

**Request for Plan Amendment,  
Ross Road, Westphal, N.S.**

*September 2017*

**Halifax Construction  
& Debris Recycling Limited**

**16-4390-1000**

*Submitted by:*

**Dillon Consulting Limited**

September 28, 2017

HALIFAX CONSTRUCTION &  
DEBRIS RECYCLING LIMITED  
16 Mills Drive  
Goodwood, Nova Scotia  
B3T 1P3

ATTENTION: Mr. Dan Chassie  
President

***Request for Plan Amendment, Ross Road C&D Material Transfer Facility***

With reference to our recent discussions and meetings, please find attached the submission document for Halifax Construction and Debris Recycling Limited (Halifax C&D) to meet HRM's Planning Approval Application process.

With your direction, this document will be submitted to HRM to support the amendment application.

Yours truly,

**DILLON CONSULTING LIMITED**

Scott D. Kyle, P.Eng.  
Project Manager

SDK:jes  
Our File: 16-4390-1000



137 Chain Lake Drive  
Suite 100  
Halifax, Nova Scotia  
Canada  
B3S 1B3  
Telephone  
  
Fax

## Table of Contents

	Page
<b>1.0 Introduction.....</b>	<b>1</b>
1.1 C&D Material Management in HRM .....	1
1.2 Ross Road Proposal .....	2
1.3 Document Organization .....	4
<b>2.0 Application Information.....</b>	<b>5</b>
2.1 Site Information .....	5
2.2 Planning Discussion.....	12
2.2.1 <i>Planning Implications of the Proposal</i> .....	12
2.2.2 <i>Regional Municipal Planning Strategy</i> .....	12
2.2.3 <i>Community Planning Strategy</i> .....	16
<b>3.0 Application Standards – Additional Information.....</b>	<b>24</b>
3.1 Location/Land Use Map and Site Plan .....	24
3.2 Preliminary Servicing Plans.....	24
3.3 Transportation Impact Statement/Study .....	28
3.4 Stormwater Management Plan.....	28
3.5 Erosion & Sediment Control Plan.....	28
3.6 Project Schedule.....	29
3.7 Legal Survey and Description of the Site .....	29
3.8 Aerial Photographs.....	29
3.9 Location of Laterals for Municipal Services .....	29
3.10 Building Elevations.....	29
3.11 Sign Requirements .....	29

**Figures:**

Figure 3-1	Detailed Conceptual Site Plan – Reduced Format Version .....	25
Figure 3-2	Typical Building End Elevation.....	26
Figure 3-3	Typical Building Side Elevation.....	27

**Tables:**

Table 2-1	HRM By-Law W101 Discharge Concentration Limits .....	11
Table 2-2	Yard and Lot Requirements, I-1 and CD-1 Zones, Cole Harbour/ Westphal MPS .....	21

**Appendices:**

Appendix A	Planning Application Form
Appendix B	CD-1 Zone Compliance Table
Appendix C	Transportation Impact Statement Letter Report
Appendix D	Aerial Photographs

## 1.0 Introduction

### 1.1 C&D Material Management in HRM

Construction and demolition (C&D) materials represent a significant portion of the overall waste stream generated within Halifax Regional Municipality (HRM). Provincial officials estimate that approximately 30% of all solid waste generated within Nova Scotia consists of C&D materials.<sup>1</sup> Acknowledging the significant diversion opportunities available through progressive management of these materials, HRM established specific requirements for the siting, operation and licensing of C&D transfer, processing and disposal facilities. The Province defines specific design, operational and approval requirements for landfills used for the disposal of C&D materials.

Two by-laws are of particular importance when considering management requirements for C&D materials within HRM:

- By-Law S-600; Solid Waste Resource Collection and Disposal By-Law
  - Specifies that waste generated in HRM must be managed at facilities (with noted exceptions) within the municipality.
- By-Law L-200; C&D Materials Recycling and Disposal License By-Law
  - Defines specific facility siting and operational requirements to obtain an HRM license.
  - Administrative Order 27 provides further direction by defining minimum waste diversion (e.g., reuse and recycling) criteria for C&D material transfer or processing facilities. At the current time, the diversion target is defined as follows; ***“a minimum of seventy-five per cent (75%) of all incoming C&D Material arriving at a C&D Processing Facility or Transfer Station shall be recycled or otherwise diverted from disposal.”***

The content of these two by-laws creates a requirement for C&D material management infrastructure within HRM that can both; a) accommodate the significant volume of materials generated within the municipality, and b) achieve the aggressive reuse and recycling targets stipulated in Administrative Order 27.

---

<sup>1</sup> Nova Scotia Environment, Renewal of Nova Scotia’s Solid Waste Resource Management Strategy, Consultation Summary Report, 2009

---

Currently, the following licensed C&D management facilities' exist within HRM:

Transfer Sites (referred to as CD-1 facilities)

- Ross Road Transfer Facility, Westphal (Halifax C&D Recycling Limited)

Processing Sites (referred to as "CD-2" facilities)

- Goodwood Processing/Transfer Facility, Goodwood (Halifax C&D Recycling Limited)

Disposal Sites (referred to as "CD-3" facilities)

- Three Corners C&D Material Management Facility, Antrim (Halifax C&D Recycling Limited)

Over the last number of years, the level of overall waste diversion success has begun to decline both in HRM and the Province. Waste management officials at both levels of government agree that construction and demolition materials represent a portion of the waste stream that appears to offer the "best diversion bang for the buck". While HRM has set the most aggressive municipal diversion target for C&D materials in the Province, it is constrained by the processing capacity of its current facilities. The sorting, storage and processing of construction and demolition materials requires significant space.

Halifax C&D Recycling's operation in Westphal, the only licensed transfer facility east of Halifax Harbour, has reached the point where essentially the entire property is in use. As new processes are developed to divert materials from landfilling (such as drywall, mixed plastic and asphalt shingles), additional yard segregation areas are required. Thus, to continue to achieve the enhanced levels of diversion performance sought by HRM and its residents, additional space is required to support an expansion of sorting and segregation activities.

## **1.2 Ross Road Proposal**

To improve diversion opportunities, safety provisions and operational efficiencies at its current C&D transfer facility, Halifax C&D wishes to expand its operations at 188 Ross Road to an adjacent area of land directly to the south. It is noted that the existing 188 Ross Road facility, originally established by Halifax C&D in 2000, is situated on a leased property (PID 40485310) zoned CD-1. Halifax C&D are currently in the process of purchasing the property with the completion of the sale being anticipated by October 2017. Proposed operations on the adjacent property would support the enhancement of the C&D debris segregation activities that are currently undertaken at 188 Ross Road.

The proposed expansion involves changes to one property;

- PID 00460709; A 6.88 ha parcel of land owned by Halifax C&D and currently zoned I-1 (Light Industrial). A fibreglass tank manufacturing operation (Dura-Tech Industrial and Marine Limited) has been situated on the northwest corner of the property for over 20 years. With the exception of the area currently leased by Dura-Tech (0.79 ha) and a 2.40 ha area in

the southwest portion of the property designated for future leasing, the property would be rezoned as CD-1 to accommodate proposed C&D material transfer activities.

- Based on aerial photographs and associated archive information, PID 00460709 has served as a location of industrial activities (including a quarry) for over 50 years.

The design concept behind the proposed revised layout of Halifax C&D's existing operation at 188 Ross Road, with the overall facility layout being expanded onto the eastern portion of PID 00460709, is the "reverse building supply store". To optimize the opportunity for generators to deliver segregated, marketable materials, the yard will include numerous dedicated drop off bins. Using preferential tipping fees as an incentive, generators will be able to proceed around the drop off compound, depositing their materials (e.g., carpet, shingles, brick, drywall, clean wood, painted wood, brush, etc.) in the appropriate storage bin. As compared to the limitations presented by the current congested site layout, this user separated protocol greatly enhances Halifax C&D's ability to identify practical diversion opportunities for a wide range of construction and demolition materials.

It is noted that the proposed expansion of Halifax C&D's Ross Road facility is not anticipated to lead to an increase in incoming material tonnages and/or traffic. Instead, its intent is to enhance operational efficiency and overall site safety.

In addition to providing further opportunities for site users to segregate reusable and recyclable materials, the proposed expansion of the existing 188 Ross Road facility onto PID 00460709 will allow Halifax C&D to:

- Move the location of the weigh scale further onto the site (including the installation of an additional exiting vehicle scale) to reduce the frequency and extent of truck queuing on to Ross Road;
- Pave the expanded active yard to minimize dust and control runoff;
- Construct a stormwater retention pond and engineered wetland, similar in concept to one recently established by Halifax C&D at its Old Guysborough Road facility, to collect storm runoff from the site, settle out sediments and allow for testing and analysis of discharge water. Use the pond as a water source for dust suppression and fire response;
- Enhance safety on the site for employees and customers;
- Separate materials to reduce the risk of fire; and
- Increase the existing staff contingent with an additional 1 to 4 full-time jobs.

This document has been prepared acknowledging the requirements presented in HRM's Planning Application Form (September 2010). The actual form is attached as **Appendix A**; the bulk of the required descriptive information for this proposal is included in the body of this supporting document.

Halifax C&D requests a plan amendment to permit the expansion and reconfiguration of the existing C&D operation onto adjoining lands. The intent of the plan amendment is to permit the expansion of the existing C&D transfer operation at Ross Road to advance HRM's waste management strategy policies and maintain compatibility with the area land uses through appropriate development controls including the CD-1 zone, development agreement, site plan approval and the L-200 Bylaw.

## 1.3 Document Organization

Following **Section 1.0**, the document is organized as follows:

- Section 2.0 Application Information
  - Section 2.1 Site Information
  - Section 2.2 Planning Discussion
  
- Section 3.0 Application Standards – Additional Information
  - Section 3.1 Location/Land Use Map and Site Plan
  - Section 3.2 Preliminary Servicing Plans
  - Section 3.3 Traffic Impact Statement/Study
  - Section 3.4 Stormwater Management Plan
  - Section 3.5 Erosion & Sediment Control Plan
  - Section 3.6 Project Schedule
  - Section 3.7 Legal Survey and Description of the Site
  - Section 3.8 Aerial Photograph
  - Section 3.9 Location of Laterals for Municipal Services
  - Section 3.10 Building Elevations
  - Section 3.11 Sign Requirements
  
- Appendices
  - A Application for Planning Process Form (completed)
  - B CD-1 Zone Compliance Table
  - C Traffic Impact Statement Letter Report
  - D Aerial Photographs



## 2.0 Application Information

### 2.1 Site Information

The following presents information on the proposed CD-1 development addressed by this application. **Appendix B** provides a tabular summary of how this proposal compares to HRM’s CD-1 Zone compliance requirements.

- Civic Address(es):
  - The subject property of this plan amendment application, currently zoned I-1, is identified as 206 Ross Road, PID 00460709. It is acknowledged that overall proposed development includes the extension of material transfer activities from an adjacent property currently zoned CD-1 (188 Ross Road, PID 40485310) on to PID 00460709.
- General location/community:
  - Ross Road, Westphal, Halifax Regional Municipality, N.S.

- Dimensions:

Item	PID 00460709 (proposed CD-1)	PID 40485310 (existing CD-1)	Total
Site Area	68,770 m <sup>2</sup>	14,407 m <sup>2</sup>	83,177 m <sup>2</sup>
Site Frontage	198.9 m	58.1 m	257.0 m
Site Depth <sup>1</sup>	365.5 m	277.7 m	365.5.0 m

1. Maximum distance from Ross Road property line to rear (easterly) property line.

- Access:
  - Provincial Highway/Road      no
  - Municipal Road                      yes      Name: Ross Road
  - Other                                      no
- Existing Uses:
  - PID 00460709; 0.79 ha occupied by Dura-Tech Industrial and Marine Limited, remaining 6.08 ha vacant.
  - PID 40485310; active use as a CD-1 facility.
- Describe existing use(s) of the site:
  - The subject area consists of portions in active use and a vacant yard.

- Are existing building/structures to be retained, demolished or relocated?:
  - Select infrastructure and storage areas associated with the existing C&D operations on PID 40485310 will be relocated in order to make efficient use of the proposed expanded facility layout.
- Previous Use(s) (within the last 12 months):
  - See Existing Uses.
- Described previous use(s) of the site:
  - See Existing Uses.
- Proposed Use(s):
  - Other:
    - 1) Construction and Demolition Material Transfer Station (consistent with HRM's CD-1 Zone definition).
- Describe proposed use in detail:
  - 1) Construction and Demolition Material Transfer Station (consistent with HRM's CD-1 Zone definition):

The proposed CD-1 development will be an extension of the existing CD-1 use at 188 Ross Road, with continuation of current site activities and a reconfiguration of the existing yard.

a. Access Control

- Site access will continue to be through the existing entrance for 188 Ross Road. Vehicular access during off-hours is controlled with a lockable gate at the site entrance. A new gated entrance from Ross Road will be established adjacent to the southern property boundary of PID 00460709 to provide an additional vehicular access point to the overall CD-1 operation for fire and emergency response requirements.
- Hours of operation will continue to be Monday to Friday, 0800 to 1700; Saturday, 0800 to 1500.
- Halifax C&D will continue to require the ability to conduct other site activities during off-hours in accordance with applicable HRM by-laws.
- On average, depending on the local level of construction and demolition activity, the site will continue to accept in the range of 55 to 100 tonnes of C&D materials per weekday.
- It is anticipated that incoming traffic on a weekday will be the range of 65 to 140 vehicles. Based on historic records, approximately 30% of incoming vehicles will be roll off trucks/tandems with the remaining

70% consisting of pickup trucks and cars, including some with utility trailers.

- On weekdays, approximately five to ten trailer loads of debris materials will leave the site for transport to the Three Corners C&D Material Management Facility or an end use market.

b. Personnel

- Continuation of current site staff complement (eight full time personnel). Site expansion could result in the requirement for one to four additional yard personnel.
- Total personnel numbers will be dependent on market conditions.

c. Site Structures

- Relocation of the existing vehicle scale and Scale House/Office approximately 20 m further from Ross Road.
- Establishment of a second scale adjacent to the relocated Scale House to allow for the separate weighing of outgoing vehicles.
- Relocation of the existing Sorting Building and Staff Building.
- Establishment of ~75 m<sup>2</sup> pre-engineered steel building for the baling of plastic materials.
- Development of a materials separation area, complete with segregation bins and an elevated ramp for transport trailer loading.
- Consistent with existing Halifax C&D facilities, pre-cast concrete barriers will be used to establish material drop off and storage locations.
- The exterior yard area will have an asphalt surface with all drainage directed to stormwater retention pond and constructed wetland at the eastern edge of the property. Subsequent drainage will be via a filter berm, with the dispersed flow proceeding through a wooded buffer to Little Salmon River.
- Roll-off containers will be positioned within the yard area to allow for the segregation and subsequent removal of materials.
- A dedicated, modified intermodal container will continue to be used for the segregation and temporary storage of identified hazardous materials (see item e, Material Receiving, Processing and Transport). Subsequent handling and off-site management of these materials will continue to be undertaken in compliance with applicable regulations.
- The southeastern portion of the CD-1 area will be gravel surfaced, with a portion being used for the storage of C&D aggregate materials (e.g., concrete, brick) and the remainder as a buffer area.

d. Mobile Equipment

- Rubber-tired front-end loader.
- Tracked excavator.
- Forklift.

e. Material Receiving, Processing and Transport

- All vehicles entering the site will be directed to the site scale. An additional scale platform and will be established approximately 20 m further onto the property (as compared to the current scale location) to reduce the potential for incoming vehicle queues on Ross Road and allow for dedicated in/out vehicle weighing. In addition to the full weight, the Scale Operator will continue to gather initial information on the incoming load from the driver, including generating location. If it is determined that the load is unsuitable for delivery to the site, it will not be accepted.
- The Scale Operator will radio the Yard Supervisor to alert them to the incoming load. The Yard Supervisor will direct the truck to the appropriate drop off bin. Larger commercial loads may be directed to proceed to specific locations within the site. If issues of potential concern regarding the load have been identified by the Scale Operator, he will request that the Yard Supervisor inspect the load.
- Depending on the nature of the load, personnel will continue to be tasked to manually sort through materials arriving on site. Materials with market value and/or banned from disposal will be removed from the load, segregated and prepared for subsequent transport to off-site markets. Remaining materials will continue to be directed to the residuals trailer to allow for subsequent transfer to the landfill at the Three Corners C&D Material Management Facility.
- With the exception of regular users of the facility, transport vehicles will continue to be weighed empty prior to exiting the site. A charge will be applied to the hauler depending on the quantity and nature of C&D material delivered to the site.
- All staff will continue to be trained to identify unacceptable and hazardous materials. Only those C&D materials permitted by HRM By-Law L-200 will be accepted at the facility.
- Unacceptable wastes may be classified as non-hazardous, potentially hazardous or unacceptable, and, depending on the time of discovery, may or may not be associated with a known hauler. The following procedures for handling unacceptable waste will continue to be followed:

- Non-hazardous, unacceptable waste delivered by a known hauler will be reloaded by the hauler (if necessary) and removed from the site;
  - Non-hazardous, unacceptable waste delivered by an unknown hauler will be segregated by Halifax C&D for subsequent transfer to appropriate off-site management facilities. To address short-term (e.g., 24 hour) storage requirements, a dedicated dumpster will be kept on-site for non-C&D solid waste materials;
  - Suspected hazardous (and therefore unacceptable) waste delivered by a known hauler will be reloaded by the hauler (if necessary) and removed from the site. Site staff will complete a Waste Inspection/Attempted Delivery of Hazardous Waste Form and inform NSE and HRM of the attempted delivery;
  - If reloading or further transporting of the suspected hazardous waste is considered unsafe, NSE will be contacted for direction. Costs associated with the attempted delivery will be borne by the hauler, and they shall be notified that they will be financially responsible for removal of the waste; and
  - Suspected hazardous waste delivered by an unknown hauler (i.e., discovered at the site) will be transferred as directed by the Site Operator to a portion of the facility designated for storage of suspected hazardous waste. The waste will be tested by a qualified firm at the discretion of NSE, and the final disposal options determined based on the results.
- For “routine” (materials typically associated with construction and demolition activities) hazardous waste (e.g., paint, PCB light ballasts, mercury-containing electrical switches), a modified, lockable intermodal container, complete with appropriate signage, will continue to be utilized for short-term storage. Subsequent management of these materials will continue to be co-ordinated through Provincially-approved service providers.
  - Depending on the nature and condition of the suspected hazardous waste, safe transfer to the holding area may not be possible. NSE is to be contacted for direction. The costs will be borne by the hauler (once identified).
  - Once a waste is suspected to be hazardous, the onus is on the hauler to demonstrate otherwise, or remove the waste, at their expense. Repeat deliverers of unacceptable or hazardous wastes may be banned from

the site at the discretion of and for a period determined by the Site Operator in consultation with NSE and HRM.

- A Contingency Plan for Emergency Response (CPER), addressing issues related to fire control, unacceptable materials and worker protection, is available for the current Ross Road facility. The facility is operated in accordance with applicable Provincial health and safety legislation. The CPER, originally developed for Halifax C&D's Mills Drive facility, was prepared in consultation with HRM Fire and Emergency Services representatives.

f. Nuisance Control

- The existing litter monitoring and collection program will continue to be maintained on the site. Consistent with municipal requirements, only covered loads will be accepted at the site. Halifax C&D will also continue its ongoing litter monitoring and collection efforts along Ross Road, including the regular sponsoring of sports teams to conduct litter sweeps.
- Due to the non-putrescible nature of C&D materials, significant odour, vector (rodents, insects) and bird control issues are not issues at the Ross Road facility. Incoming loads and the overall site will continue to be monitored on an ongoing basis to identify and address potential nuisance control issues. Dry wall/gypsum board materials will continue to be managed to avoid wet and anaerobic conditions (associated with the potential generation of hydrogen sulphide gas).
- The site will continue to be monitored on an ongoing basis to identify and address dust control concerns. During dry weather conditions, the asphalt-surfaced yard will be washed/swept on a routine basis.
- Operations at the Ross Road site will continue to be conducted in compliance with applicable HRM noise control by-laws.

g. Surface Water Management

- Surface water from the Ross Road facility will be managed using a 500,000 litre, HDPE-lined stormwater retention pond. The pond, sized to accommodate a 5 year/2 hour storm, will be situated near the eastern boundary of the property. The collection pond will discharge to a PVC pipe (complete with flow control valve to allow for shut off in the event of an emergency) followed by a constructed wetland. The wetland will provide an additional level of runoff control prior to discharge towards the Little Salmon River. As a safety measure, page wire fencing will surround the perimeter of the retention pond.
- Surface water from off site will continue to be redirected away from the yard using drainage ditching. Pavement will be maintained within

the yard area which will prevent erosion. Positive flow shall be maintained away from buildings and storage areas. During normal operations, it is expected that the stormwater runoff will not come into contact with deleterious substances.

- The stormwater retention pond shall be visited on a daily basis to confirm operational effectiveness;
- A visual inspection of the stormwater retention pond embankments and general area shall be performed daily to identify maintenance requirements.
- Consistent with the protocol developed by Halifax C&D for its Mills Drive facility, qualified environmental technicians will collect a sample at the pond as well as the discharge point of the wetland three times per year. The samples will be analyzed for the parameters as listed in HRM By-Law W101 - Respecting Discharge into Public Sewers (see **Table 2-1**). Results will be made available to HRM Solid Waste Resources personnel upon request.

**Table 2-1 HRM By-Law W101 Discharge Concentration Limits**

Substance	mg/L	Substance	mg/L
Arsenic	0.5	Lead	0.05
BTEX (benzene, toluene, ethyl benzene, xylene)	0.02	Mercury	0.001
Biochemical Oxygen Demand	15	Oil and Grease	15
Cadmium	0.015	Phosphorus	0.5
Carbon tetrachloride	0.02	Selenium	0.01
Chromium	0.02	Silver	0.001
Copper	0.03	Suspended Solids	15
Cyanide	0.05	Thallium	0.01
Fluoride	1.5	Trichloroethylene	0.02
		Zinc	0.3

Additional substances/parameters to be included: Iron, Manganese and pH

- Consistent with expectations (acknowledging the nature of the materials being handled), yard runoff monitoring conducted at Halifax C&D’s Mills Drive site since 2013 has not led to the identification of elevated parameters of concern. Similar results are anticipated at the Ross Road facility.

**h. Site Records**

- A records management system for incoming and outgoing materials, consistent with the requirements of HRM By-Law L-200, will continue to be maintained at the Ross Road facility.

- i. Emergency Response
  - As described under item e, a Contingency Plan for Emergency Response (CPEP), addressing issues related to fire control, unacceptable materials and worker protection, is available for the current Ross Road facility.

## **2.2 Planning Discussion**

The following presents information on the proposed CD-1 development addressed by this application in relationship to the HRM's planning framework.

### ***2.2.1 Planning Implications of the Proposal***

Expansion of the Halifax C&D transfer station at 188 Ross Road onto 206 Ross Road will require an amendment to the Construction and Demolition Waste Management Strategy found on pp. 28 through 30 of the Cole Harbour/Westphal Municipal Planning Strategy (MPS). The amendment required will be to Policy SW-7. Halifax C&D requests that the policy be changed to allow the extension of the CD-1 (C&D Materials Transfer Stations) Zone that now applies to 188 Ross Road onto 206 Ross Road.

Complementary to this amendment to the MPS, Halifax C&D seeks to rezone the property at 206 Ross Road from the I-1 (Light Industry) Zone to the CD-1 Zone. All standards applicable to the existing transfer operation through the CD-1 Zone shall apply to the lands proposed to be rezoned, including the requirements for site plan approval found in Section 24A.5 of the Cole Harbour/Westphal Land Use Bylaw.

### ***2.2.2 Regional Municipal Planning Strategy***

HRM adopted its current Regional Municipal Planning Strategy (RMPS) in 2014. The RMPS addresses amendments to its policies in Section 9.6 of the Regional Plan Review and Amendments on p. 108. Policies G-12 and G-14 address amendments prior to plan review, which is mandated to occur within five years by Policy G-13:

G-12 Amendments to this Plan may be considered from time to time to address non-substantial matters or amendments which are consistent with or further the vision and objectives of this Plan.

G-14 Proposed amendments to this Plan shall be accompanied by any amendments to Secondary Planning Strategies, Land Use By-laws and the Regional Subdivision By-law or other planning documents required for implementation so that these documents are consistent with this Plan.

The application does not require an amendment to the RMPS; however, amendments to secondary plans such as the Cole Harbour/Westphal must be "consistent with or further the

---



vision and objectives of th[e RMPS].” Objectives of the RMPS are found on pp. 9-13 of the document. Solid waste is addressed on p. 13 under the heading Municipal Water Services, Utilities and Solid Waste through the municipal commitment to “6. Reduce the amount of solid waste generated and operate solid waste facilities in an environmentally responsible and cost-effective manner.”

The RMPS also references and endorses the Integrated Resource Management Strategy adopted by HRM in 1996. C&D facilities advance the Municipality’s solid waste objective by diverting this material away from landfilling, including the Residuals Disposal Facility (RDF) at HRM’s Otter Lake site. Diversion reduces the total quantity of waste sent to the Otter Lake RDF, which extends its life and reduces costs that would otherwise be borne by taxpayers. It also serves to extend the life of private (provincially approved and municipally licensed) C&D landfills within HRM, reducing the frequency of the requirement to site and develop new disposal locations.

HRM By-Law L-200 (along with Administrative Order 27) requires C&D operators to reuse or recycle at least 75% of all C&D materials taken in at transfer stations (CD-1) like Ross Road. The balance is sent to specialized C&D processing (CD-2) or waste disposal (CD-3) sites, which are operated by private companies and are less costly to manage because C&D waste materials generally have less environmental impact than the residual wastes that go to Otter Lake (i.e., most C&D materials are generally inert and do not require special handling, although materials deemed hazardous, such as asbestos, must be separated and handled according to Province of Nova Scotia requirements).

The Ross Road transfer station is one of two transfer stations in HRM. Halifax C&D also operates the other (which as a CD-2 operation is also able to process construction and demolition debris materials) in the Goodwood area to the west of Halifax. The area on the east side of Ross Road where the Halifax C&D transfer station is located and wishes to expand is designated “Rural Commuter” on the Generalized Future Land Use Map (Map 2) of the RMPS. Lands facing the property on the west side of Ross Road are designated “Urban Reserve.” The intent of the Rural Commuter designation is “to protect the character of rural communities and conserve open space and natural resources by focusing growth within a series of centres and carefully controlling the amount and form of development between centres.” The proposal adheres to this intent by proposing extension of the existing CD-1 use onto abutting lands now zoned I-1 (Light Industry). The property is in a wider area of established industrial uses extending to the north and south on the east side of Ross Road.

Policy G-16 of the RMPS is more directly pertinent to the Halifax C&D application than the previous RMPS policies cited:

G-16 Provided other policies of this Plan are satisfied and the proposed development is limited in scale, for the purpose of providing for the development of similar uses on properties which abut one another or share a common street line, HRM may consider the following development agreements or amendments to the applicable Land Use By-laws, for lands

---

which are located where land use designations abut one another, as shown on the Generalized Future Land Use Map (Map 2):

- (a) amendments within a designation to provide for the development of uses which are uses permitted within the abutting designation;
- (b) ***amendments within a designation to provide for the development of uses which are uses permitted by the zone on the abutting property within the abutting designation; [emphasis added]***
- (c) development agreements within a designation which are extensions of development agreements in effect on the abutting property within the abutting designation; and
- (d) amendments within the Urban Reserve or Rural Commutershed Designations on lands which meet or share a common street line with the Urban Settlement Designation or the Harbour Designation to accommodate development serviced with municipal water or wastewater infrastructure where the development is generally consistent with the intent of the Urban Settlement Designation policies in this Plan including Policy SU-4 and the total number of dwelling units does not exceed twenty. Preference will be given to lands that are naturally tributary to trunk municipal service systems.

Emphasized subsection (b) precisely reflects the circumstances of the Halifax C&D application where development permitted within a designation and zone is being requested for abutting lands in the same designation (i.e., Rural Commuter) but in a different zone (i.e., I-1 as opposed to CD-1).

The proposal is not anticipated to increase the volume of waste handled at Ross Road or the number of vehicle trips to or from the site. The quantity of C&D waste generated in HRM is a function of the level of development activity in the Region. As noted, the Ross Road transfer station is one of two C&D facilities in HRM, both of which are owned by Halifax C&D. Almost all C&D material generated in HRM is destined for one of the two sites. Enlarging the area available for sorting will allow Halifax C&D to handle the volume more effectively while reducing visual impact by increasing separation between sorting areas as well as accommodating enhanced landscaping that will improve screening of all onsite activities.

The proposal to move the scale that weighs C&D materials entering the Halifax C&D property farther to the interior Halifax C&D site will enhance access and egress by allowing trucks that occasionally queue at the scale to wait on the access driveway within the Halifax C&D property rather than on Ross Road. As a continuation of recent improvement efforts, Halifax C&D also proposes to enhance landscaping on the property frontage to buffer adjacent residential uses from the impacts of the CD-1 use and to improve the general appearance of the property.

---

The extension of these uses will contribute to further economic development of both urban and rural communities. Halifax C&D will continue to provide a conveniently located, established site for carriers to access, minimizing time from pickup location to delivery site. The expanded yard area will also create the potential for additional employment (see **Section 2.1**) while further mitigating operational impacts on nearby properties by allowing activities to be separated on the property.

Finally, the proposal complies with the three tests of RMPS Policy G-15:

1. That the proposal is not premature or inappropriate by reason of:
  - the financial capability of HRM to absorb any costs relating to the development – in fact, the proposal will increase waste diversion rates which will, in turn, delay the necessity of acquisition, construction and operation of a new landfill facility.
  - the adequacy of municipal wastewater facilities, stormwater systems or water distribution systems – the site is adequately serviced; (see the **Section 2.1** of this report).
  - the proximity of the proposed development to schools, recreation or other community facilities and the capability of these services to absorb any additional demands – the proposed expansion is buffered from such land uses and will make no demands on those uses.
  - the adequacy of road networks leading to or within the development – as noted above, the site has direct access to an arterial road.
  - the potential for damage to or for destruction of designated historic buildings and sites – there are no designated historic buildings or sites nearby.
2. Controls are in place to prevent conflict with any adjacent or nearby land uses:
  - the proposal will comply with zoning, site planning and Bylaw L-200 license requirements.
  - with the expanded site, more separation of C&D materials will be done with some of this done inside buildings. This will further decrease any noise and debris creation as it may affect nearby land uses.
  - stormwater management will ensure the quality of the downstream stormwater drainage from the site.
3. The site is suitable in terms of the steepness of grades, soil and geological conditions:
  - locations of watercourses, marshes or bogs and susceptibility to flooding.
  - there are no special topographic conditions on the site.
  - the site will be graded to direct yard runoff into a reservoir for monitoring and re-use onsite or discharge to a constructed treatment wetland, with final flow to Little Salmon River.
  - adequate separation will be maintained from watercourses.

### **2.2.3 Community Planning Strategy**

The Ross Road site is on the eastern edge of the Cole Harbour/Westphal planning area. It is, therefore, subject to the Cole Harbour/Westphal Municipal Planning Strategy adopted by the Council of the former County of Halifax on November 30, 1992. Lands in the Lawrencetown planning area immediately to the east are separated from the site by the Little Salmon River.

#### ***Cole Harbour/Westphal Municipal Planning Strategy***

The properties at both 188 and 206 Ross Road are designated “Urban Residential” or UR on the Generalized Future Land Use Map that accompanies the Cole Harbour/Westphal Municipal Planning Strategy. The UR designation, in fact, applies to all lands fronting on both sides of Ross Road from Highway 107 to Cole Harbour Road.

The land use intent expressed for the UR designation is stated as follows on p. 50 of the MPS:

The Urban Residential Designation recognizes the Plan Area's established community and constitutes the priority area for continuing residential development. The intention is to recognize the existing residential environment while providing for a variety of housing types and densities as the community continues to grow and evolve.

The plan acknowledges existing industrial uses within the designation and makes specific reference to the Ross Road area in which the Halifax C&D transfer station is located:

Although the principal intent of the planning strategy is to provide protection and direction for continued suburban residential and commercial growth, existing industrial uses can for the most part, be supported within the Plan Area. A number of these uses are located on contiguous lots along Ross Road, and essentially constitute a small industrial area apart from the major residential community. ... The high standard at which these properties have been maintained has resulted in their being accepted in their neighbourhoods and, although such uses are not seen as generally appropriate to continuing development, provisions can be made for existing operations.

The existing Ross Road C&D transfer station, although a light industrial-type use, is recognized separately in the MPS. Solid Waste Management is addressed in detail within the Environmental Health Services section of the document. Policies under the Solid Waste Management sub-heading (pp. 25-27) broadly endorse the Integrated Resource Management Strategy (IRMS) adopted by HRM in 1996.

A separate section of the MPS immediately following the Environmental Health Services section focuses on C&D Waste. The Construction and Demolition Waste Management Strategy was added to the MPS as an amendment in 2002. Like the RMPS, the Cole Harbour/Westphal endorses the IRMS. It also details the benefits of C&D diversion as we have above. Critically for

this application, it addresses the Halifax C&D operation on Ross Road under the subheading Existing C&D Operations. Policy SW-6 within the subsection provides the policy basis for the CD-1 (C&D Transfer Stations) Zone and Policy SW-7 applies it to the transfer station property at 188 Ross Road:

SW-6 A CD-1 (C&D Transfer Stations) Zone shall be established in the land use by-law. The zone shall permit only C&D transfer stations and shall establish controls on setbacks from adjacent uses, buffering and screening, landscaping, access, and outdoor storage in order to minimize impacts on adjacent uses.

SW-7 It shall be the intention of Council to recognize the existing C&D Transfer Stations on 188 Ross Road (PID# 40485310) by applying the CD-1 Zone to reflect its existing functions.

Under the next subheading, Site Plan Approval, Policy SW-8, the MPS requires the application of the Site Plan Approval process to regulate changes to the transfer station operation:

SW-8 Further to SW-6, any expansion of an existing transfer station shall be regulated under a Site Plan Approval Process in order to minimize land use impacts. Siting standards shall be set out in the Land Use By-law to address such items as, but not limited to, screening, access, outdoor storage, maintenance, stormwater management, lighting, signage, and landscaping measures.

#### ***2.2.4 Regional Municipal Planning Strategy and Cole Harbour/Westphal Municipal Planning Strategy***

The Land Use designations in the RMPS and the Cole Harbour/Westphal MPS differ. As noted, the RMPS designates the east side of Ross Road “Rural Commuter” and the west side of the road “Urban Reserve.” The Cole Harbour/Westphal MPS, which predates the current version of the RMPS, designates both sides of the roadway “Urban Residential.”

Section 9.4 of the RMPS addresses the relationship between itself and secondary planning strategies like the Cole Harbour/Westphal MPS. Its Policy G-7 states that “in the event of conflict between the policies of this Plan and a Secondary Planning Strategy, the more stringent shall prevail.” Although policies appear to differ between the two plans concerning lands on Ross Road affected by this application, it is not clear to us that they are “in conflict” or which policies are “the more stringent.”

In this case, we believe the guiding policy of the RMPS to be Policy G-9, which reads:

G-9 When new secondary planning strategies or amendments to existing secondary planning strategies are brought forward for approval, HRM shall consider whether the proposed objectives and policies are consistent with or further achieve the objectives and policies of this Plan.

As we have outlined above, the proposed transfer station aligns with the objectives of both the RMPS and the Cole Harbour/Westphal MPS by advancing the objectives of the IWMS, which both plans endorse. We also note the vision of the Cole Harbour/Westphal MPS concerning the area in question around Ross Road. The Cole Harbour/Westphal plan examines the subject area in more depth as a secondary planning strategy is expected to do and distinguishes the industrial area on the east side of Ross Road as a distinct sub-area, which can be managed in relation to the residential component growing in the area through appropriate land uses controls.

In the case of the C&D transfer station, detailed controls are in place through the CD-1 Zone. They have worked effectively for the existing operation since 2002. This proposal asks that the provisions be extended to 206 Ross Road to allow the transfer station to operate more effectively in support of the Municipality's well-established and highly successful waste management strategy.

### **2.2.5 Land Use Bylaw**

The CD-1 Zone applied to 188 Ross Road allows only "Construction and Demolition Materials Transfer Stations." Long-term storage or landfilling of C&D materials onsite is not permitted in the zone. In addition to area, minimum coverage, and setback requirements, the zone has specific separation requirements from property lines (30 m), from residential or institutional buildings (60 m), and from a watercourse (30 m as opposed to the 20 m buffer required around all watercourses under the LUB).

Unlike most zones, the CD-1 Zone also has specific requirements that govern the operation of a C&D transfer station. Provisions of the zone prohibit noise, air, and water pollution from a C&D operation and require a landscaped or treed strip on the lot frontage. The zone also prohibits access through local streets or residential or parks and open space zones.

There have been no documented nuisance complaints with the Ross Road property. Halifax C&D has monitored water quality in the Little Salmon River since its establishment and will upgrade stormwater collection and treatment through improvements incorporated in its proposed expansion. The existing and proposed expanded uses have direct access to Ross Road (Route 328), which is classified as a Major Collector road on Map 3 (Transportation) of the Cole Harbour/Westphal MPS. Ross Road, in turn, connects directly to Highway 107, which is classified as an Arterial Road in the MPS. The route allows carriers to access the site efficiently and to return quickly to the regional road network after delivering C&D materials.

### **2.2.6 Plan Amendment**

The current policy in the Cole Harbour/Westphal MPS that must be amended to facilitate the extension of the CD-1 Zone to lands at 206 Ross Road is found on pp. 29-30 of the MPS:

#### **Existing C&D Operations**

Within the plan area, there is one existing C&D operation (a transfer station located at 188 Ross Road - PID# 40485310). To recognize this existing operation, Council shall establish and apply

---

applicable zoning to this property to reflect the use conducted on the property prior to the adoption of the amendments.

SW-6 A CD-1 (C&D Transfer Stations) Zone shall be established in the land use by-law. The zone shall permit only C&D transfer stations and shall establish controls on setbacks from adjacent uses, buffering and screening, landscaping, access, and outdoor storage in order to minimize impacts on adjacent uses.

SW-7 It shall be the intention of Council to recognize the existing C&D Transfer Stations on 188 Ross Road (PID# 40485310) by applying the CD-1 Zone to reflect its existing functions.

The preamble before Policy SW-6 should be updated to recognize circumstances when this application is approved; that is, that the C&D transfer station property will include a substantial portion on the current 206 Ross Road property (PID# 00460709). While Policy SW-6 will remain unchanged, we anticipate Policy SW-1 will be amended in a similar manner to the preamble, perhaps removing the word “existing” as well as altering the civic address and PID number as appropriate to identify properly the enlarged transfer station property.

The basis for the requested changes is similar to the rationale put forward in May 2011, when HRM considered and approved a plan amendment to expand the Goodwood Transfer Station operated by Halifax C&D. As stated in the Plan Amendment Application submitted for Goodwood at that time, the 2002 policies incorporated in the District 4 Municipal Planning Strategy (MPS) applicable to the Goodwood site “were written anticipating a number of operators to enter the C&D business.” The 2011 submission suggests that HRM expected new operators to establish additional sites over time but that has not happened. As noted above in this document, Halifax C&D continues to be the only operator of C&D transfer stations in HRM, with Ross Road being the only other transfer station other than Goodwood.

The Goodwood property in 2011, like the Ross Road lands today, was fully occupied by activities required to sort and manage C&D materials. Increasing the area available for the functions of the C&D transfer station allowed Halifax C&D to address challenges in Goodwood similar to those on the Ross Road property. The scale house, for example, was moved farther onto the site to reduce the potential for queueing vehicles to back up onto the road leading to the transfer station property, which is Mills Drive in Goodwood. It also allowed better distribution of sorting facilities, which reduced the visual impact and the potential for blowing litter. We have noted the same benefits from the proposed plan for Ross Road.

The expansion of the Ross Road facility will also have the same benefits for the implementation of the Municipality’s C&D Waste Management Strategy as were listed in the Ross Road application:

- Further increase diversion from landfill through recycling of an increasing amount of construction and demolition debris;
  - As more materials are separated, more can be diverted from landfilling, thereby extending the life of disposal facilities.
- Increase economic activity and value added processing through recovery of construction and demolition debris; current Halifax C&D examples include:
  - Recycling drywall to use in the manufacture of new drywall.
  - Recycling glass for reuse for septic tank drainage.
  - Recycling plastic for reuse as plastic lumber.
  - Recycling wood for energy production.
- Provide an opportunity to properly dispose of construction and demolition debris that cannot be recycled;
  - Segregation of non-recyclable materials at Ross Road for transfer to licensed disposal facilities
- Minimize environmental, land use and nuisance impacts from the operation of construction and demolition processing operations;
  - Stormwater will be controlled through site paving, grading and direction to a reservoir with outflow to a constructed treatment wetland.
  - The paved yard will minimize dust generation.
  - New storage buildings and enclosures will further minimize debris and noise.
  - Activities at the site, noting the proposed reconfiguration, are well buffered from residential uses.

Expanding the Ross Road facility will advance these objectives not so much by increasing the capacity of the system but by increasing the efficiency with which fluctuating quantities of C&D waste can be handled in the municipality, and by reducing the local impact of its management.

### **2.2.7 Rezoning**

The amendment to Policy SW-7 of the Cole Harbour/Westphal MPS suggested above is necessary to allow the rezoning of lands at 206 Ross Road from I-1 to CD-1, as noted above. No change is required to Policy SW-6, which is the basis for the CD-1 Zone in the Cole Harbour/Westphal LUB. Halifax C&D will develop all components of the proposed transfer station expansion within the established restrictions of the CD-1 Zone.

The lot and yard standards applied in the CD-1 Zone are considerably more stringent than those applied in the I-1 Zone from which the property will be rezoned. As can be seen from **Table 2-1**, the lot size requirement and all yard are many times larger in the CD-1 Zone. The coverage maximum is the same and the frontage requirement for properties on central services, which does not apply on Ross Road, is somewhat less. CD-1 uses, furthermore, must maintain separation distances from other uses that do not apply in I-1 Zones and the separation from a watercourse is increased by 10 m.



**Table 2-2 Yard and Lot Requirements, I-1 and CD-1 Zones, Cole Harbour/Westphal MPS**

Zone Requirement	I-1 Zone		CD-1 Zone	
	Minimum Lot Area: central services	557.4 m <sup>2</sup>	6,000 ft. <sup>2</sup>	3,716 m <sup>2</sup>
Minimum Lot Area: on-site services	1858.1 m <sup>2</sup>	20,000 ft. <sup>2</sup>	11,148 m <sup>2</sup>	120,000 ft. <sup>2</sup>
Minimum Frontage: central services	18.3 m	60 ft.	15 m	49.2 ft.
Minimum Frontage: on-site services	30.5 m	100 ft.	30 m	98.4 ft.
Minimum Front or Flankage Yard	7.6 m	30 ft.	25 m	82.0 ft.
Minimum Rear or Side Yard	4.6 m	25 ft.	30 m	98.4 ft.
Maximum Lot Coverage	50%		50%	
Maximum Height	N/A		11 m	36.0 ft.
Distance from any property line	N/A		30 m	98.4 ft.
Distance from nearest residential dwelling	N/A		60 m	196.9 ft.
Distance from a watercourse	20 m	65.6 ft.	30 m	98.4 ft.

Other additional requirements in the CD-1 Zone include restrictions on nuisances, which reinforce requirements of HRM’s nuisance bylaws that are applicable to a broader range of land uses, landscaping requirements, and access specifications that prohibit the creation of an access to a CD-1 use through a residential or institutional zone.

Finally, development of CD-1 uses is subject to site plan approval. Whereas an applicant seeking to construct a permitted use in most zones must simply comply with the standards of that zone to obtain a permit, an applicant seeking to build a permitted C&D use in a CD-1 Zone must submit plans for approval by HRM’s Development Officer. The site plan requirements under Section 24A.5 of the Cole Harbour/Westphal MPS allow the Development Officer to scrutinize site access, separation, loading and storage areas, landscaping, outdoor lighting, waste storage, signage, and standards of care.

Consideration of land use bylaw amendments such as rezonings in Cole Harbour/Westphal is governed by Implementation Policy IM-11 in the Cole Harbour/Westphal MPS:

IM-11 In considering amendments to the land use by-law or development agreements, in addition to all other criteria as set out in various policies of this planning strategy, Cole Harbour/Westphal Community Council shall have appropriate regard to the following matters:

- (a) that the proposal is in conformity with the intent of this planning strategy and with the requirements of all other municipal by-laws and regulations;
- (b) that the proposal is not premature or inappropriate by reason of:
  - (i) the financial capability of the Municipality to absorb any costs relating to the development;
  - (ii) the adequacy of sewer and water services;

- (iii) the adequacy or proximity of school, recreation and other community facilities;
  - (iv) the adequacy of road networks leading or adjacent to or within the development; and
  - (v) the potential for damage to or destruction of designated historic buildings and sites.
- (c) that controls are placed on the proposed development so as to reduce conflict with any adjacent or nearby land uses by reason of:
- (i) type of use;
  - (ii) height, bulk and lot coverage of any proposed building;
  - (iii) traffic generation, access to and egress from the site, and parking;
  - (iv) open storage;
  - (v) signs; and
  - (vi) any other relevant matter of planning concern.
- (d) that the proposed site is suitable in terms of steepness of grades, soil and geological conditions, locations of watercourses, potable water supplies, marshes or bogs and susceptibility to flooding; and
- (e) any other relevant matter of planning concern.

Within any designation, where a holding zone has been established pursuant to “Infrastructure Charges - Policy IC-6”, Subdivision Approval shall be subject to the provisions of the Subdivision By-law respecting the maximum number of lots created per year, except in accordance with the development agreement provisions of the MGA and the “Infrastructure Charges” Policies of this MPS. (RC-Jul 2/02; E-Aug 17/02)

The Halifax C&D property, as noted, is within an industrial area and, consequently, is separated from “schools, recreation or other community facilities.” There are also no historic structures noted in the MPS or of which we are otherwise aware in the vicinity of the transfer station.

As noted, the CD-1 Zone is subject to much more stringent limitations on building bulk than are imposed by the I-1 Zone that presently applies to the property. The expansion plan also incorporates an improved stormwater management system featuring a constructed wetland. Under the proposed plan, as well, the location of C&D uses on site will respect the 30-m watercourse buffer applicable to C&D uses in the Cole Harbour/Westphal Municipal Planning Strategy, where the site abuts the Little Salmon River. The 30-m standard expands the 20-m requirement applicable to all uses on all watercourses in the municipality.

Residential uses across Ross Road are separated by the roadway and natural buffering that has been maintained on the residential properties as well as by buffering on the Halifax C&D frontage. Buffering on the Halifax C&D land has been recently enhanced and will be further improved under the proposed development plan, which includes a landscaped berm to screen areas where C&D materials will be actively sorted.

### **2.2.8 Existing Facility Impacts**

As noted, the existing C&D transfer station is located within an industrial area that has evolved on the east side of Ross Road. The transfer station is next to the R & R Kinsman's Auto Salvage Yard with the industrial area, which extends roughly from a property at 196 Ross Road that appears to be used for storage of construction equipment in the north to the Superior Foundations property at 246 Ross Road to the south. Properties on Ross Road to the north and south of this industrial cluster as well as on the west side of the road are predominantly residential.

The roadway is heavily vegetated along much of its length. Many homes are screened from the road by mature trees and can only be detected from their driveways and mailboxes. The auto salvage yard and the Halifax C&D property are also screened to a degree by trees as well as by smaller scale business uses located on their frontages. Dura-Tech, a manufacturer of fiberglass products, which leases its property from Halifax C&D, occupies a portion of the Halifax C&D frontage. The lands to the south of Dura-Tech (which will continue to be zoned I-1) have been cleared and graded but are essentially vacant behind a healthy stand of trees.

The land on the west side of Ross Road immediately opposite the current Halifax C&D transfer station is undeveloped and heavily wooded. Lands to the south that will face the expansion area are occupied by two single-detached homes that are among those almost completely obscured by vegetation. It seems unlikely that Ross Road or the land uses on the east side of the road are visible from these properties except when standing on the respective driveways.

The preservation of natural vegetation on Ross Road minimizes the visual impact of industrial uses including the Halifax C&D operation. It should also dampen sound to the extent that either is generated on the site. Notwithstanding this existing condition, Halifax C&D is committed to enhancing the appearance of its frontage. The company has already taken steps to clean up the Dura-Tech yard and its plan for expansion includes a landscaped berm on the perimeter of the new C&D handling area.

## **3.0 Application Standards – Additional Information**

### **3.1 Location/Land Use Map and Site Plan**

As specified in HRM's Planning Application Form, a Detailed Conceptual Site Plan of the proposed development is provided as **Sheet 1** at the rear of the document. A reduced format version of this figure (with some detail removed to enhance legibility) is presented as **Figure 3-1**. One new building is proposed for the expanded site layout; a materials Sorting Building situated directly to the south of the relocated Office/Scale House. Preliminary elevations of the proposed Sorting Building presented in **Figures 3-2** and **3-3**.

With regard to **Sheet 1** and **Figure 3-1**, the following is noted:

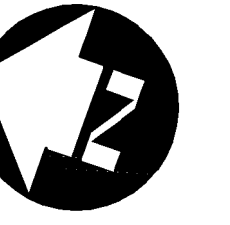
- The base plan for this figure is founded on a legal survey prepared by John C. MacInnis, NSLS, in September 2014 as well general site observations as of May 2017;
- Landscaping provisions for the proposed development will be defined in accordance with HRM requirements; and
- Prior to the commencement of detailed engineering design activities, a full topographical survey of the property will be completed.

### **3.2 Preliminary Servicing Plans**

Water servicing is provided to properties along Ross Road via an existing water main, maintained by Halifax Water. At the present time, the Halifax C&D facility at 188 Ross Road does not have water servicing. As part of the proposed site expansion, Halifax C&D intend to use yard runoff collected in a site reservoir to address non-potable water requirements including dust control and fire response. For the foreseeable future, staff will continue to be provided with bottled water for drinking purposes.

Central sewer servicing is currently not available in the Ross Road area. Washroom requirements for site staff will continue to be met through the use of portable toilets, complete with hand cleaner/sanitizer dispensers.

Details relating to building servicing will be established as part of pending detailed engineering design activities.

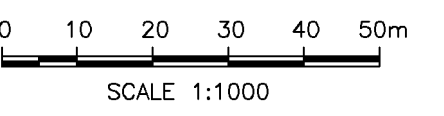


HALIFAX

FILE NAME: C:\PROJECTS\WORKING\ROSS\ROSS\PROPOSED\_LAYOUTING\_PLOTTED\_BY: RONDEAU, TMMY  
PLOT DATE: 2017-09-28 11:55 AM PLOT SCALE: 1:1000 PLOT SIZE: 24.1 X 34.1 CM



- LEGEND:**
- YARD RUNOFF FLOW DIRECTION
  - DRAINAGE SWALE
  - EXISTING TREED AREA
  - NEW LANDSCAPED AREA
  - NEW TREES/SHRUBS
  - EXISTING DECIDUOUS TREE BUFFER TO BE RETAINED
  - ASPHALT
  - GRAVEL
  - FUTURE LEASED PROPERTY
  - LEASED PROPERTY
  - INDICATES A NEW OR RELOCATED BUILDING
  - $\times 16.45$  EXISTING ELEVATION
  - $\times 15.75$  PROPOSED ELEVATION



**PRELIMINARY**

**Conditions of Use**

Verify elevations and/or dimensions on drawing prior to use. Report any discrepancies to Dillon Consulting Limited.

Do not scale dimensions from drawing.

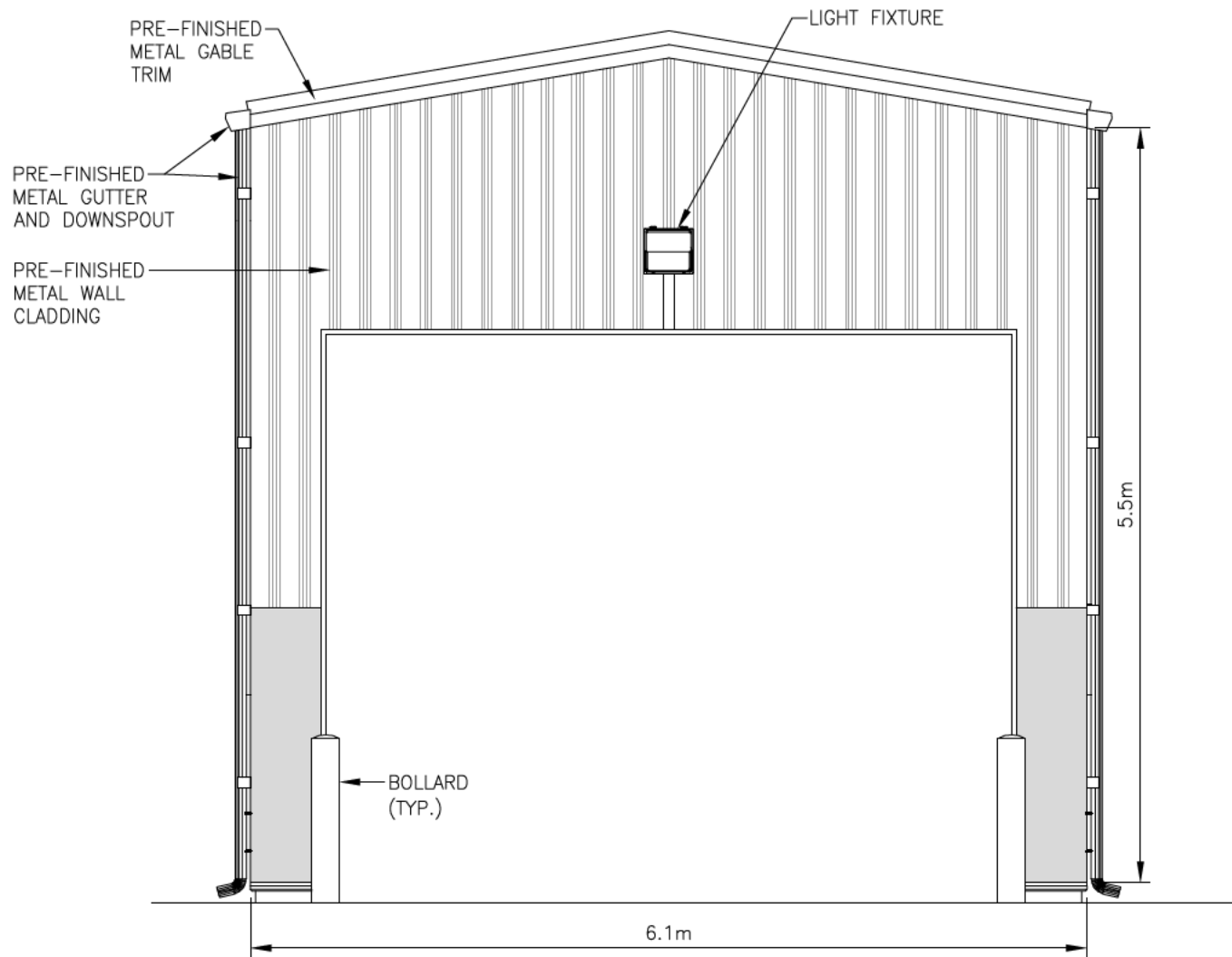
Do not modify drawing, re-use it, or use it for purposes other than those intended at the time of its preparation without prior written permission from Dillon Consulting Limited.




DESIGN	SDK	REVIEWED BY	SDK
DRAWN	TLR	CHECKED BY	SDK
DATE	SEPTEMBER 2017		
SCALE	1:1000		
3	AMENDMENT DOCUMENT PREPARATION - ADDITIONAL INFORMATION	28/09/17	SDK
2	AMENDMENT DOCUMENT PREPARATION	12/09/17	SDK
1	CLIENT REVIEW	31/07/17	SDK
No.	ISSUED FOR	DATE	BY

<b>ROSS ROAD ADVISORY SERVICES</b>		PROJECT NO. <b>16-4390</b>
<b>PROPOSED LAYOUT</b>		FIGURE NO. <b>3-1</b>

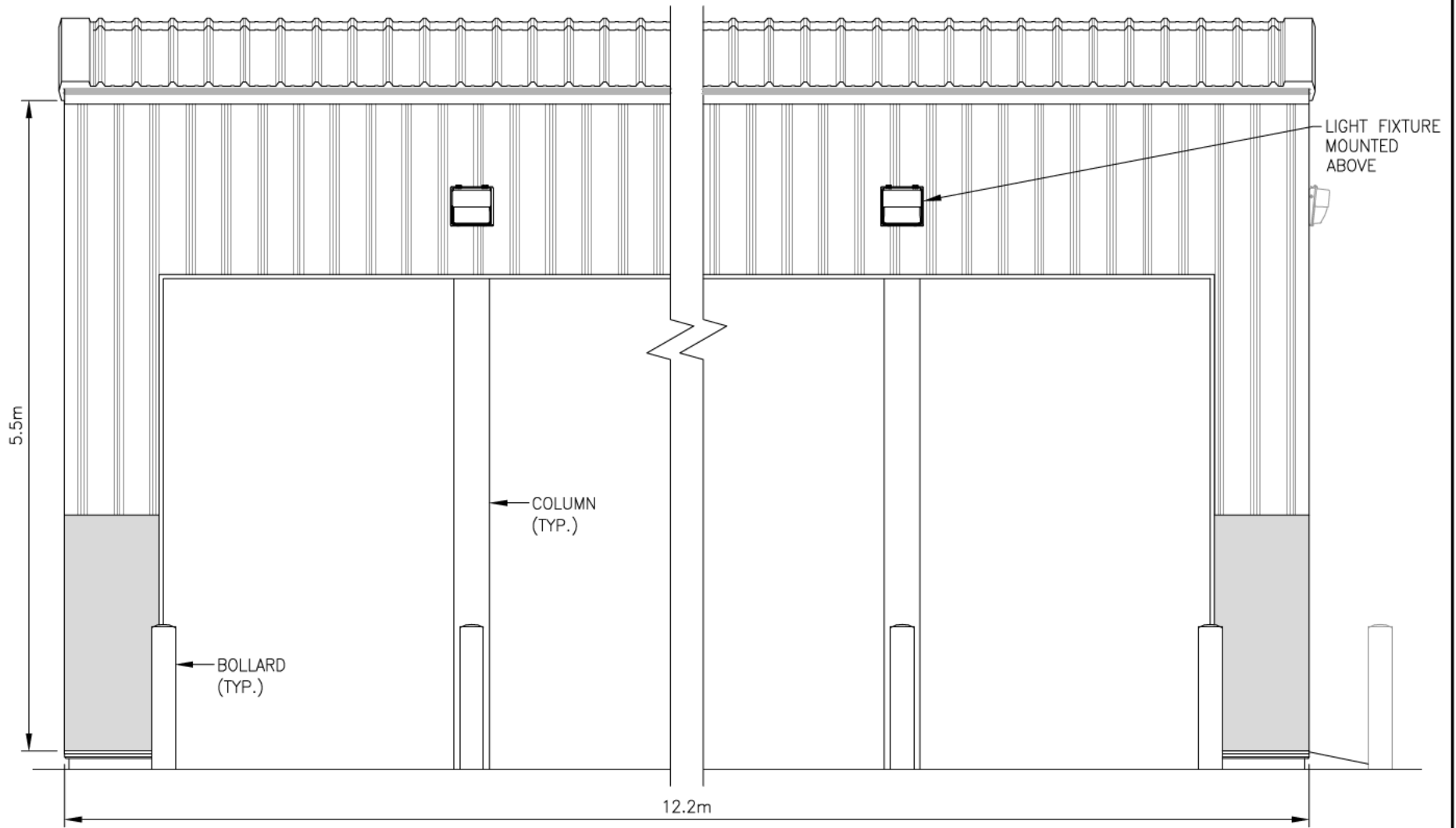
File Name: c:\project\elw\working directory\active\150\tr\00\401709\16\4390\_fig\_elevations.dwg



**END ELEVATION**  
1:50

 <b>DILLON</b> CONSULTING	PROJECT	<b>HRM PLANNING AMENDMENT SUBMISSION ROSS ROAD</b>	PROJECT NO. <b>16-4390</b>
	TITLE	<b>TYPICAL BUILDING END ELEVATION</b>	FIGURE NO. <b>3-2</b>
DATE	<b>AUGUST 2017</b>		

File Name: c:\project\elw\working directory\active\50\tr\00\401709\16\4390\_fig elevations.dwg



END ELEVATION  
1:50



	PROJECT	<b>HRM PLANNING AMENDMENT SUBMISSION ROSS ROAD</b>	PROJECT NO. <b>16-4390</b>
	TITLE	<b>TYPICAL BUILDING SIDE ELEVATION</b>	FIGURE NO. <b>3-3</b>
DATE	<b>AUGUST 2017</b>		

### **3.3 Transportation Impact Statement/Study**

With reference to the descriptive information presented in this submission, and acknowledging the requirements of HRM's *Guidelines for the Preparation of Transportation Impact Studies*, Adam Lanigan, P.Eng. (a transportation planning engineer with Dillon Consulting Limited), completed a review of potential traffic issues associated with the proposed development. With reference to **Appendix C**, a letter report presenting Mr. Lanigan's findings was prepared by Dillon in July 2017. As stated in Section 5.0 of the letter, no significant net change in vehicle arrivals or departures at the Ross Road site is anticipated as the result of the establishment of the development proposed by Halifax C&D. Thus, it was concluded that a Transportation Impact Study is not required for the proposed Ross Road facility expansion.

### **3.4 Stormwater Management Plan**

Halifax C&D is in the process of adjusting its operations at the Ross Road facility to expand to an adjacent property in order to improve operations. The total redeveloped area will be approximately 1.43 ha including an area designated for C&D material sorting and storage which will have an asphalt surface. All post-construction runoff from the site will flow in an easterly direction to a stormwater retention pond.

Runoff from the existing site generally flows in an easterly direction towards a wooded area adjacent to Little Salmon River. For the proposed development, stormwater management procedures will be significantly enhanced. The active yard area will be paved, with all runoff being directed to a 500,000 litre, HDPE-lined stormwater retention pond. The pond then discharges into an engineered wetland through a pipe in the berm. The pipe will be equipped with a butterfly valve that can be closed in the event of a suspect discharge. The runoff will be discharged from the wetland through a filter berm which will allow the run off to dissipate into the adjacent wooded buffer area on the eastern side of the property, with ultimate flow to the Little Salmon River. The Little Salmon River flows southerly to Cole Harbour and subsequently into the Atlantic Ocean.

Construction and demolition materials to be routinely managed on-site (including wood, shingles, masonry, plastics, metals and other items permitted in By-Law L-200) are not anticipated to generate contentious runoff quality impacts.

### **3.5 Erosion & Sediment Control Plan**

An Erosion and Sediment Control Plan, consistent with the requirements of HRM and NSE, will be prepared as an element of site construction and operation documents. Given the specification of asphalt and aggregate surfaces for the proposed development as well as the use of sod and/or

---



hyrdoseeding for landscaped areas, it is anticipated that erosion and sediment control issues will be of primary concern during construction.

### **3.6 Project Schedule**

Development of the proposed expanded Ross Road facility will commence immediately following the receipt of necessary municipal planning and building permit approvals. Ideally, construction will be initiated during the summer of 2018 and be completed by the end of the year.

### **3.7 Legal Survey and Description of the Site**

Halifax C&D plan to merge the properties as required to address the proposed development and meet the layout requirements as presented in this submission. A legal survey will be prepared as part of this effort.

### **3.8 Aerial Photographs**

Representative aerial photographs of the proposed development area are provided in **Appendix D**.

### **3.9 Location of Laterals for Municipal Services**

As noted in **Section 3.2**, the existing Halifax C&D facility at 188 Ross Road does not have water or sewer servicing. Potentially, Halifax C&D may bring water servicing into the site at a future date.

### **3.10 Building Elevations**

Refer to **Figures 3-2** and **3-3**.

### **3.11 Sign Requirements**

The identification signs for the existing CD-1 site are in place.

**Appendix A**  
**Planning Application Form**

## Planning Application Form

### APPLICATION TYPE

- Land Use By-law Amendment
  Development Agreement Amendment  
 Development Agreement
  Other \_\_\_\_\_  
 Subdivision By-law Amendment

Internal Use Only	<input type="checkbox"/> Major	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Minor
Processing Fee		Advertising Deposit	Total
Description of proposed use in detail: (attach additional pages, if necessary)			
Existing Land Use			
Existing Structures		Previous Land Use	
Sanitary Service		Water Service	

### PROPERTY INFORMATION

#### Primary Property

PID	Civic Address	Owner(s) Name

#### Other Property(s) affected

PID	PID	PID

### ENCUMBRANCES

Describe any easements, restrictive covenants or other encumbrances affecting the subject land(s):

### CULTURE/ HERITAGE

<b>Is this a registered Heritage Property?</b> <input type="checkbox"/> Municipal <input type="checkbox"/> Provincial <input type="checkbox"/> Federal <input type="checkbox"/> No
Does this property abut a registered Heritage Property? <input type="checkbox"/> Yes <input type="checkbox"/> No

**Planning Application Form**

**Are you aware if the site contains any of the following cultural/heritage resources?**

archaeological sites  
 buildings, structures, and landscape features of historical significance or value  
 cemeteries or known burials

If yes to any of the above, please provide details of any cultural or heritage resources on or abutting the site:  
 Not applicable

**CONTACT INFORMATION**

**Registered Owner(s):** Halifax C&D Recycling Ltd.

Mailing Address 16 Mills Drive, Goodwood, NS B3T 1P3  
 Attn: Dan Chassie, President

E-mail Address

Phone	Cell	Fax
-------	------	-----

Applicant?\*  Yes  No

**Consultant:** Dillon Consulting Limited

Mailing Address 137 Chain Lake Drive, Suite 100  
 Halifax, NS B3S 1B3

E-mail Address

Phone	Cell	Fax
-------	------	-----

Applicant?\*  Yes  No

I certify that I am submitting the above referenced application, including all of the required supporting information, for approval with the consent of the owner(s) of the subject property(s). The owner(s) has/have seen the proposal and have authorized me to act as the applicant for this planning application. \* My identification as the applicant means that I am the primary contact with HRM in all matters pertaining to this application.

I understand that all studies or reports submitted in support of this application are public. Once it has been determined that these documents are complete in both the comprehensiveness of the data used and that the analysis methodology is in keeping with HRM standards, they will be available for release to the public for inspection. Upon request by HRM, I agree to may be necessary.

Applicant Signature

SEPT 28/17  
 Application Date

All applications must include the written consent of all registered owners of the subject lands, contain complete and accurate information, and include the appropriate fees. **Incomplete applications will be returned.**

**All fees are to be made payable to Halifax Regional Municipality.**

**All plans are to be folded to approximately 8½" x 11" with the face of the folded print being the title block which is located in the lower right-hand corner of the plan.**



## Planning Application Form

### MINOR Applications

**\$330 Processing Fee + \$450 Advertising Deposit\* = \$780.00**

- Time Extensions (Advertising Deposit not required)
- Discharge Development Agreement (Advertising Deposit not required)

\*Where costs differ from the deposit, the balance will be charged or refunded to the applicant.

### DRAWING STANDARDS

Plans shall be prepared by the appropriate qualified professionals (i.e., engineer, architect, landscape architect, surveyor, etc.) who are members in good standing with their professional associations, and are to be based on the best available and most current mapping or aerial photos. All plans are to include a north arrow, scale, legend, and drawing/ revision dates. The type of plan (e.g."Site Plan") shall appear in a title block in the lower right portion of the drawing.

#### **NOTE 1**      ***Detailed Site Plan***

The site plan shall include:

- Dimensions and area of all subject lands based on the most recent surveys and legal descriptions
- Location and names of all existing and proposed streets, registered easements, and rights-of-way,
- A key plan, property identification (PID #, lot number, and/or civic number), and name of property owner
- For developments involving new street construction, the same information required in the *Regional Subdivision By-law* (section 94) for Concept Plans
- The location of any municipal service boundary on the site (if applicable)
- The footprint and area of proposed buildings, setbacks from all property boundaries, and the location of any existing buildings or structures to be retained or demolished
- Existing and proposed grades and spot elevations at all building corners; (or a separate grading plan)
- Driveway locations and parking layout
- Surface type (e.g. asphalt, gravel, sod, woodland etc.) and areas of existing vegetation to be retained
- Proposed ground sign locations

#### **NOTE 2**      ***Preliminary Landscape Plan***

The preliminary landscape plan shall be prepared by a Landscape Architect and provide details on:

- General description of type and location of hard and soft surface materials
- General description of proposed plant material (e.g. deciduous trees, coniferous shrubs, sod) graphically shown on the plan
- General location and type of fencing, retaining walls and site furnishings
- Delineation of areas of existing trees to be retained
- Description or details of proposed method(s) of tree protection

#### **NOTE 3**      ***Building Drawings***

Building drawings shall be prepared by a qualified professional and include the following details:

- |   |   |
|---|---|
| <input type="checkbox"/> Height and number of storeys           | <input type="checkbox"/> Angle controls (if applicable)                                   |
| <input type="checkbox"/> View plane locations, where applicable | <input type="checkbox"/> Signage (if applicable)  |
| <input type="checkbox"/> Building materials and colours         | <input type="checkbox"/> Renderings of all elevations                                     |
| <input type="checkbox"/> Pattern and size of windows            | <input type="checkbox"/> Floor Plans with uses labelled, location, type & number of units |
| <input type="checkbox"/> Roof lines                             |   |

## Planning Application Form

### **NOTE 4**      **Traffic Impact Statement/Study**

The traffic impact statement/study shall be prepared and stamped by a Professional Engineer in accordance with the current version of HRM's *Guidelines for the Preparation of Transportation Impact Studies*. These studies may require input from the NS Department of Transportation and Infrastructure Renewal. Copies of these requirements are available upon request.

### **NOTE 5**      **Micro Climate Conditions**

- Shadow Study which evaluates the shadow impact for various times during the day on each of the following dates: March 21, June 21, September 21 & December 21
- Wind Mitigation Strategy which predicts wind impacts and advises of methods to reduce them

### **NOTE 6**      **Servicing Schematics**

The Preliminary Servicing Plans shall be prepared by a Professional Engineer in accordance with the *Municipal Service Systems Design Guidelines* and shall contain at a minimum:

*For Development not requiring street construction:*

- Lot layout and building footprint
- Preliminary lot grading showing grading/drainage directions (general intent)
- Driveway location(s) including dimensions
- Sewer lateral locations including size
- Water lateral locations including size
- Existing trunk services that will service the property
- Preliminary sanitary flow calculations
- Preliminary storm flow calculations (pre and post development)

*For Development requiring street construction:*

- Proposed street and lot layout
- Proposed central services size and location & direction of flow (water, sanitary and storm)
- Proposed forcemain and pumping station locations (if required)
- Existing trunk services that will service the project
- Existing street network abutting the project
- Preliminary lot grading showing grading/drainage directions (general intent)
- Preliminary sanitary flow calculations
- Preliminary storm flow calculations (pre and post development)

**The level of detail shown on servicing schematics shall be relative to the scale of the development.** The above represents minimum standards acceptable for typical planning applications.

### **NOTE 7**      **Preliminary Stormwater Management Plan/Drainage Plan**

These plans shall be prepared and stamped by a Professional Engineer in accordance with the *Municipal Service Systems Design Guidelines*, any applicable provincial requirements, and HRM's *Regional Subdivision By-law*.

**Please submit your application to the appropriate Planning Applications office**

**Halifax**  
Planning Applications  
Bayers Road  
PO Box 1749  
Halifax, NS B3J 3A5

*courier:*  
7071 Bayers Road, Suite 2005  
Halifax  
tel: (902) 490-4393

**Sackville**  
Planning Applications  
Acadia Centre  
PO Box 1749  
Halifax, NS B3J 3A5

*courier:*  
636 Sackville Drive  
Sackville  
tel: (902) 869-4260

**Dartmouth**  
Planning Applications  
Alderney Gate  
PO Box 1749  
Halifax, NS B3J 3A5

*courier:*  
40 Alderney Drive, 2<sup>nd</sup> Floor  
Dartmouth  
tel: (902) 490-4472

**Appendix B**  
**CD-1 Zone Compliance Table**



## Appendix B

**Proposed Plan Amendment  
Ross Road, Halifax C&D Recycling Limited  
CD-1 Zone Compliance Table**

CD-1 Zone Requirement	Halifax C&D Proposal	Comment
<p><u>26A.1 CD -1 USES PERMITTED</u> No development permit shall be issued in any CD-1 (Transfer Stations) Zone except for the following, pursuant to the Site Plan Approval process:</p> <ul style="list-style-type: none"> <li>• Construction and Demolition Materials Transfer Stations</li> <li>• Uses accessory to permitted use</li> </ul>	<p>Halifax C&amp;D will use the site for Construction and Demolition Materials Processing Facilities (transfer station, consistent with HRM's CD-1 definition) and allowable accessory uses.</p>	<p>No processing or disposal will occur on site. Activities to be limited to material separation and preparation for transfer off-site.</p>
<p>Minimum Lot Area 3,716 square metres (40,000 square feet) - central services 11,148 square metres (120,000 square feet) - on-site services</p>	<p>The current C &amp; D site (PID 40485310) is 3.56 acres (155,073 square feet or 14,407 square metres).</p>	<p>The current CD-1 site will be enlarged through this application to provide a total property size of 83,177 square metres.</p>
<p>Minimum Frontage 15 metres (49.2 feet) - central services 30 metres (98.4 feet) - on-site services</p>	<p>The current Halifax C&amp;D operation, which has water servicing only, has approximately 58.1 metres (190.6 feet) of frontage on Ross Road. This frontage length will remain applicable with the addition of the proposed expansion area.</p>	-
<p>Minimum Front Yard 25 metres (82.0 feet)</p>	<p>Buildings in the proposed CD-1 expansion area on PID 00460709 will respect the 25 metre minimum front yard requirement.</p>	<p>Includes the Elevated Loading Ramp structure and material bins.</p>
<p>Minimum Side Yard 30 metres (98.4 feet)</p>	<p>Buildings in the proposed CD-1 expansion area on PID 00460709 will respect the 30 metre minimum side yard requirement.</p>	<p>Includes the Elevated Loading Ramp structure and material bins.</p>
<p>Minimum Rear Yard 30 metres (98.4 feet)</p>	<p>Buildings in the proposed CD-1 expansion area on PID 00460709 will respect the 30 metre minimum rear yard requirement.</p>	<p>Includes the Elevated Loading Ramp structure and material bins.</p>

CD-1 Zone Requirement	Halifax C&D Proposal	Comment
Maximum Lot Coverage 50 %	Buildings will respect the maximum 50% lot coverage limit.	
Maximum Height 11 metres (36.0 feet)	Both existing and proposed buildings will respect the maximum 11 metre height limit.	The proposed height of the one new building to be included in the development (Sorting Building) is approximately 7 metres.
<u>26A.3 OTHER REQUIREMENTS: C&amp;D MATERIALS TRANSFER STATIONS</u> No development permit shall be issued for a C&D Materials Transfer Station except in compliance with the following provisions:		-
(a) any building or structure shall meet the following separation distances: (i) from any property line – 30 metres (98.4 feet) (ii) from the nearest residential dwelling or institutional use – 60 metres (196.9 feet) (iii) from a watercourse – 30 metres (98.4 feet)	Buildings in the proposed CD-1 expansion area will respect all requirements of 26A.3(a).	A 60 metre setback from residential and institutional properties as well as a 30 m watercourse (Little Salmon River) setback is presented on the site layout plan.
(b) notwithstanding Section 26A.3(a), where a building or structure is not to be located within 250 metres of a residential or institutional use or building, the building setback from any property line may be reduced to 10 metres (32.8 feet).	Not applicable – the separation distance between a building or structure on the property and the nearest <b>residential</b> (211 Ross Road) or institutional use building is approximately 80 m.	-
© notwithstanding Section 26A.3(a), any C&D Materials Transfer Station which is to be totally enclosed within a building (no outdoor storage of material, product, or equipment) setback from any property line may be reduced to 10 metres (32.8 feet).	Not applicable – storage of material, product and equipment will not be enclosed under the proposed development.	-

Appendix B

CD-1 Zone Requirement	Halifax C&D Proposal	Comment
<p><u>26A.4 GENERAL REQUIREMENTS: C&amp;D MATERIALS OPERATIONS</u>            No development permit shall be issued for a C&amp;D Materials Operation except in compliance with the following provisions:</p>	-	-
<p>(a) no operation shall be permitted, result in, causes or produces any of the following effects discernible outside any building or structure or affecting any adjacent property:            (i) noise or sound which is obnoxious because of its volume, duration, intermittent beat, frequency, or shrillness;            (ii) dissemination of smoke, fumes, gas, dust, odour, or any atmospheric pollutant; or            (iii) discharge of any waste material whatsoever into a watercourse or water resource except in accordance with the applicable government requirements.</p>	<p>Operations at the expanded facility will be consistent with those conducted to date at Halifax C&amp;D's existing Ross Road transfer station, acknowledging requirements of all applicable HRM bylaws including those associated with noise, odour, dust and other nuisance concerns.</p> <p>Halifax C&amp;D will not be discharging any waste material into a watercourse or water resource.</p>	<p>Smoke, fumes, gas, odour and atmospheric pollutants are not disseminated from the C&amp;D segregation and transfer activities.</p> <p>Consistent with historic practices, Halifax C&amp;D will control dust through the use of water and sweeping of the site.</p>
<p>(b) notwithstanding any other provisions of this by-law, C&amp;D Materials Operation may occur either inside or outside of a building;</p>	<p>C &amp; D materials will be handled in open areas and within select structures on the site.</p>	-

CD-1 Zone Requirement	Halifax C&D Proposal	Comment
<p>© there shall be a landscaped area of at least 4.5 metres (14.8 feet) in depth that runs the length of and directly abuts the front lot line, excluding driveway openings, and such land within this required landscaped area shall be grassed (or other appropriate vegetation ground cover) and trees and shrubs shall be planted (trees shall be a minimum of 1.8 metres (6 feet) in height) or existing trees and shrubs shall be maintained at a minimum rate of one (1) plant per each 2 metres (6.6 feet) of frontage;</p>	<p>Landscaping requirements for the front lot line will be incorporated into the final detailed site plan for the expanded CD-1 facility.</p>	<p>-</p>
<p>(d) notwithstanding Section 26A.4(c), if the front yard area is treed, the landscaped area is not required but all vegetation within 10 metres of the front lot line shall be retained and maintained;</p>	<p>A stand of deciduous trees exists along the front yard area – these trees will be retained and maintained.</p>	<p>-</p>
<p>(e) no portion of the operation shall be located within any side, rear, or front yard setback;</p>	<p>Buildings in the proposed CD-1 expansion area will respect all identified setback requirements.</p>	<p>-</p>
<p>(f) no operation shall have direct access to either a local or subdivision road, as determined by the Municipality’s Traffic and Transportation Services Division and any access road for such operations shall not occur through lands zoned for residential (R-1, R-1A, R-2, R-3 and R-5) or community use (P-1, P-2, P-3, EC and FP); and</p>	<p>Ross Road is indicated to be a Major Collector Road on the Transportation Map (Map 3) in the Cole Harbour/Westphal MPS. No net increase in site traffic is anticipated as a result of the proposed development; the number of public and private users of the facility will remain consistent.</p>	<p>See Section 3.3 of the Plan Amendment Application document for a Transportation Impact Statement.</p>

<b>CD-1 Zone Requirement</b>	<b>Halifax C&amp;D Proposal</b>	<b>Comment</b>
(g) no portion of the operation shall be located within a 1:100 year floodplain.	All portions of the operation are setback more than the required 30-metre watercourse setback.	Following a review of current site conditions, existing and proposed yard elevations and available local hydrological information, Dillon Consulting (on behalf of Halifax C&D) was unable to identify any evidence indicating that the proposed development area is within a 1:100 year flood plain.
<p>26A.5 GENERAL REQUIREMENTS: SITE PLAN APPROVAL</p> <p>All C&amp;D operations are subject to approval of a site plan. The Development Officer shall approve a site plan where the following matters have been addressed:</p>	A site layout plan with the proposed expanded layout has been included with this submission.	-
a) driveway access to the site shall be located in such a manner to minimize land use impacts on adjacent land uses;	The existing site access at 188 Ross Road will be maintained as part of the proposed development.	-
b) separation distances shall be provided from any structure on the site and abutting residential or community facility properties to ensure the development does not negatively impact upon surrounding properties;	Buildings in the proposed CD-1 expansion area will respect all identified setback requirements.	-
c) all off-street loading and unloading areas, stockpiles, processing areas, and parking facilities shall be located on the site such that no aspect impacts upon adjacent uses or streets and screening can be in the form of fencing, berms,	Halifax C&D has incorporated earthen berm, fencing and vegetation features to enhance the visual screening of the CD-1 facility.	-

CD-1 Zone Requirement	Halifax C&D Proposal	Comment
d) a landscaping plan shall be prepared that protects and minimize land use impacts on adjoining lands and the plan shall indicate the type, size, and location of all landscaping elements including the landscaping along the front of the property, to achieve the objective of the plan;	Landscaping requirements will be incorporated into the final detailed site plan for the expanded CD-1 facility.	-
e) within any designated side and rear yards, existing vegetation shall be retained unless it does not provide for adequate screening measures;	No side yard vegetation currently exists at the proposed development property. No development will take place within the existing “pine tree plantation” adjacent to the Little Salmon River, as defined on the 2015 legal survey document.	-
f) all outdoor lighting shall be oriented such that it is directed away from adjacent properties;	Consistent with historic operations at the 188 Ross Road site, limited amounts of yard lighting will be required for the proposed development.	-
g) all solid waste storage containers shall be screened from view from adjacent properties and streets;	Halifax C&D has incorporated earthen berm, fencing and vegetation features to enhance the visual screening of the CD-1 facility.	-
h) impact of the location, number and size of signs;	Signage is in place for the existing CD-1 operation at Ross Road; any revisions will be made in accordance with HRM requirements.	-
i) measures, including but not limited to lot grading, berms, shall be required to adequately address the management of stormwater and surface water; and	As noted in Section 3.4 of the Plan Amendment Application document, stormwater and yard run off management features for the proposed development include a retention pond, and engineered wetland and a filter berm.	-
j) provisions are established to ensure the operation and any required site improvements are maintained to a high standard.	Halifax C&D will continue to operate the Ross Road facility in full compliance with the requirements of its CD-1 license.	-

**Appendix C**  
**Transportation Impact Statement Letter Report**

July 31, 2017



Halifax Construction &  
Debris Recycling Limited  
16 Mills Drive  
Goodwood, Nova Scotia  
B3T 1P3

Attention: Dan Chassie, President

***Transportation Impact Statement for 188 Ross Road***

In response to your request, Dillon Consulting Limited (Dillon) had completed a review of potential transportation and traffic implications associated with the proposed modifications to Halifax C&D's facility at 188 Ross Road in Westphal, NS.

**1.0 Description of the Proposed Development**

---

Halifax C&D is proposing to develop a portion of a recently acquired 6.88 ha parcel of land adjacent to its current facilities located at 188 Ross Road in Westphal, NS. The changes will allow for a more logical overall layout and increase the space for movement of vehicles on site, which will increase the efficiency and safety of the handling of construction and demolition materials on-site.

Figure 3-1 in the Plan Amendment Application Report provides a conceptual plan of the proposed development and a listing of the major changes to the site.

**2.0 Existing Transportation Environment**

---

Ross Road (Highway 328) is a two-lane major collector that connects Highway 7/107 in the north with Highway 207 (Lawrencetown Road) in the south – with a total length of 2.6 km.

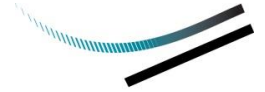
Ross Road provides local road and driveway access to residential properties to the north and south of a cluster of industrial land uses in the middle of the corridor. All intersections along and at the end points of the corridor are currently stop-controlled. The posted speed limit on Ross Road is 60 km/h.

Count data available from NSTIR (2007) shows that Ross Road carries an Average Annual Daily Traffic (AADT) of approximately 3,600 vehicles (bi-directional total). Assuming a 1% Compound Annual Growth Rate (CAGR), the current AADT on Ross Road is likely in the range of 4,000 vehicles.

137 Chain Lake Drive  
Suite 100  
Halifax, Nova Scotia  
Canada  
B3S 1B3  
Telephone

Fax





A rural unsignalized collector can reasonably be assumed to provide an automobile capacity of 900 vehicles per hour per lane. In the absence of recent count data, it can also be reasonably assumed that the peak hour for the facility will be in the range of 8-10 % of the AADT, which is typical of commuter-focused roadways.

Given these assumptions, the peak hourly volume on Ross Road is likely in the range of 320-400 total vehicles per hour or 160-200 per direction. This volume is well below the capacity for the roadway with a volume to capacity ratio (v/c ratio) in the range of 0.18 to 0.22. This indicates that no significant automobile capacity issues are present on Ross Road.

### **3.0 Site Traffic Generation**

---

Through a review of information related to the proposed expansion of the Ross Road facility and discussions with Halifax C&D personnel, it was concluded that no significant net change in vehicle arrivals or departures is anticipated.

As discussed in the Plan Amendment Application document, the reasons for the expansion of the site are related to safety and efficiency of the on-site operations. The extra space will provide for improved safety for employees and customers while on-site. Additionally, the additional space will allow for greater separation of materials, which will reduce the risk of fire.

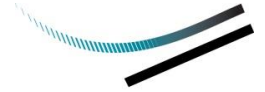
The overall tonnage and number of vehicles entering the site is not anticipated to increase with the changes to the site, as Halifax C&D will be maintaining their existing client base.

### **4.0 Interaction with Ross Road**

---

The most significant change to the site from a transportation perspective is related to the weigh scale that all vehicles must access when entering or exiting the site. Under current operations, there is one scale that must serve vehicles in both directions – as they enter the site and as they leave – to determine the weight of the delivered materials. This occasionally causes queuing on-site and onto Ross Road due to the bottleneck at the single weigh scale that must accommodate traffic in both directions.

To better accommodate the operations at the site, a second scale is proposed to be added. This provides a significant increase in efficiency for the site as entering and exiting vehicles can be serviced simultaneously. This will result in significantly shorter queues on-site.



Additionally, the new site layout proposes moving the scales 30 m further to the east, which increases the total distance between Ross Road and the weight scales to approximately 90 m. This provides significantly more space for vehicles to queue when entering the site than is currently present.

These two modifications (two-way scale, increased queuing space) will combine to significantly reduce both the frequency and length of queues resulting from site operations. This will have a positive impact on the operations of Ross Road.

## 5.0 Transportation Impact Study Requirements

---

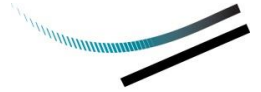
Section 2.0.2 of HRM's Guidelines for the Preparation of Transportation Impact Studies (8<sup>th</sup> Revision) states that "...a TIS will generally be required if the proposed development or redevelopment will add more than 100 peak-hour, peak-direction person trips to the transportation system." As noted above, no significant net change in existing traffic volume is predicted as a result of the proposed changes to the site.

Additionally, the Guidelines present five further criteria to consider when examining the need for a TIS:

- The development or redevelopment proposal incorporates direct vehicular access to a major collector or arterial road;
- The vehicular traffic generated by the development would result in volume/capacity ratios at a signalized intersection becoming critical (i.e., greater than 0.85 overall or for a shared through/turning movement, or greater than 1.0 for an exclusive turning movement);
- The development or redevelopment proposal is in an area with significant traffic congestion and/or a high expected rate of population or employment growth;
- The development or redevelopment proposal requires amendment of the applicable MPS or transportation plan(s); and
- The development or redevelopment proposal is not envisaged by local land-use/transportation plans.

Below are responses to each of the five criteria relative to the current proposal for this site:

- The site does connect to a major collector. However, the observed volume on the roadway would indicate that it is not a major thoroughfare;
- No significant net change is expected to site trip generation. Therefore, any operational issues already exist and are not due to the changes at the site;



- The available count data indicates that it is highly unlikely that there are any capacity issues on the roadway. The area surrounding the development is largely undeveloped, but is not likely to see a significant increase in development;
- This development does not require modifications to the Municipal Planning Strategy, nor any transportation plans; and
- The redevelopment of the site was not envisaged by land use or transportation plans. However, it does not present a change in land use or an increase in vehicles arriving or departing the site.

Given the above review of the threshold for new trips and the five additional criteria, it is reasonable to conclude that a TIS is not necessary for the site.

## 6.0 Conclusion/Statement of Impact

---

In summary, no significant change in vehicle arrivals or departures at Halifax C&D's facilities at 188 Ross Road is anticipated as a result of the proposed changes to the site. Thus, we conclude that a Transportation Impact Study is not required for the site at 188 Ross Road.

We trust that this letter is sufficient for your purposes at this time. However, if you have any questions or concerns, please contact the undersigned at your convenience.

Sincerely,

**DILLON CONSULTING LIMITED**

▪

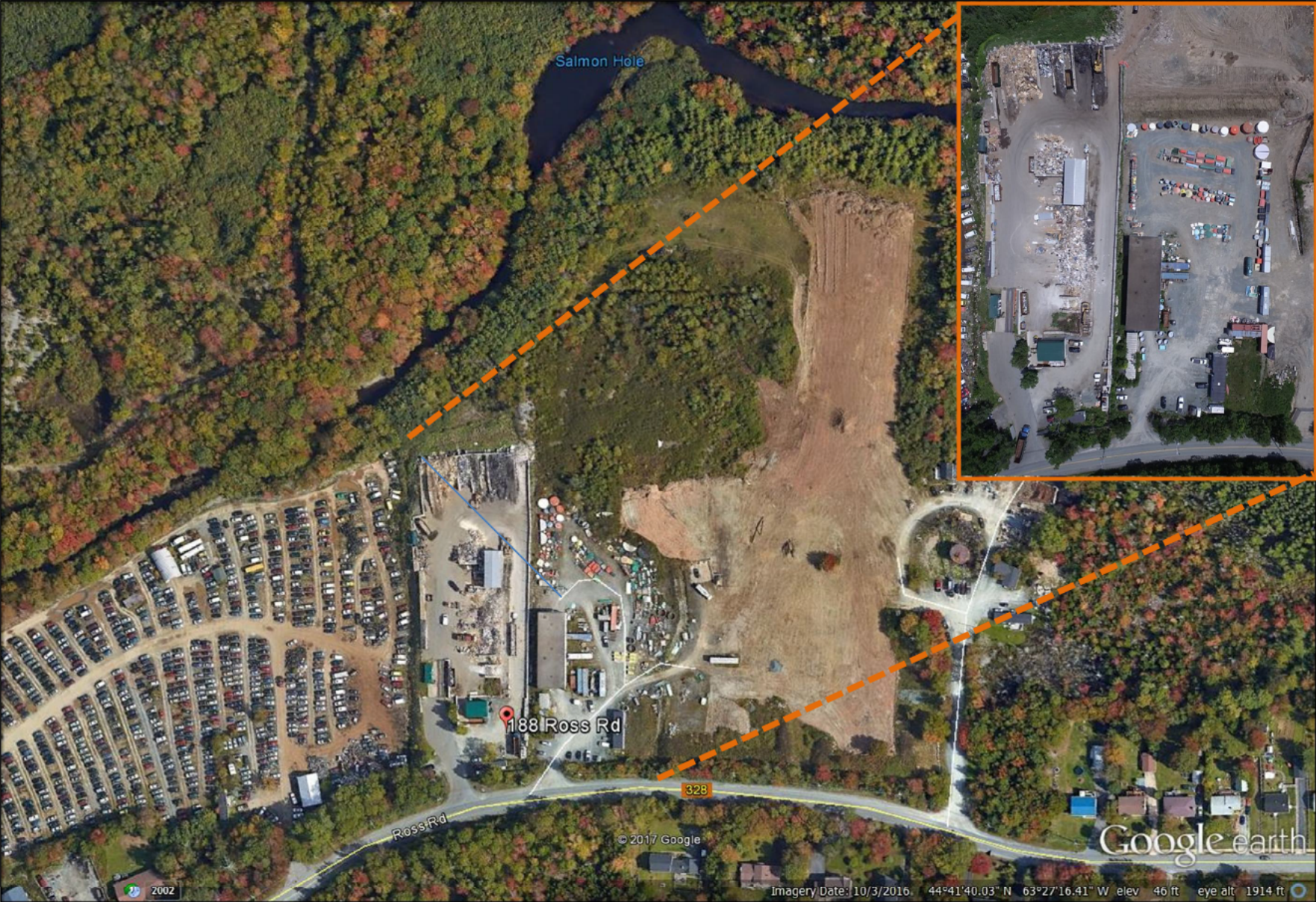
Adam Lanigan, P.Eng.  
Transportation Engineer/Associate

AML:jes

Our file: 16-4390-1000

**Appendix D**  
**Aerial Photographs**

Appendix D – Aerial Photographs



Appendix D – Aerial Photographs

