APPENDIX F

Meetings and Calls

Appendix F-1

Summary of Call with MOECC; Alternative Site Development Concepts

MEMORANDUM

TO Ministry of the Environment **DATE** June 25, 2013

CC Nigel Guilford, Miller Waste; Jeff Parkes, The Taggart Group; Doug Thomson, McCarthy Tetrault

FROM Trish Edmond and Paul Smolkin
Golder Associates Ltd. **PROJECT No.** 12-1125-0045

SUMMARY OF THE JUNE 19, 2013 CALL WITH THE MINISTRY OF THE ENVIRONMENT TO DISCUSS ALTERNATIVE SITE DEVELOPMENT CONCEPTS FOR THE CRRRC

Call Purpose

To review alternative site development concepts prepared for the CRRRC and obtain Ministry of the Environment (MOE) feedback on them, as per the approved, amended Terms of Reference (TOR)

Attendance

Trish Edmond and Paul Smolkin (Golder Associates Ltd.)

Jason Ryan and Dale Gable (MOE, Environmental Assessment and Approvals Branch)

Peter Taylor, Gillian Dagg-Foster, Ruth Orwin, Frank Crossley and Victor Castro (MOE, Eastern Region Technical Support)

Sandra Ausma (MOE, Sudbury District Office)

Steve Burns and Tara MacDonald (MOE, Ottawa District Office)

Discussion

General Background

Golder Associates Ltd. (Golder) provided a general overview of the project, as several of the participants on the call did not have previous experience with this project. The Capital Region Resource Recovery Centre (CRRRC) is a proposed waste management facility and the proponent is Taggart Miller Environmental Services (Taggart Miller). The Notice of Commencement of the TOR occurred in November 2010. The project is to manage industrial, commercial and institutional (I,C&I) and construction and demolition (C&D) waste from a service area of Eastern Ontario. The project is for an integrated waste management facility, the components of which are described further below.

The TOR was approved in December 2012. As this is a greenfield site the Environmental Assessment (EA) impact work will be completed to an Environmental Protection Act (EPA) level of detail. Taggart Miller had two proposed locations for the project. The first step in the EA was to complete some preliminary existing conditions work and complete a comparative assessment of the two sites as per the TOR. The assessment work was completed in January and February of 2013 and the identified preferred site was presented and described to the public at two open houses held in late February 2013. The preferred site is known as the Boundary Road Site and is located within the City of Ottawa. Following determination of the preferred site, the project team has worked on completing existing conditions studies and developing alternative site development concepts for the Boundary Road Site.

The alternative site development concepts were presented to the public at an open house held on June 5, 2013. Also presented were some preliminary results related to the geology, hydrogeology & geotechnical; socio-economic (visual) and traffic disciplines.

One component of the existing conditions that directly impacts the site design concepts is the geology of the Boundary Road Site. The geology consists of a variable thickness of surficial silty sand, or stiff weathered clay, typically up to about 1.5 m thick, overlying a thick deposit of about 30 m of clay to silty clay, followed by glacial till and Carlsbad Formation bedrock. One continuous layer was identified within the silty clay deposit beneath the Site consisting of sandy silt to silty sand with a trace of clay (known as the silty layer). The top of the continuous layer was found at a depth of about 4.5 to 5 m below ground, and the layer had a thickness ranging from 130 to 600 mm (average about 350 mm).

Alternative Site Development Concepts

In advance of the call three handouts had been circulated electronically to the MOE: the alternative site comparison summary part, the two alternative site development concepts and a plan with two cross sections. These are also attached to this summary for reference.

Golder reviewed the characteristics of the general property and surrounding area using one of the alternative site development concepts as a reference. Note that since the time of the TOR approval an additional piece of land has been added to the property. It is located near the northwest corner of the site and offers a site entrance closer to where Highway 417 exits onto Boundary Road. The Boundary Road site is very flat. The zoning of the Boundary Road Site is General Rural and Rural Heavy Industrial. There are limited residential land uses and no institutional uses within 1,000 m of the Boundary Road Site. The proposal is to receive 450,000 tonnes of waste per year with anticipated 40 to 55% diversion commencing at the beginning of operations. The airspace volume of a landfill to support 450,000 tonnes per year, the anticipated diversion and a 30 year operating period is about 9.5 to 10.5 million cubic metres.

The CRRRC will include a Material Recovery Facility (MRF), C&D recycling building, contaminated soil processing, organics processing (in a pre-processing building and cells), a leachate treatment facility, and a landfill for waste which cannot be otherwise diverted.

The site geology will limit the actual design of the landfill component at the site. For either alternative site development concept, the landfill component will be approximately 1.5 to 2 metres below ground surface with a constructed perimeter berm, have 14H:1V side slopes with the top deck being 20H:1V and have a maximum waste thickness of 20 to 25 metres. The site geology also has implications on buildings with larger buildings requiring piles while smaller buildings will be on footings.

Alternative A site development concept was reviewed. Essentially all buildings are located on the north part of the site, with the landfill occupying the south part of the site. The plan shows the location for on-site leachate treatment, although this will be assessed and it is possible that there could be off-site treatment at the City of Ottawa sewage treatment plant with, or without pre-treatment. This is true of either development concept.

Alternative B site development concept was reviewed. Essentially the MRF and C&D recycling facilities are located to the north, near the site access. All other buildings and processing are located in the southwest part of the property adjacent to Boundary Road. This leaves the eastern side of the site for landfilling in two areas split by the Simpson Drain, which runs through the site from west to east.

Cross sections of the landfill component for both alternative site design concepts were briefly discussed. Some visual assessment work for these two site development concepts has been completed and was presented at the June 5, 2013 open house. Three viewpoints were developed and the proposed alternative site development concepts are only visible from Devine Road looking west toward the Boundary Road Site.

For the actual design of the containment system, Golder is proposing a site specific design. Golder is proposing to cut off the surficial sand and weathered clay using a liner on the side of the landfill or a cut-off wall. Modelling will determine if it is necessary to also isolate the continuous silty layer located at 4.5 to 5 metres below ground surface. If required, a cut-off wall can be extended to this depth. Modelling work to demonstrate compliance with groundwater regulations and requirements is not yet complete but at this time a liner along the base of the landfill is not proposed.

Comments and Questions:

Liner Several comments and questions regarding the liner were received from MOE and there was some concern that a bottom liner may be required to cut-off the continuous silty layer pathway. The initial suggestion not to use a bottom liner is not a cost saving measure, but based on Golder's experience in similar conditions in Eastern Ontario, it will not likely be necessary. Modelling will be conducted to support this. Further, the construction of a bottom liner in these geological conditions will present some challenges.

Buffer The direction of groundwater flow is to the east and northeast. For both site development concept Alternatives A and B, the landfill footprint is within 120 metres of the eastern property boundary. The question was raised whether this buffer would be sufficient, considering no bottom liner. Golder discussed that the groundwater flow velocity at the site is very low, centimetres per year, even in the surficial sand unit and the continuous silty layer. Nevertheless there is some by the MOE regarding the adequacy of the width of the eastern buffer.

Stormwater Management Neither alternative site development concept shows stormwater management ponds or ditching. Golder has completed some conceptual work on stormwater management but will develop this further and show information on the plans once the preferred site development concept is determined.

O. Reg. 419 A reminder that landfills now fall under O. Reg. 419 for monitoring requirements.

Overall Impression of Alternative Site Development Concepts MOE would like to see this summary document before providing further thoughts. Generally no opinion was expressed. Eastern Region says that a landfill further away from the eastern property boundary would be preferable and that this is easier to accomplish with Alternative A than Alternative B. Also, in terms of phasing of the landfill, consideration could be given to initially filling an area more westerly, away from the eastern area of the proposed footprint.

Attachments: Design Comment Sheet
Cross Section

Appendix F-2

Summary of Call with MOECC; Groundwater Impact Assessment

Edmond, Trish

From: Edmond, Trish
Sent: September 24, 2013 9:53 PM
To: Zappone, Lorna (ENE) (Lorna.Zappone@ontario.ca)
Cc: 'frank.crossley@ontario.ca'; 'kyle.stephenson@ontario.ca'; Farnel, Megan
Subject: CRRRC Groundwater Impact Assessment

Hello Lorna,

As discussed this email outlines the conference call held on September 12, 2013 between the MOE Kingston office and Golder Associates Ltd. The attendees on the call included:

- Frank Crossley, MOE
- Kyle Stephenson, MOE
- Trish Edmond, Golder Associates Ltd.; and,
- Megan Farnel, Golder Associates Ltd.

The phone call was arranged to discuss the groundwater impact assessment for the Environmental Assessment for the Capital Region Resource Recovery Centre (CRRRC) in Ottawa, Ontario (site). Golder Associates Ltd. wanted feedback from the MOE related to the parameters that would be used for the contaminant transport modeling in groundwater at the site. The call's duration was approximately ½ hour.

During the call Trish Edmond gave an overview of the project and where it stands in the approvals process. Megan Farnel then described the existing geology and hydrogeology and discussed the groundwater impact assessment that is going to be completed and described the parameters that Golder is proposing to use for the assessment. Due to the naturally poor groundwater quality at the site some parameters that are listed in the MOE's Landfill Standards and are typically used for contaminant transport modeling have concentrations in groundwater at the site greater than the Ontario Drinking Water Quality Standards (ODWQS). The parameters listed in the Landfill Standards with concentrations naturally exceeding the ODWQS at the site include chloride. Golder wanted the MOE's thoughts on removing this parameter from the contaminant transport modeling but adding in boron as a replacement. Boron is a parameter that is observed in leachate from landfills that accept similar waste to what is proposed at the CRRRC (industrial, commercial and institutional (IC&I) as well as construction and demolition (C&D) waste).

Frank Crossley indicated that he agreed with the addition of boron as it is a good tracer for IC&I waste but thought that chloride should be included to avoid criticism. Although compliance cannot be demonstrated using chloride since it naturally exceeds the ODWQS in groundwater at the site, expected concentrations of chloride from the landfill should still be provided and then qualified.

To be conservative, Golder will use the Landfill Standard source concentrations even though the concentrations in the waste proposed for the CRRRC will likely be less.

Golder will start the groundwater impact assessment using the natural clay as a liner and if the contaminant transport modeling indicates that there may be a problem then another liner system will be considered. Golder will stay in touch with the MOE as any new concerns arise.

If you have any concerns with this summary of the conference call please do not hesitate to get in touch with me.

Thank you,
Trish

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Appendix F-3

Summary of Meeting with the NCC; EA Findings

Edmond, Trish

Subject: NCC areas of interest (Provincial) EA for CRRRC- Boundary Rd

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From: Candow, Sandra [mailto:sandra.candow@ncc-ccn.ca]
Sent: May 6, 2014 2:59 PM
To: Edmond, Trish
Subject: RE: NCC areas of interest (Provincial) EA for CRRRC- Boundary Rd

Trish,
Thank you for providing the summary- it has been on my to-do list also to confirm back to Taggart/Golder;

Yes- from an EA perspective, the NCC concerns have been addressed.

I have made one minor addition below, should you also wish to reflect our issues in any other documentation/draft EA (I added the capital arrival route status for 417).

We look forward to receiving the design/operation package via CD/electronically when available.

Many thanks
Sandra

Merci,
Sandra
Tél: 613 239-5678 ext 5586

From: Edmond, Trish [mailto:Trish_Edmond@golder.com]
Sent: Tuesday, May 06, 2014 7:49 AM
To: Candow, Sandra
Subject: NCC Summary of Meeting for your review- see edits incorporated

Hello Sandra,

We want to thank you for taking the time to meet with us and organizing a time for your colleagues to join us on April 16. I have been travelling a bit so my apologies for not sending this e-mail sooner.

From our discussion we understand that the NCC's main interests in the CRRRC project are stormwater management and the potential for surface water flow from the CRRRC site toward the Mer Bleue Bog, and the traffic flow on the off-ramps from Highway 417 to the CRRRC Site. During consultation on the TOR the NCC also indicated a concern regarding the appearance of the CRRRC from Highway 417. Finally, during our meeting on April 16 we also discussed the recently published Canada's Capital Greenbelt Masterplan.

As described at the meeting, the CRRRC Site is located approximately 3.5 kilometres southeast of the Mer Bleue Bog. Drainage at the CRRRC Site is via three ditches (that include one municipal drain) whose outlets will be maintained post construction. All of these ditches drain to the east and combine in Shaw's Creek and then Bear Brook, flowing away from the Mer Bleue Bog. The EA studies specifically considered and mentioned the Mer Bleue Bog and found that there are no anticipated direct or indirect adverse surface water (or groundwater) effects from the CRRRC on the Mer Bleue.

During the meeting we discussed the traffic assessment that has been completed. We noted the main Site access is located 850 metres south of the eastbound Highway 417 on/off ramp on Boundary Road. Although there is presently significant traffic on Boundary Road, with an annual average daily traffic of 7,820, the analysis showed that there would

be no requirement for modifications to any of the existing intersections analyzed, which included the Highway 417 on/off ramps. The analysis did warrant a dedicated left turn lane on Boundary Road into the Site access.

Representative viewpoints of the CRRRC were reviewed during the meeting, including one from a capital arrival route, Highway 417. The viewpoint from Highway 417 showed the Site in its present existing conditions, what it will look like with the CRRRC built, and what it will look like with some visual mitigation (i.e., a screening berm and tree planting). It was concluded that the CRRRC would not materially affect the viewshed from Highway 417.

The 2013 NCC Greenbelt Masterplan was also discussed with regard to the greenbelt concept figure that shows the greenbelt, connecting natural areas and ecological corridors. This plan and the information it contains was considered in the CRRRC and no adverse impacts were identified to the greenbelt or the associated ecological functions.

The NCC appreciated that their interests have been considered and addressed in the EA.

We trust that this accurately reflects our meeting. Should you have any questions or comments, please feel free to contact us. We expect the draft EA to be circulated sometime over the next few months.

Regards,

Trish

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Appendix F-4

Presentation to City of Ottawa

Environmental Assessment of the Proposed Capital Region Resource Recovery Centre

Presented to: City of Ottawa

June 24, 2014

Background

- Taggart Miller Environmental Services (Taggart Miller) has recently completed the draft Environmental Assessment for an integrated waste management facility
- 7 week comment period, ending July 31, 2014

- Purpose of Presentation:
  - provide an overview of the project and its evolution
  - present the layout and structure of the draft Environmental Assessment Study Report package
  - review some results from the environmental assessment

Who is the Proponent

The Taggart Group of Companies

- Ottawa-based, family-owned, business founded in 1948
  - Tamarack Homes, Doran Contractors, Taggart Realty Management and Taggart Construction Ltd. - Eastern Ontario's largest civil works contractor
  - Operates in all parts of Eastern Ontario, with offices in both Ottawa and Kingston

Who is the Proponent

Miller Waste Systems Inc.

- Wholly owned by The Miller Group, a privately-owned Canadian company dating back to 1916
- Operates waste diversion/processing facilities at 9 locations in the GTA; in North Bay, Owen Sound and London; and in Halifax
- Designed, constructed and operate 2 open windrow and 2 in-vessel organics composting facilities, about 175,000 tonnes per year
- Designed, constructed and operate 5 facilities for processing of recyclables
- Markets 150,000 tonnes/yr of recycled materials and 50,000 – 60,000 m^3 of compost products/yr
- Collects 2 of the 5 residential waste zones in Ottawa under recent contract to the City


Miller – York Region Waste Management Centre

CRRRC Project Overview

- Proposed CRRRC will only accept solid non – hazardous IC&I and C&D waste materials, including multi-residential recyclables
- Primary focus of the proposed CRRRC is to maximize diversion of materials from disposal through recycling and other processes, and generation of products with commercial value. However, a portion of the wastes received and process residuals that cannot be diverted will be disposed of on-site in a landfill
- For economic and operational efficiencies, both the diversion and disposal components will be on the same site (also minimizes transportation impacts)
- Committed to build diversion facilities as part of the initial construction of the facility
- 30 year operational planning period

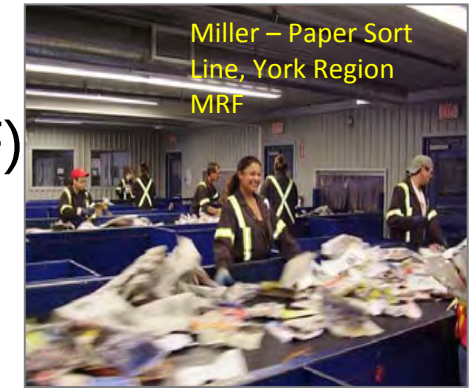
Proposed CRRRC Components


Miller – Wood Recycling into Mulch


Miller – Windrow Composting of Leaf & Yard Waste

- Materials Recovery Facility (MRF)
- C&D Processing Facility
- Organics Processing Facility
- Petroleum Hydrocarbon Soil Treatment
- Surplus Soil Management
- Leaf and Yard Material Composting

- Engineered Landfill
- Landfill Gas Management/Power Generation
- Leachate Management

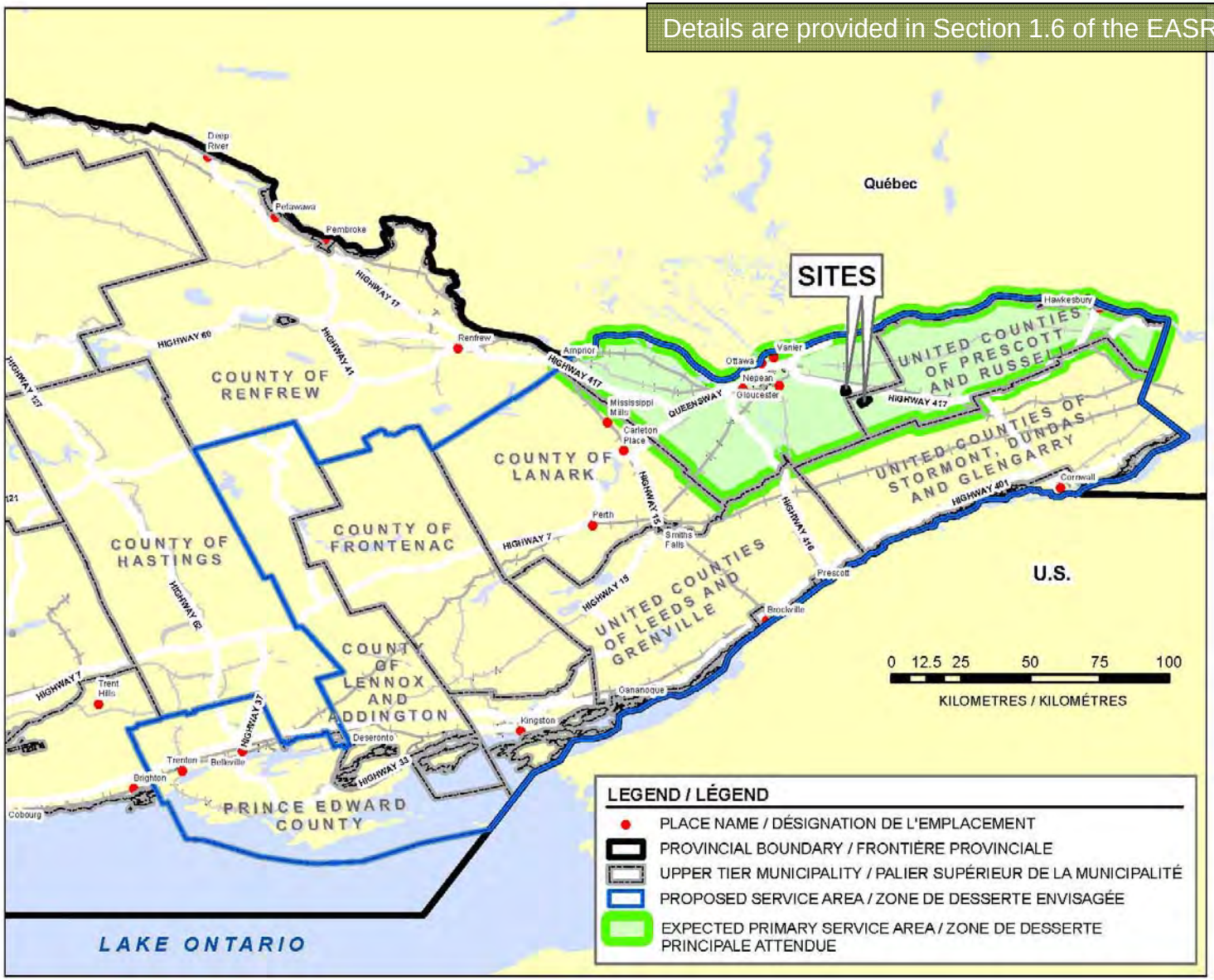

Miller – Paper Sort Line, York Region MRF


Miller – Toronto Dufferin MRF

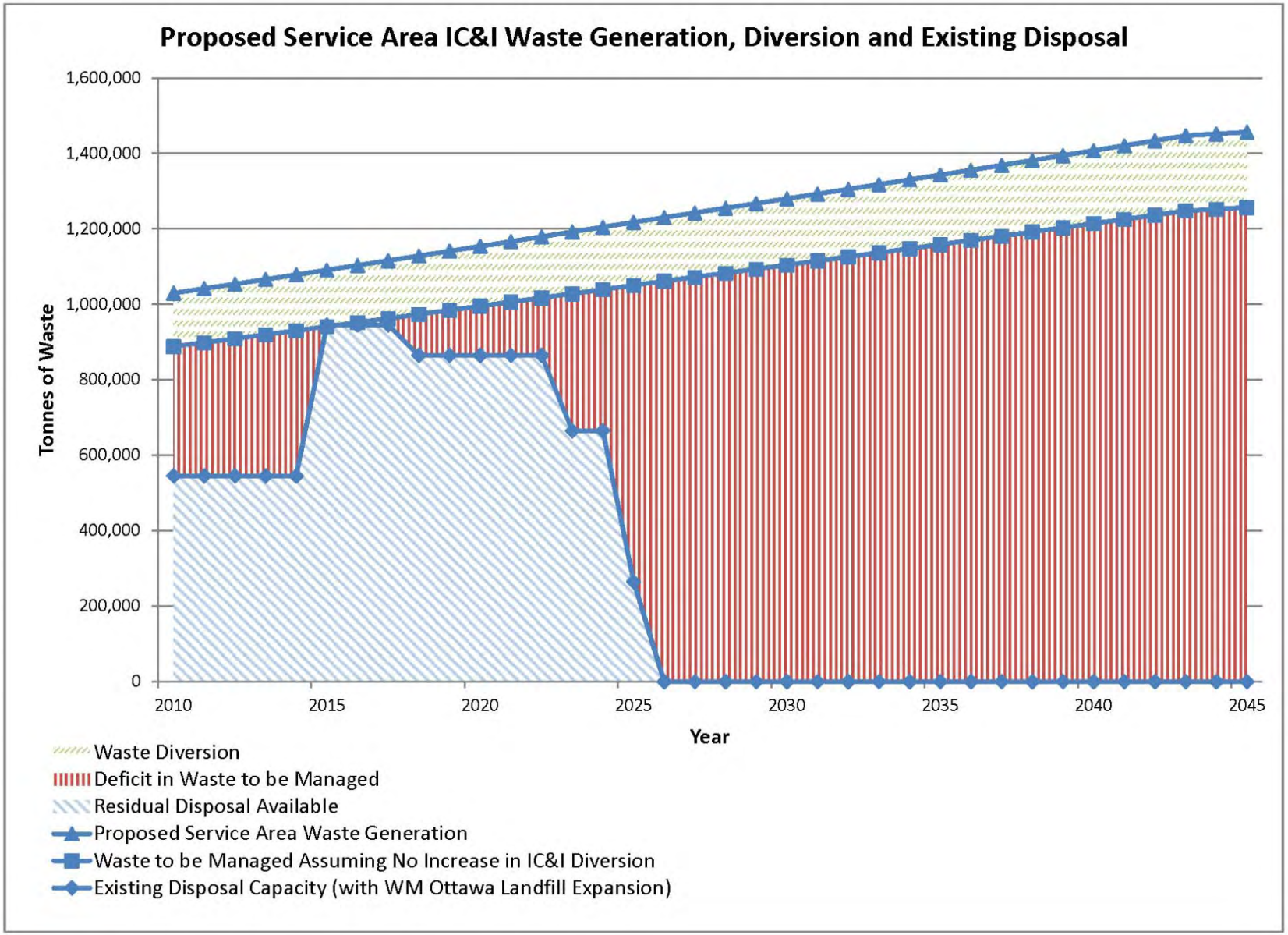
Details are provided in Section 6.0 of the EASR Volume I

Proposed Service Area

Details are provided in Section 1.6 of the EASR Volume I



Predicted Waste Management Requirements (with WM Ottawa Landfill Expansion)



CRRRC Project Overview (cont'd)

- Planning to receive up to 450,000 tonnes per year of waste and recyclable materials, average 1,500 tonnes per day (middle of the range for large waste management sites in the area)

- Taggart Miller believe that the CRRRC can realistically achieve diversion of up to 43 to 57% of the waste received once the facility is fully commissioned and end markets develop

- Taggart Miller hope to have all approvals in place and be operational in 2017/2018

Project Evolution

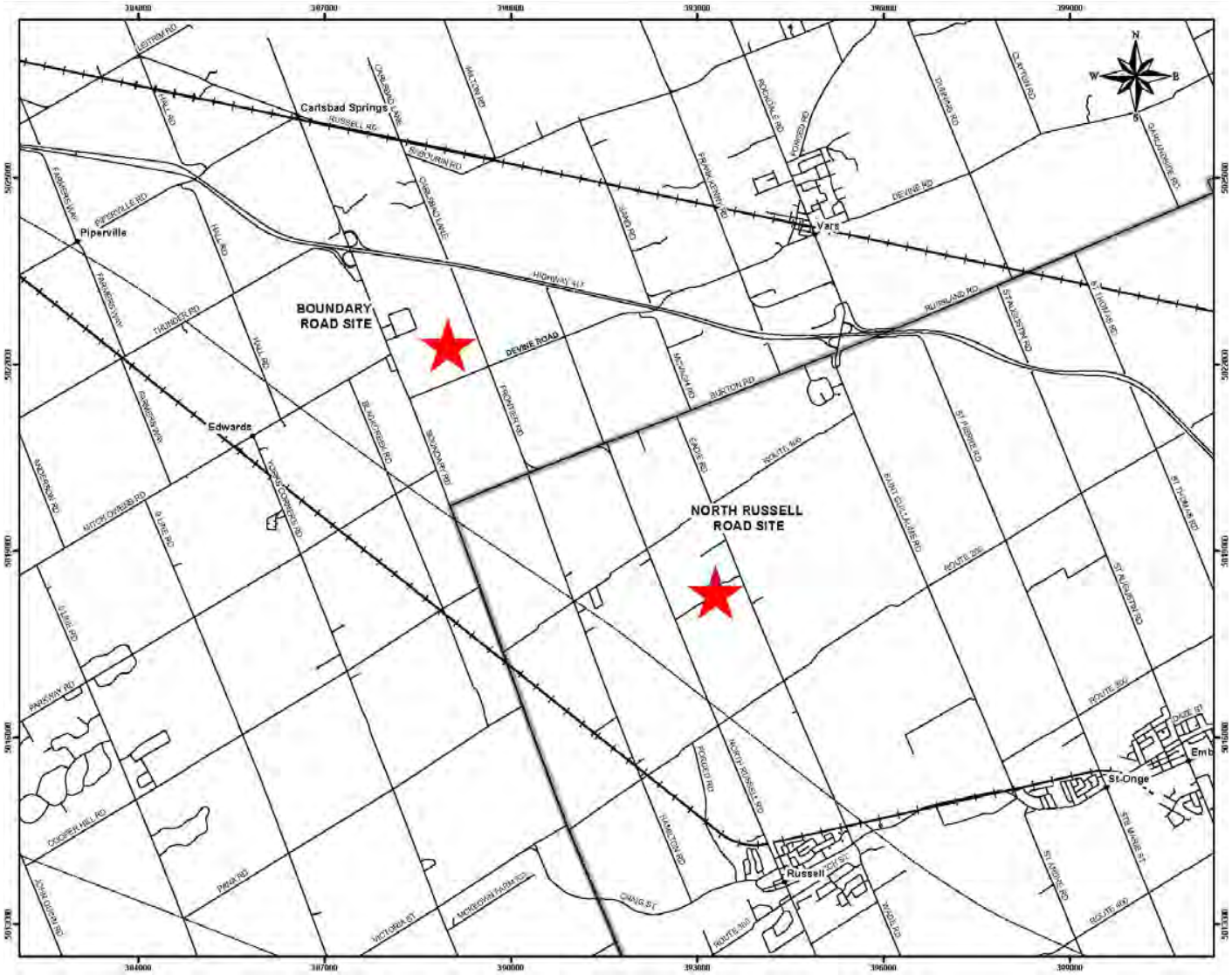
After the proposed CRRRC project was announced in November 2010, to be located on a site in the north part of Russell Township, Taggart Miller heard:

- Some liked the idea of the project, but questioned the merits of the Russell location ("Good project, wrong location").
- Concern about possible impacts to groundwater, traffic and proximity to residential neighbours.
- Should be looking at a site with industrial neighbours.
- Should be looking for a site that is not underlain by bedrock.
- Ottawa waste should be managed in Ottawa, not in Russell.
- Site should be located closer to major transportation routes.

Acquisition of Second Alternative Site for the Proposed CRRRC

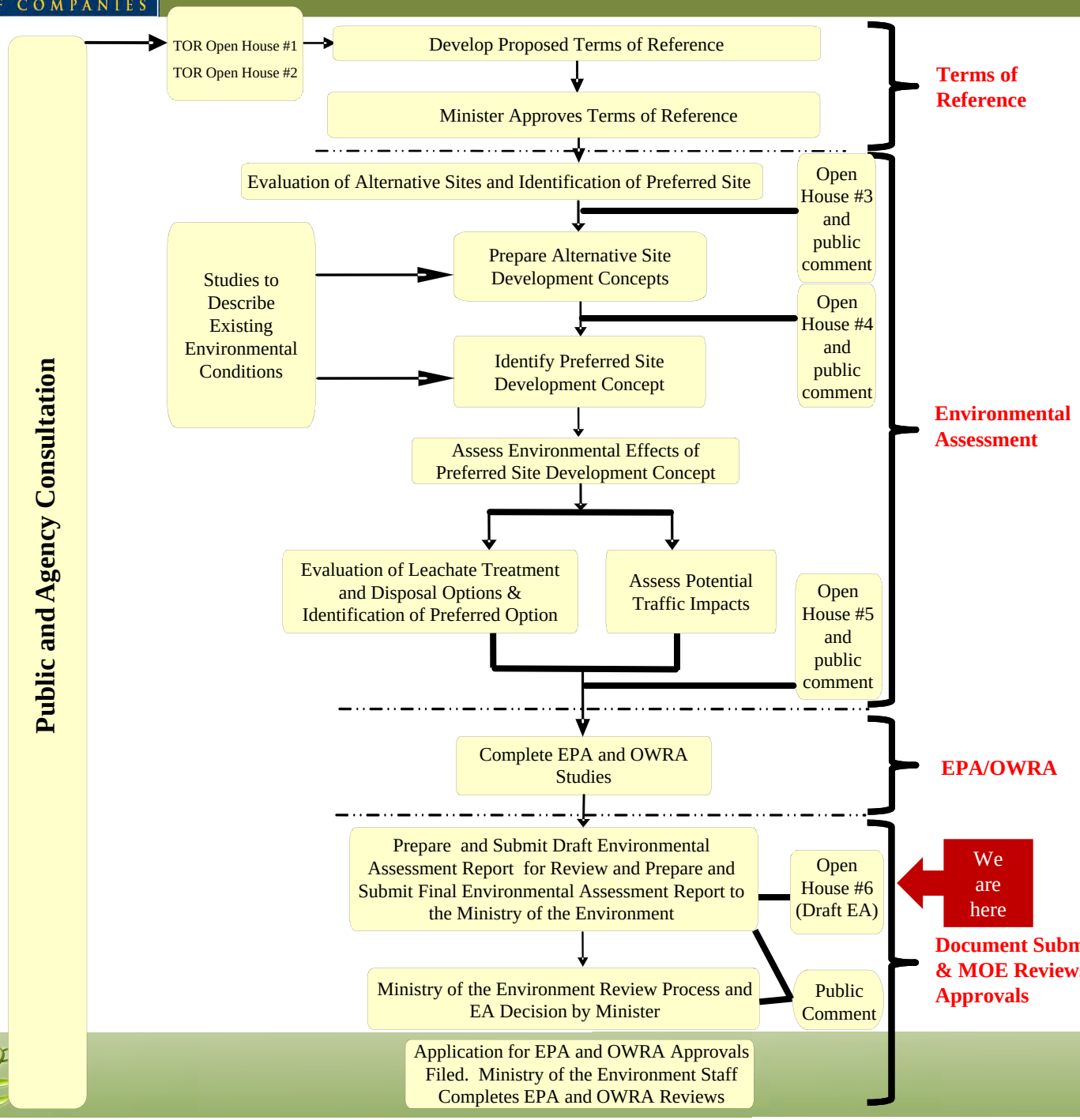
- Taggart Miller listened carefully to input about the North Russell Road Site, and decided to look for another site with these characteristics, that could be considered for the CRRRC.
- Taggart Miller Identified an undeveloped parcel of land southeast of the Highway 417/Boundary Road interchange that appeared to have these characteristics, i.e.,
  - Adjacent to Highway 417 and an Industrial Park
  - Few residential neighbours
  - Within the City of Ottawa
  - Based on published information, underlain by thick clay soils
- Taggart Miller then learned the identified site is within the area identified by the RMOC during their Waste Planning Study in the mid to late 1980's as the preferred site for a new Regional Landfill.

Alternative Sites for Proposed CRRRC



Details are provided in Section 1.4 of the EASR Volume I

The TOR and EA Process



- November 10, 2010 – Notice of Commencement of EA
- May 29, 2012 – Announcement of second alternative site
- September 14, 2012 – Completion of the TOR
- December 17, 2012 – Approval of the TOR
- June 11, 2014 – Completion of Draft EA Package

Details are provided in Section 2.0 of the EASR Volume I

Organization of the Draft EA Documentation

The EASR is presented in 4 volumes:

- Volume I is the main EASR
  - TSD #1 is a technical support document to the main EASR
  - TSD #2 to #10 are additional technical support documents to the main EASR

- Volume II contains the consultation record

- Volume III contains the Geology, Hydrogeology & Geotechnical Report

- Volume IV contains the Design and Operations Report

Approved TOR is quite prescriptive on how the comparative evaluation of the two sites and the impact assessment at the Boundary Road site is to be carried out.

Details are provided in Section 1.9 of the EASR Volume I

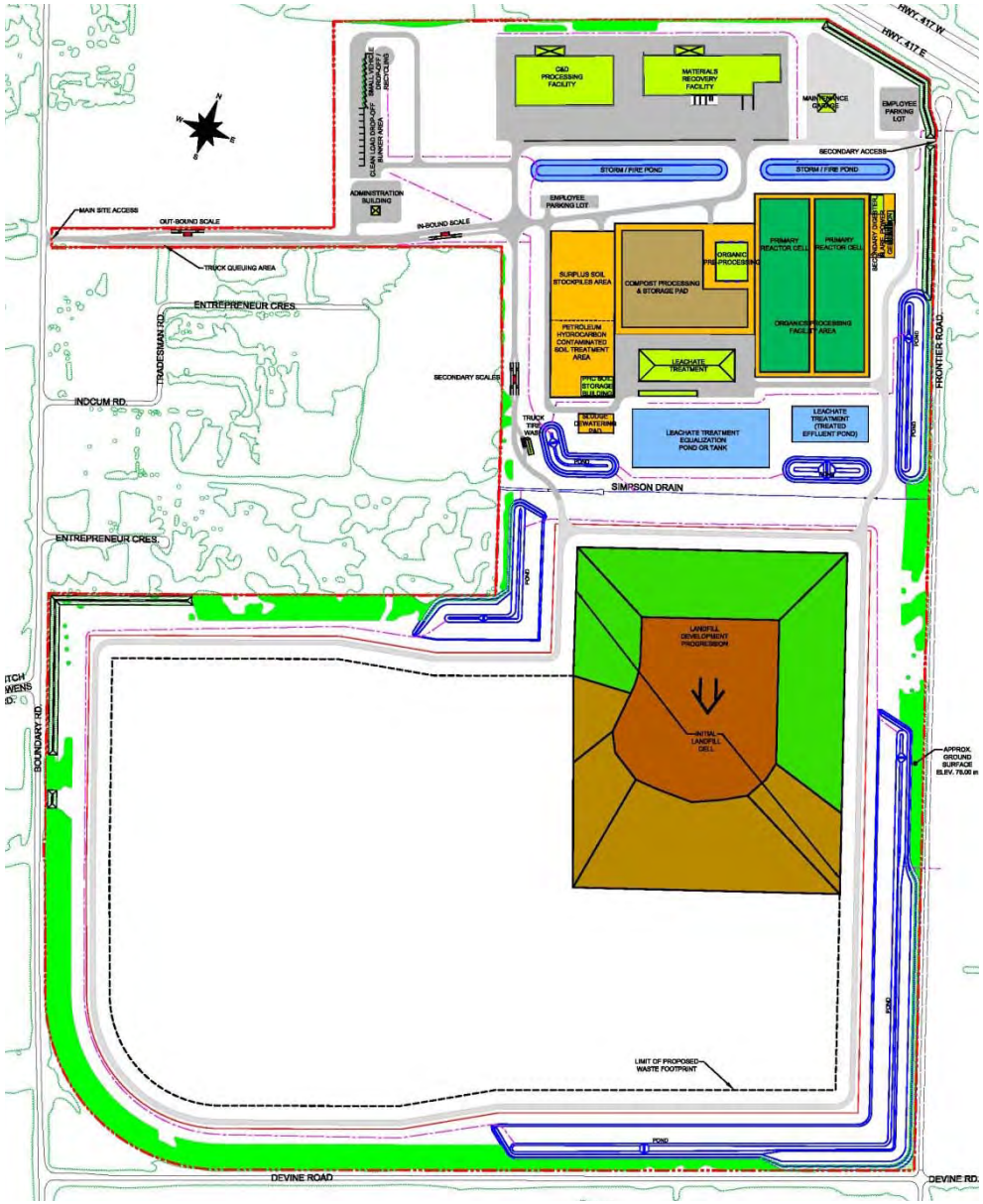
Comparative Evaluation of Alternative Sites

Component	Preferred Site
Most Important	
Atmospheric	Boundary Road Site
Geology, Hydrogeology & Geotechnical	Boundary Road Site
Land Use & Socio-economic	Boundary Road Site
Traffic	Boundary Road Site
Important	
Surface Water	Boundary Road Site
Biology	Boundary Road Site
Agriculture	Boundary Road Site
Design & Operations	Boundary Road Site
Less Important	
Cultural & Heritage Resources	Boundary Road Site

Details are provided in Section 7.0 of the EASR Volume I and TSD #1

Boundary Road Site & Surrounding Area

Site Development Plan



LEGEND

- PROPOSED FACILITY BUILDING
- OUTDOOR DIVERSION AREA
- PAVED ROAD (ASPHALT)
- GRAVEL ROAD
- PROPERTY BOUNDARY
- EXISTING VEGETATION SCREENING
- CONSTRUCTED SCREENING FEATURE
- PERIMETER BERM CONTOURS (interval 1 m)
- STORMWATER MANAGEMENT PONDS

120 0 120 240
METRES

Details are provided in Section 10.0 of the EASR Volume I

Boundary Road Site Impact Assessment: List of Disciplines Evaluated

- Atmosphere
  - Air Quality and Odour
  - Noise
- Geology, Hydrogeology & Geotechnical
- Surface Water
- Biology
- Land Use & Socio-economic
  - Land Use
  - Socio-economic
  - Visual
- Cultural Heritage & Archaeology
- Agriculture
- Traffic

Details are provided in Section 2.0 of the EASR Volume I, TSD#2 to #10, Volume III and Appendix A of Volume IV

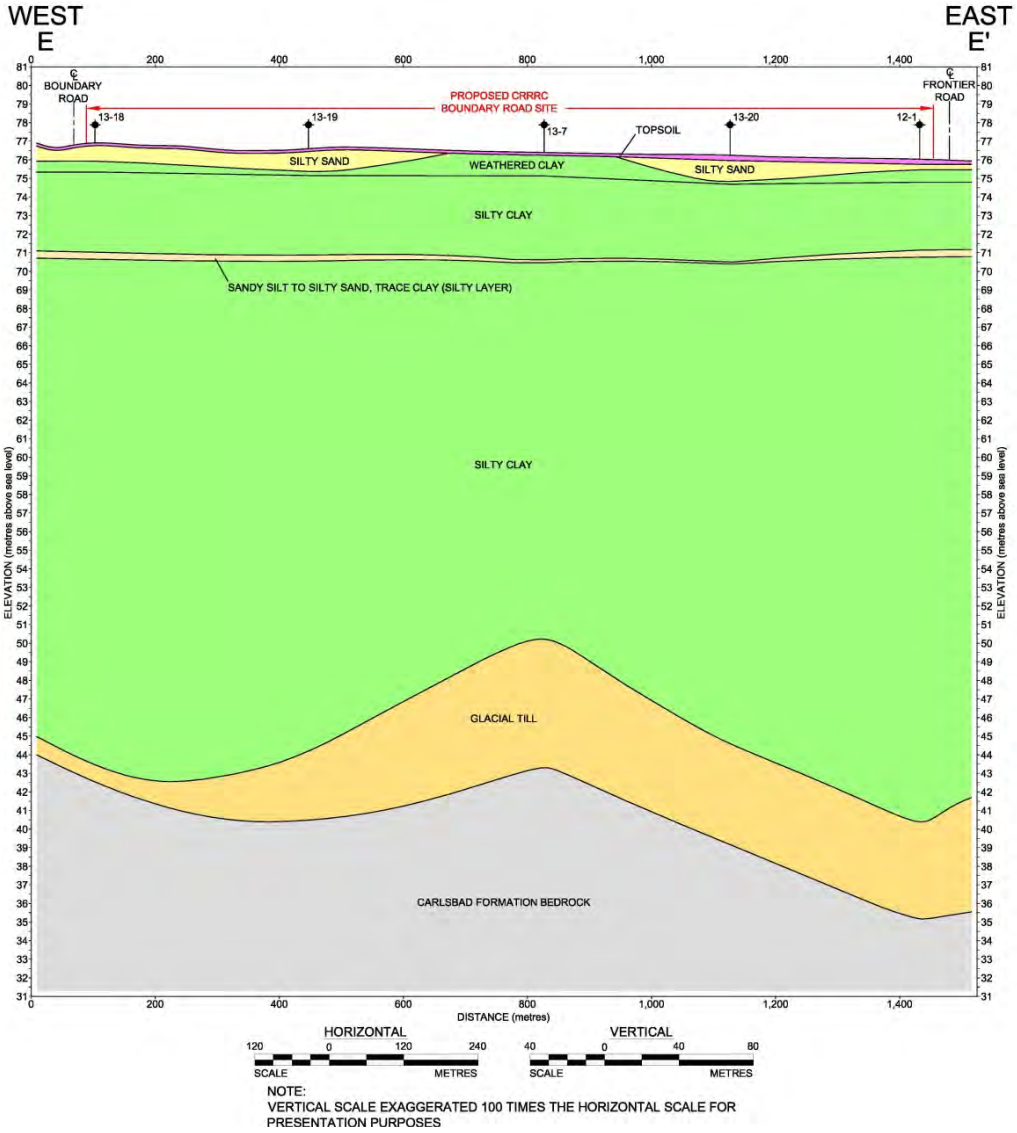
Results of EA
Air/Odour

- The MOE has point-of-impingement (POI) criteria for various compounds. The MOE POI criteria are used to assess specific impacts of an individual facility.

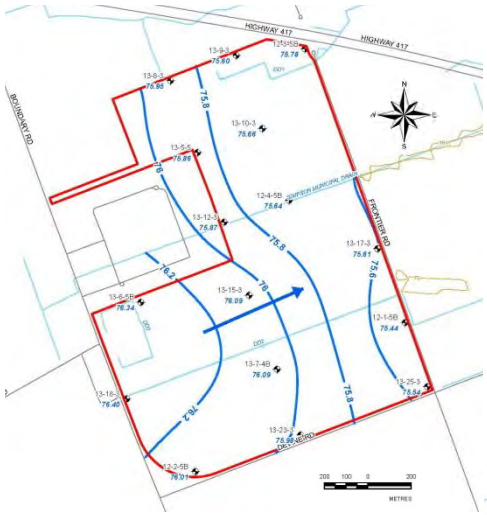
- All of the predicted maximum POI concentrations meet the relevant standards, which are intended to be protective of human health. The CRRRC regulated sources would include LFG, combustion processes and materials handling emissions. Mobile equipment was conservatively included in the assessment of POI compliance, even though such equipment is not considered for ECA permitting purposes under O. Reg. 419/05.

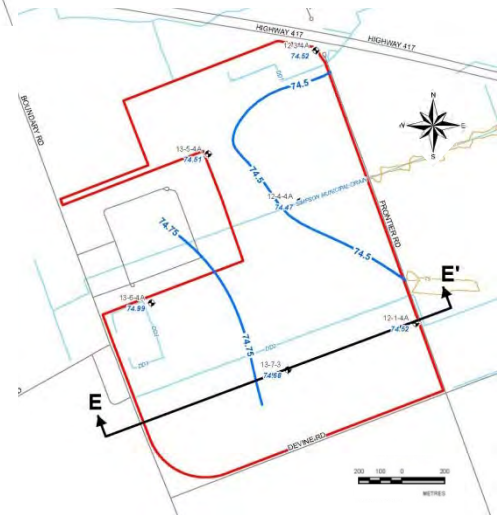
Details are provided in Section 11.2 of the EASR Volume I and TSD #3

Results of EA Groundwater



Horizontal Groundwater Flow – May 2013



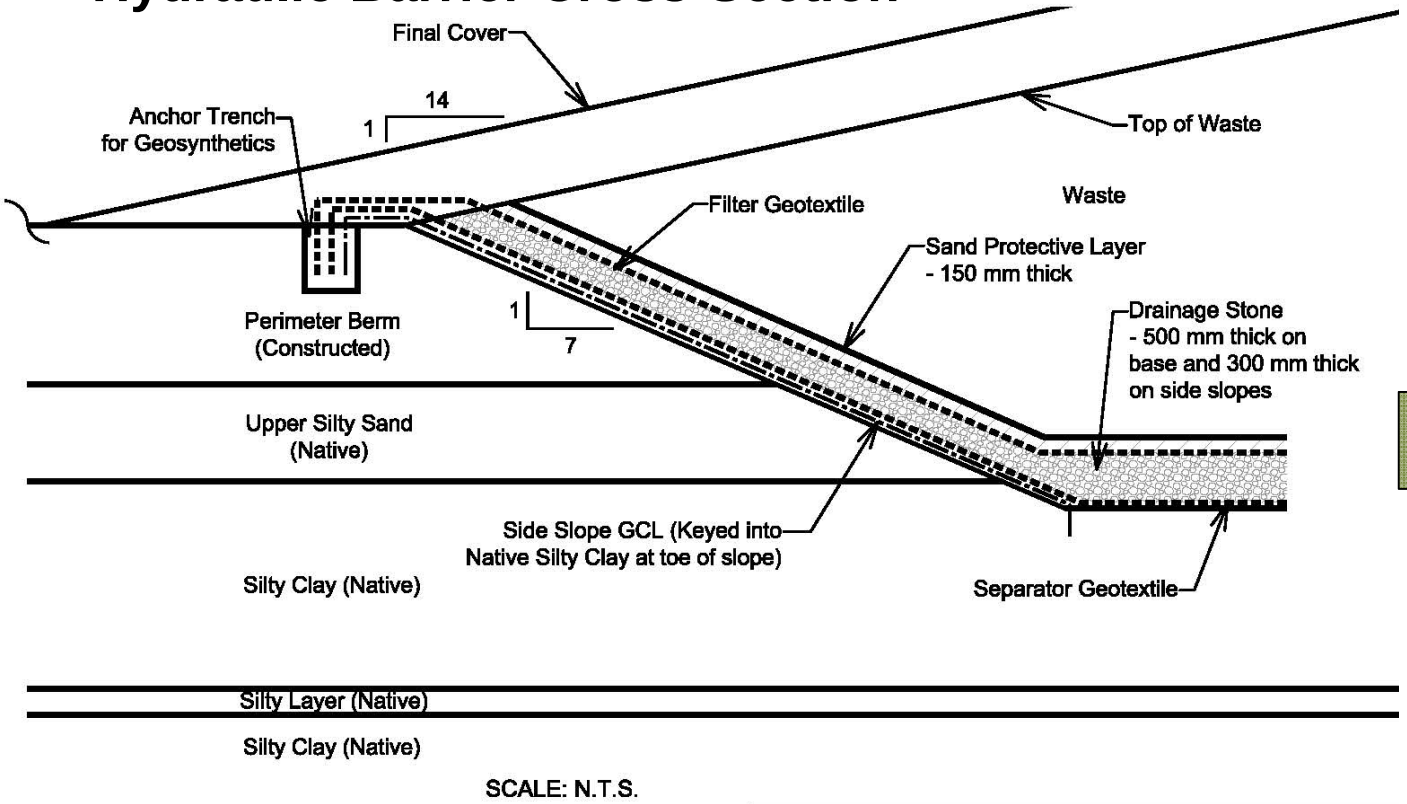


Details are provided in Section 8.5.2 of the EASR Volume I and Volume III

Results of EA Groundwater

- A hydraulic barrier will be constructed around the landfill perimeter to prevent impacts to the surficial silty sand.

Hydraulic Barrier Cross-Section

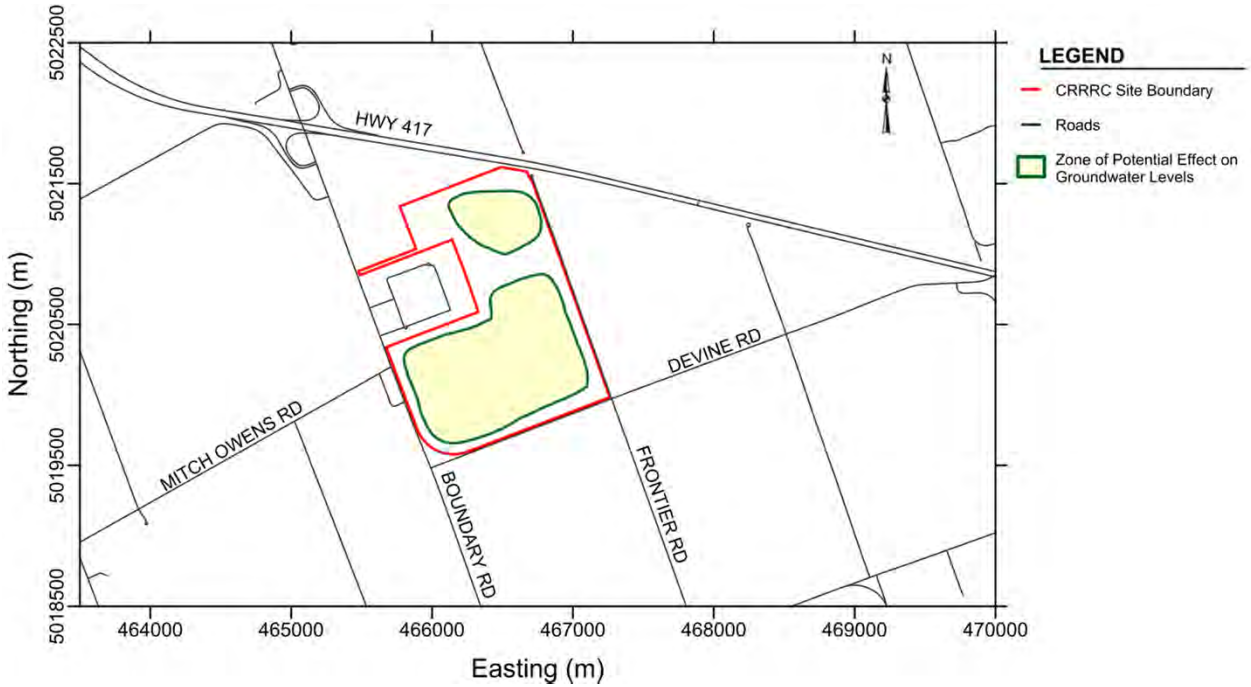


Details are provided in Section 11.3.2 of the EASR Volume I

- The natural clay deposit and the proposed engineered leachate collection and management systems will contain and control landfill leachate at the Site.

Results of EA Groundwater

Zone of Potential Effect on Groundwater Levels



Details are provided in Section 11.3.2 of the EASR Volume I and in Volume III

- Leachate management ponds and organics primary reactor and soil treatment cells are lined and always accessible for repair.
- The Site will remain in compliance with MOE groundwater protection requirements (Reasonable Use Guideline) in both the short term and long term.
- Based on groundwater modelling, the maximum lowering of the groundwater level in the surficial silty sand occurs while the leachate collection system is operational. During these conditions the impacts of the CRRRC on off-Site groundwater levels are negligible beyond the Site boundary.

Geotechnical Considerations

- Site underlain by a 30 m thick deposit of marine silt clay
- Similar to many other sites in Ottawa and eastern Ontario underlain by these clay soils (i.e., Navan and Lafleche landfills), appropriate geotechnical design is required for the proposed development to perform acceptably
- A detailed geotechnical investigation has been carried out at the CRRRC site, and the results used in analysis to prepare the site development plan and the landfill configuration (Volume III of EA/EPA package)
- For geotechnical reasons, the landfill component has:
  - A base at shallow depth below ground
  - A perimeter berm to provide stability and lateral containment
  - A relatively flat sideslope profile
  - A maximum peak height of 25 m above ground

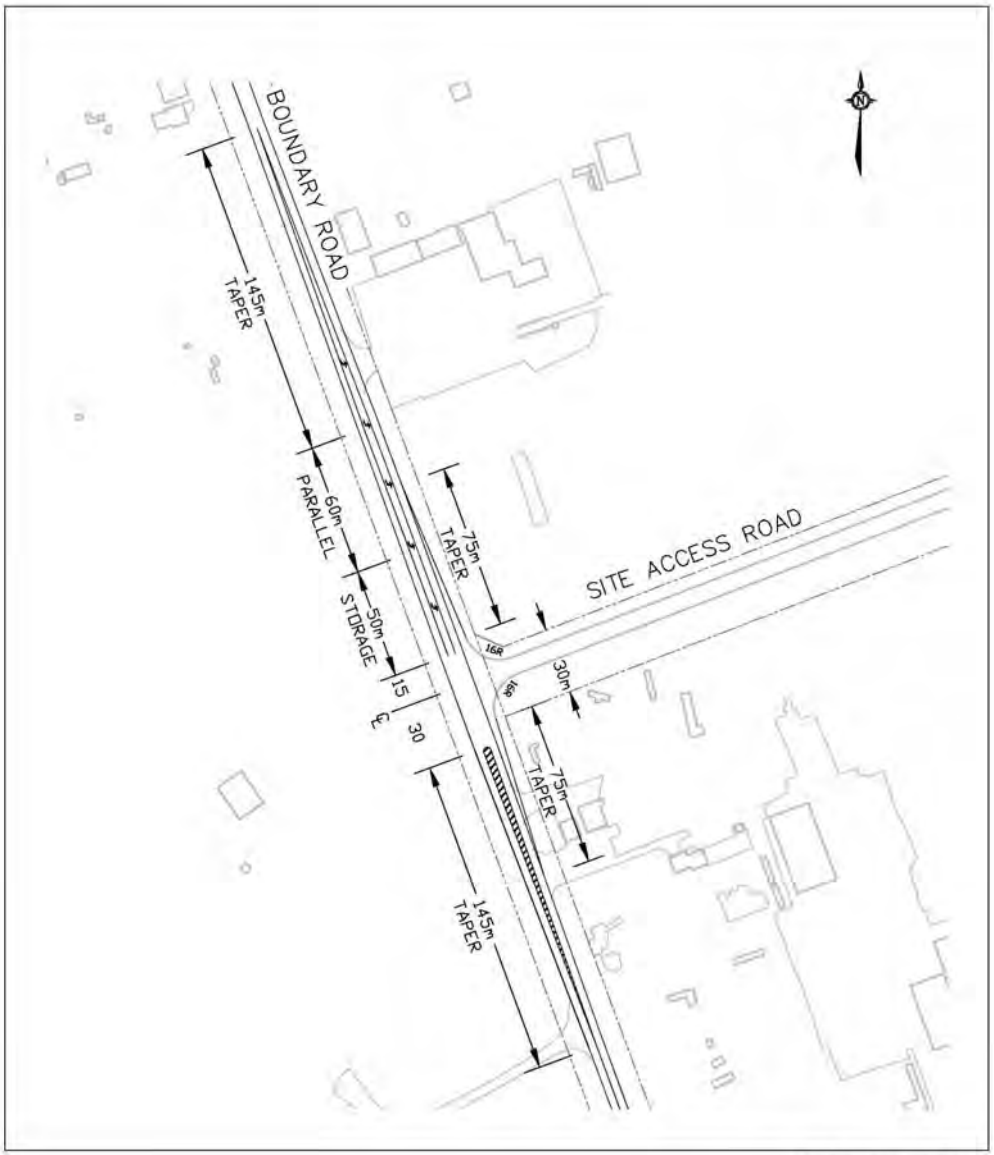
Details are provided in Section 11.3.3 of the EASR Volume I and Volume III

Results of EA
Traffic

- For a maximum daily receipt of 3,000 tonnes per day, the estimated daily number of trucks over a 10-hour time period would be 287 trucks entering and exiting the Site.
- The number of peak hour trips would be 43 trucks entering and exiting the Site.
- The maximum CRRRC truck traffic represents approximately 8 percent of the total volume of traffic along Boundary Road between the Site access and Highway 417. The predicted annual average traffic (1,500 tonnes per day) would be in the range of 6 percent.
- All of the existing intersections within the study area would operate at an acceptable Level of Service during the weekday peak AM and PM hours, with no intersections requiring modifications due to the CRRRC truck trips.
- The proposed lane configuration at the Site access includes an exclusive left turn lane on southbound Boundary Road.

Details are provided in Section 11.9 of the EASR Volume I and TSD #9

Results of EA
Traffic



Proposed Boundary Road/Site Access Geometry

Details are provided in Section 11.9 of the EASR Volume I and TSD #9

Leachate Management

LEACHATE MANAGEMENT OPTIONS - METHODOLOGY

- Based on existing leachate management and treatment being provided at other disposal sites, and the current regulatory approvals requirements, it is expected to be possible to construct an on-Site leachate treatment plant that will achieve a high quality effluent to allow discharge into the local surface water system. On-Site leachate treatment technologies were screened and a preferred on-Site treatment option was selected based on demonstrated performance and cost-effectiveness.
- Off-Site leachate receiver/treatment alternatives were evaluated and alternatives to convey leachate to available off-Site leachate treatment alternatives were considered.
- A comparison of the preferred on-Site leachate treatment technology to a viable off-Site treatment alternative was completed as per Appendix B of the TOR.

COMPARISON OF LEACHATE MANAGEMENT OPTIONS

- Environmental components considered in the comparison of on-Site versus off-Site treatment included:

Atmosphere	Geology & Hydrogeology
Surface Water	Biology
Land Use	Traffic
Technical Effectiveness	Regulatory Approvability
Capital and Operating Costs	

Details are provided in Section 12.0 of the EASR Volume I , TSD #10 and Volume IV

- The criteria and indicators for comparison were those in Appendix B of the approved TOR.

- The preferred leachate management option is on-Site pre-treatment and trucking to the City treatment facility (ROPEC). If the City of Ottawa option proves not to be available, other possible alternatives, including the on-Site option described above will be re-visited.