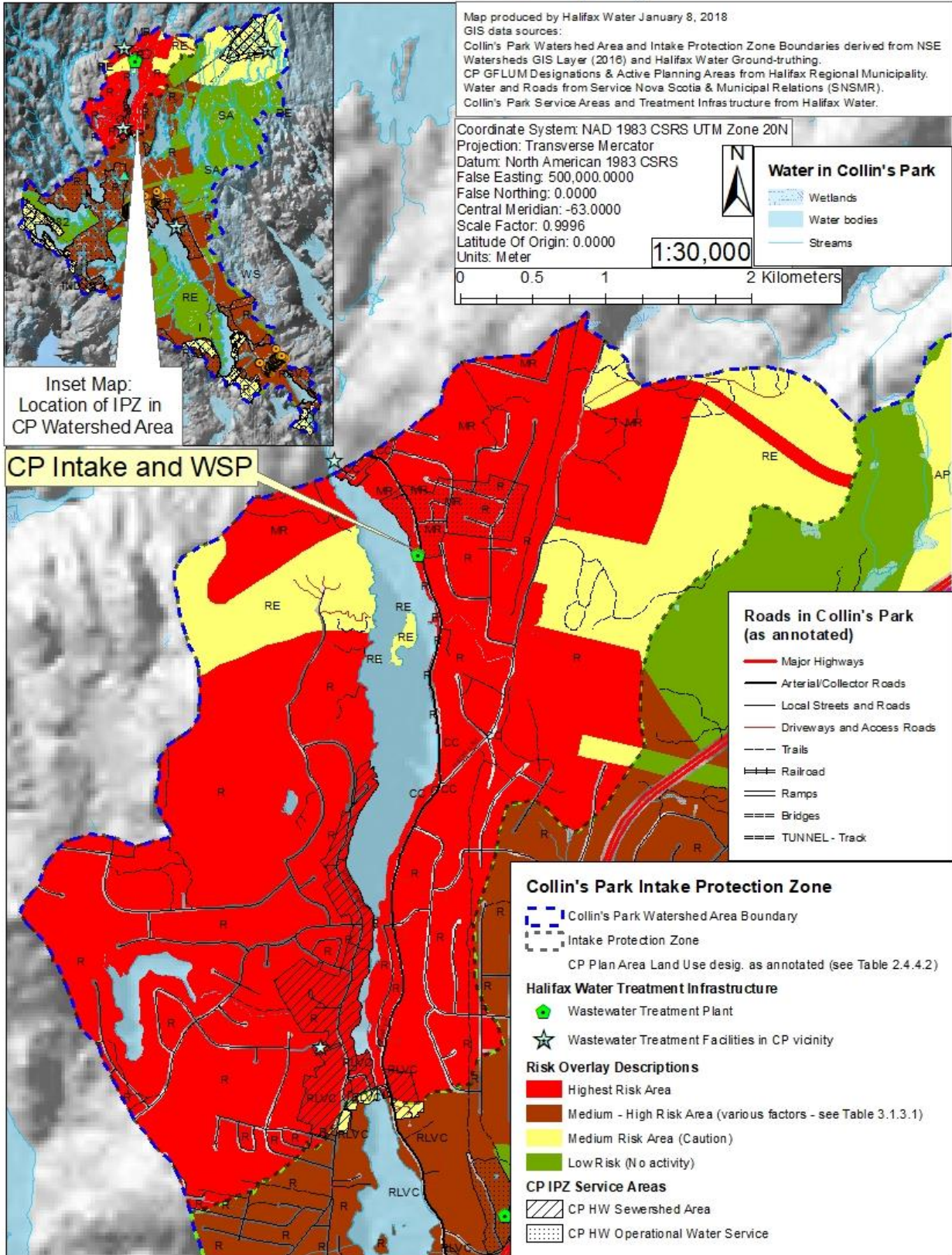


Collin's Park Hydrology, Elevations and Sample Sites



* This map is for informational purposes only and should not be used for legal, engineering or surveying purposes.

Collin's Park Intake Protection Zone (IPZ)



* This map is for informational purposes only and should not be used for legal, engineering or surveying purposes.