

Appendix J-4

Government Review Team Meetings

December 6, 2024

Subject/Client:	Walker South Landfill Phase 2 EA – GRT EA Meeting #1	Ref. No.	12567140
From:	Erika Brown	Tel:	416 866-2351
Date/Time:	November 28, 2024, 11:15 AM – 12:00 PM		

Attendees

Ministry of the Environment, Conservation, and Parks

- Stephen Deneault, Project Officer, Environmental Assessment Branch
- Karin Ajderian, Policy Advisor, Climate Change Adaptation
- Mohammad Sajjad Khan, Surface Water Specialist Group Lead, Surface Water Unit
- Tianchu Zhang, Quality Analyst, Air, Pesticides and Environmental Planning
- Ron Nielsen, Senior Policy Advisor, Policy Development
- Tom North, Director, Adaptation and Resilience Branch
- Sarah Day, Supervisor, Ground Water and Surface Water Units
- Jason Fair, Policy Advisor, Climate Change Mitigation
- Miroslav Ubovic, Manager, Noise Approvals
- Joan Del villar Cuicas, Environmental Resource Planner & EA Coordinator, Project Review

Ministry of Citizenship and Multiculturalism

- Liam Smythe, Central Region Heritage Planner, Heritage Planning

Niagara College

- Nadeen Shehaiber, Senior Director Planning, Sustainability, and Capital Projects

Niagara Peninsula Conservation Authority (NPCA)

- Colleen Bain, Senior Watershed Planner

Walker

- Darren Fry, Project Director

GHD

- Erika Brown, Waste & Environmental Planner, Project Manager
- Emma Simioni, Graduate Environmental Planner, Project Support

Topics Discussed

1. Key Meeting Objectives
2. Overview of South Landfill Phase 2 Environmental Assessment (EA)
3. EA Process & Progress Update
4. Role of the Government Review Team
5. Schedule & Next Steps

Summary (*Action items in italics*)

Action

Attendees were welcomed, introductions made, and agenda and objectives presented.	None
Walker completed a company overview including the background on the South Landfill Phase 2 EA.	None
<i>Walker noted their commitment to providing a full description of water management at the South Landfill in the EA based on previous comments received.</i>	Walker/GHD
GHD completed an overview of the EA process and noted the commencement of the EA on October 17, 2024.	None

GHD clarified that as part of the EA, numerous technical studies will be completed to ensure that Phase 2 will be protective of the environment while providing the municipality with safe disposal services.	None
Question raised by Mohammad Sajjad Khan (MECP) regarding the inclusion of climate change considerations in the EA process. GHD confirmed that climate change considerations will be a critical component in the detailed impact assessment for the recommended alternative.	None
The Alternative Methods will be described in the Conceptual Design Report and will include alternative landfill footprint configurations. Existing landfill gas and leachate treatment at the South Landfill will be reviewed as part of the South Landfill Phase 2 EA and may form additional Alternative Methods for evaluation.	None
GHD outlined the role of the Government Review Team. <i>GRT members will be provided draft technical reports prepared in support of the EA for review prior to drafting the EA Report.</i>	All
GHD provided a high-level schedule for the next 12 months, highlighting the next touchpoint with the GRT anticipated to be in February 2025.	None

Attachments: Meeting Presentation

Attachments

Attachment 1

Meeting Presentation



→ November 28, 2024

Walker South Landfill Phase 2 EA GRT EA Meeting #1

Welcome

1

Agenda

- **Introductions & Meeting Objectives**
- **Overview of Walker & Proposed Project – South Landfill Phase 2**
- **Environmental Assessment Process & Progress Update**
- **Role of the Government Review Team**
- **Schedule & Next Steps**

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Introductions & Meeting Objectives

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Introductions

Proponent: Walker Environmental Group Inc. (Walker)

- Project Director: Darren Fry
- Project Support Specialist: Leticia Koole

Primary Consultant: GHD

- Project Advisor: Blair Shoniker
- Project Manager: Erika Brown
- Project Coordinator: Janet Oswald
- Project Support: Emma Simioni

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Meeting Objectives

- Describe the South Landfill Phase 2 Project
- Provide a progress update
- Provide an overview of the Environmental Assessment process
- Outline the role of the Government Review Team
- Present the project schedule

South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Overview of South Landfill Phase 2 EA

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Walker Overview

Building a sustainable future, **together.**



Part of the Niagara Community for 136+ Years

- Fifth-generation, Niagara based family-owned company
- 1,200+ employees



Innovative Campus

- Integrated Resource Management Campus
- Safely managed Niagara's waste for over 40 years



Committed to Resource Recovery

- Recover & repurpose landfill-bound waste into sustainable materials & products



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Walker's Resource Management Campus



More than a landfill

A dynamic operation that efficiently manages waste and sustainably recovers resources.

Campus Operations Include:

- A** Residential Drop-off
- B** Niagara Compost Facility
- C** Resource Recovery Area
- D** N-Viro® Biosolids Facility
- E** Agricultural Rehabilitation
- F** Landfill Gas to Energy Facility
- G** Aggregates Recycling & Processing Area
- H** South Landfill

South Landfill Phase 2



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Project Overview

Planning for long-term waste disposal capacity is increasingly important.

Despite recycling and green bin composting efforts, landfill space is still needed for non-recyclable materials.

Phase 2 Development of the South Landfill

- State-of-the-art engineered landfill
- Designed with exceptional safety & environmental controls
- Accepts solid non-hazardous waste only
- Located immediately east of the current landfill operations
- Existing waste management infrastructure, such as the site entrance will not change

South Landfill Phase 2



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Project Location

Key Facility Information

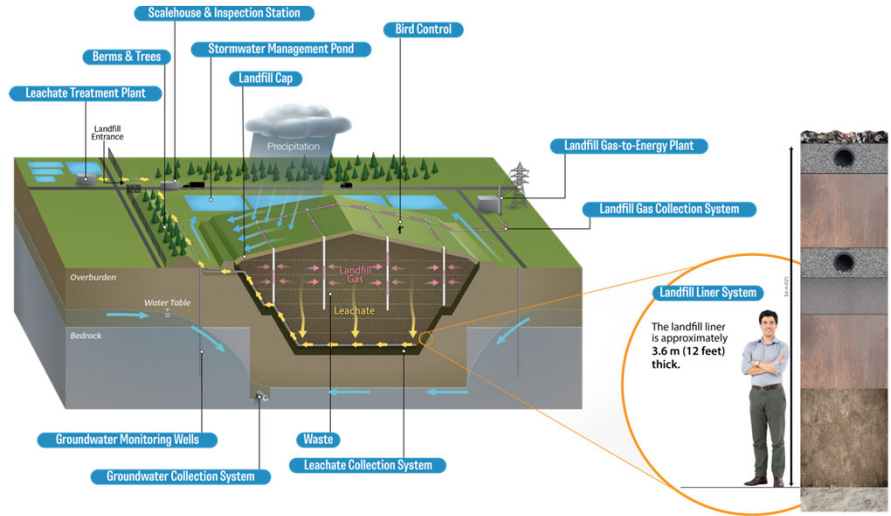
-  1.1 million tonnes of waste per year
-  18 million m³ total capacity
-  20 years of safe disposal
-  ~ 500 jobs supported
-  Renewable energy to power the equivalent of 10,000 homes

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Designed & Operated to the highest standard

Key Features

- 12-foot multi-layer liner
- Leachate collection & treatment system
- Landfill gas collection system
- 0.75 m thick final landfill cap



South Landfill Phase 2

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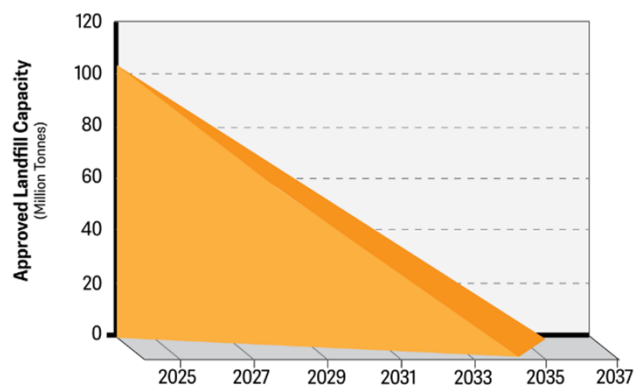
Niagara's Waste Disposal Solution

South Landfill Phase 2

Ontario is expected to run out of landfill capacity by 2035

- Existing landfills are quickly filling up
- Population & waste generation are increasing
- It takes up to 10 years to develop new landfill capacity

ONTARIO'S REMAINING LANDFILL CAPACITY



<https://www.owma.org/articles/2019-owma-landfill-report>

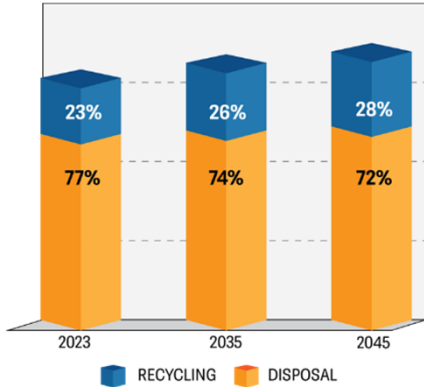
South Landfill Phase 2

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Niagara's Waste Disposal Solution

South Landfill Phase 2

ONTARIO'S RECYCLING & DISPOSAL RATES



<https://www.amo.on.ca/policy/land-use-planning-resources-and-climate-change/amos-baseline-waste-and-recycling-report-and>

Despite recycling efforts, there will still be materials requiring safe disposal

- Even with increased recycling and Green Bin composting, landfills are still needed to safely manage residual waste

South Landfill Phase 2



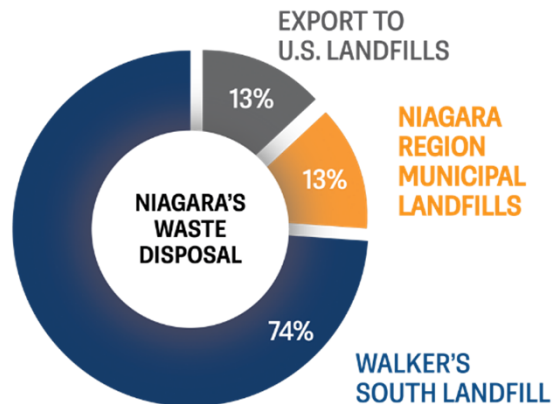
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Niagara's Waste Disposal Solution

South Landfill Phase 2

Niagara is no exception, additional disposal capacity is needed

- Over 2/3 of Niagara's waste is currently managed at the South Landfill, which is expected to reach capacity by 2030



* Based on historical recycling trends

South Landfill Phase 2



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Supporting Niagara for over 136 years



Jobs & Employment

Supporting ~500 jobs in Niagara through our current waste management & resource recovery operations



Community Giving

Donations & giving totalling over \$1.4 million annually to charities, community groups, and infrastructure



Volunteering

Providing employees 2 paid volunteer days per year to support local community initiatives



Awareness & Education

Supporting educational activities by participating in community events, giving tours and presentations, and through partnerships

South Landfill Phase 2



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Environmental Assessment Process & Progress Update

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Environmental Assessment

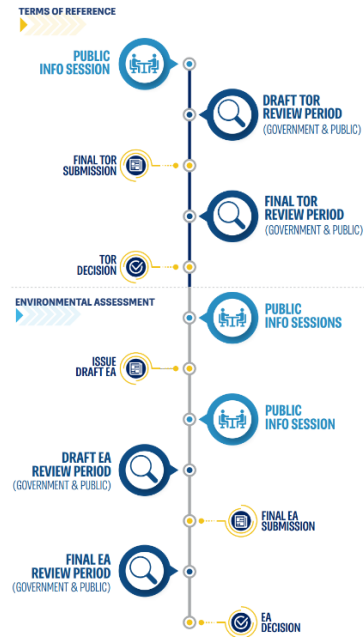
A Two-Step Planning & Decision-Making Process

Step 1 – Terms of Reference (ToR) [Complete]

- Serves as a roadmap for what will be studied in the Environmental Assessment (EA) & outlines the anticipated public consultation program

Step 2 – EA [In Progress]

- Scientific studies identifying the effects of the project & proposed mitigation measures



South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Terms of Reference

ToR Submission

- Submitted June 28, 2024

ToR Approval

- Approved on September 10, 2024



South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Environmental Assessment

Notice of Commencement for the EA

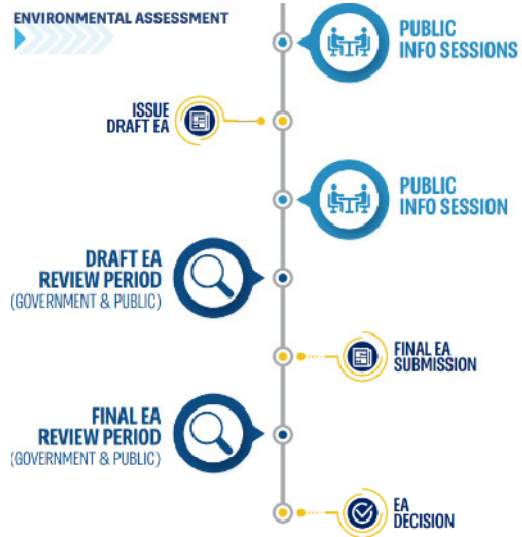
- Issued on October 17, 2024, initiating the EA phase of the project.

Existing Conditions

- Studies and reporting to establish conditions in and around the project location.

Conceptual Design Report

- Alternative landfill footprint configurations are being developed to a conceptual level of detail.
- These will form the Alternative Methods for comparative evaluation in the EA.



Technical Studies to be Completed in the EA

- As part of the EA, numerous scientific studies will take place to ensure Phase 2 will be protective of the environment while continuing to provide the community with safe and reliable waste disposal services



Existing Conditions

- Establishes the existing environmental conditions within the study area so that potential effects of the alternatives can be identified and assessed.
- Builds on the work completed for the Preliminary Description of the Environment in the ToR.
- Guided by the Work Plans included in the approved ToR.
- Further detailed information will be collected as part of the impact assessment of the preferred method.



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Alternative Methods & Conceptual Design Report

Alternative Methods

- Describes the different ways of doing/achieving the same activity.
- Alternative Methods included as part of this EA:
 - Site configuration (e.g., footprint dimensions, height, contours, side slopes, etc.)
 - Landfill gas collection system (tentative)
 - Leachate treatment system (tentative)

Conceptual Design Report

- Conceptual level of design, reflecting regulatory requirements (i.e., O. Reg. 232/98) & operational aspects of Walker's Campus (e.g., required on-site infrastructure).
- Allows the technical team to assess the potential environmental effects of the Alternative Methods & forms the basis of the comparative analysis.

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South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Comparative Evaluation of Alternative Methods

A three-step process:

01

Assessment of alternative methods, using criteria & indicators grouped into the five environmental components: natural, built, social, economic and cultural

02

Comparative evaluation of the Alternative Methods & selection of the Recommended Method

03

Identification of the Preferred Method following consultation with review agencies, Indigenous communities & the public

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South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Impact Assessment & Environmental Assessment Report

Impact Assessment

- Facility Characteristics Report – further developing Conceptual Design based on Preferred Method.
- Confirmatory fieldwork, as required.
- Detailed Impact Assessment Reports (including assessment of cumulative impacts & climate change considerations).

Environmental Assessment Report

- Must be prepared in accordance with the approved ToR.
- **Draft EA Report** – released for public, Indigenous community and government review & comment.
- **Final EA Report** – formally submitted to the Minister for approval and subject to public, Indigenous community and government review & comment.
- Note: contributing reports will form appendices of the EA report.

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South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Consultation

Stakeholder Consultation:



- Members of the public, agencies, Indigenous communities and other interested persons are encouraged to actively participate in the planning process by attending consultation opportunities or contacting staff directly with comments and questions.
- Consultation opportunities are planned throughout the EA and will be advertised in local newspapers on the project website, by direct mail and/or email.

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South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Consultation

Consulting During the EA

Consultation Methods



Website

A dedicated project website is available online.
southlandfillphase2.com



Email

A dedicated project email has been created.
info@southlandfillphase2.com



Phone

A toll-free phone line for questions related to the EA is available.
1-866-699-9425



Events

Public information sessions, open houses and stakeholder meetings.

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South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Role of the Government Review Team

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Role of the Government Review Team

- Provide information and guidance within mandated areas of responsibility
- Provide consistent advice throughout the decision-making process or relevant reasons if positions change
- Participate in the government review of the Environmental Assessment

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South Landfill Phase 2 EA – GRT Meeting #1 | GHD

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Schedule & Next Steps

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Schedule Review

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Upcoming Dates

Winter 2025

- **GRT EA Meeting #2 & Public Event #1** to review Existing Conditions, present Alternative Method, and comparative evaluation methodology

Spring 2025

- **GRT EA Meeting #3 & Public Event #2** to present Comparative Evaluation of Alternatives and Preferred Method

Summer 2025

- Prepare Detailed Design of Preferred Alternative
- Commence Detailed Impact Assessment of the Preferred Method

Please reach out with any questions or comments to:

<p>Darren Fry, Walker Email: Dfry@walkerind.com Office: 1-866-699-9425</p>	<p>Erika Brown, GHD Email: Erika.Brown@GHD.com Office: 416 866 2351</p>
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*** Thank You**

→ ghd.com

April 2, 2025

Subject/Client:	Walker South Landfill Phase 2 EA – GRT EA Meeting #2	Ref. No.	12567140
From:	Erika Brown	Tel:	416 866-2351
Date/Time:	March 28, 2025, 10:00 AM – 10:45 AM		

Attendees

Ministry of the Environment, Conservation, and Parks

- Stephen Deneault, Project Officer, Environmental Assessment Branch
- Michael Durst, Environmental Compliance Officer, Niagara District Office
- Michael Di Cosmo, Coordinator, Strategic Policy and Cabinet Liaison, Policy Coordination and Outreach Branch
- Andrew Evers, Supervisor, Project Coordination
- Sherif Hegazy, Manager, Noise Approvals
- Mohammad Sajjad Khan, Surface Water Specialist Group Lead, Surface Water Unit
- Ron Nielsen, Senior Policy Advisor, Policy Development
- Sarah Day, Supervisor, Ground Water and Surface Water Units
- Jason Fair, Policy Advisor, Climate Change Mitigation
- Kim Peters, Manager, Environmental Planning and Policy

Ministry of Natural Resources

- Christa Rigney, Regional Planner, Land Use Planning Unit

Ministry of Citizenship and Multiculturalism

- Karla Barboza, Team Lead, Heritage, Heritage Planning

Niagara Escarpment Commission

- Janet Sperling, Senior Strategic Advisor, Niagara Escarpment Commission

MHBC

- Christine Fandrich, Technician

Walker

- Darren Fry, Project Director

GHD

- Erika Brown, Waste & Environmental Planner, Project Manager
- Janet Oswald, Environmental Planner, Project Coordinator
- Blair Shoniker, Business Group Leader, Project Director

Topics Discussed

1. Introductions & Key Meeting Objectives
2. Overview of South Landfill Phase 2 Environmental Assessment (EA) and Process Update
 - a. Existing conditions
 - b. Alternative Methods
3. Overview of Public Event #1
4. Next Steps

Summary (*Action items in italics*)

Action

Attendees were welcomed, introductions made, and agenda and objectives presented.	None
Walker provided a project overview including the background on Walker's Resource Management Campus, Phase 2 Development of the South Landfill, and the Project Location.	None

GHD provided an overview of the EA process and noted the commencement of the EA on October 17, 2024.	None
GHD provided information on the purpose of establishing Existing Conditions and confirmed that Preliminary Draft Existing Conditions Reports were posted to the Project Website on March 6, 2025.	None
Karla Barboza asked about the timeline for GRT review of Existing Conditions Report and for providing feedback. <i>GHD confirmed that they will share links to the Existing Conditions Reports and the requested timeline for feedback with the meeting summary.</i>	GHD
GHD defined the Existing Conditions Study Areas for the discipline.	None
GHD provided information on the Consideration of the Natural Environment, Built Environment, and Social, Economic, and Cultural Environment from each relevant discipline's perspective.	None
The Alternative Methods will be described in the Conceptual Design Report and will include alternative landfill footprint configurations. Existing landfill gas and leachate treatment at the South Landfill will be reviewed as part of the South Landfill Phase 2 EA and may form additional Alternative Methods for evaluation.	None
GHD outlined the South Landfill Phase 2 Alternative Options for Site Configurations: Option A – Same height and slope as current South Landfill Phase 1 Option B – Maximized Agricultural end use option Option C – Average agricultural end use option	None
GHD outlined the South Landfill Phase 2 Alternative Options for Municipal Wastewater Treatment System: Option A – Continued & Expanded Use of the Municipal Wastewater Treatment System Option B – Development of an On-Sie Wastewater Treatment Plan	None
GHD provided an overview of Public Event #1	None
GHD provided description of Next Steps including completion of the Three Step Comparative Evaluation of Alternative Methods, Impact Assessment and Environmental Assessment Report, and Consultation.	
Stephen Deneault asked how the Walker is meeting the Terms of Reference's commitment to provide access to technical information to Indigenous communities. <i>Walker is scheduling update meetings and are providing information to Indigenous communities as it becomes available. Engagement agreements are currently being finalized with Six Nations of the Grand River Elected Council, the Haudenosaunee Development Institute and the Mississaugas of the Credit First Naton. Communities will be provided advance notice of archaeology and ecology field work in order to coordinate participation of monitors.</i>	Walker
GHD provided a high-level schedule for the next 12 months, highlighting the Public Event #2 and the next touchpoint with the GRT anticipated to be in February 2025.	None

Attachments: Meeting Presentation

Attachments

Attachment 1

Meeting Presentation



→ March 28, 2025

Walker South Landfill Phase 2 EA GRT EA Meeting #2

Welcome

1

Agenda

- **Introductions & Meeting Objectives**
- **Overview of South Landfill Phase 2 EA and Process Update**
- **Overview of Public Event #1**
- **Next Steps**

2

Introductions & Meeting Objectives

3

Introductions

Proponent: Walker Environmental Group Inc. (Walker)

- Project Director: Darren Fry
- Project Support Specialist: Leticia Koole

Primary Consultant: GHD

- Project Advisor: Blair Shoniker
- Project Manager: Erika Brown
- Project Coordinator: Janet Oswald
- Project Support: Emma Simioni and Anna Zarina

4

Meeting Objectives

- Provide a progress update
- Present the Alternative Methods
- Share feedback received from Public Event #1
- Outline next steps and the role of GRT
- Address questions from the GRT

South Landfill Phase 2 EA – GRT Meeting #2 | GHD

5

Overview of South Landfill Phase 2 EA and Process Update

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Walker's Resource Management Campus

More than a landfill
A dynamic operation that efficiently manages waste and sustainably recovers resources.

Campus Operations Include:

<ul style="list-style-type: none"> A Residential Drop-off B Niagara Compost Facility C Resource Recovery Area D N-Viro® Biosolids Facility 	<ul style="list-style-type: none"> E Aggregates Recycling & Processing Area F Agricultural Rehabilitation G Landfill Gas to Energy Facility H South Landfill
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South Landfill Phase 2

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Project Overview

Planning for long-term waste disposal capacity is increasingly important.

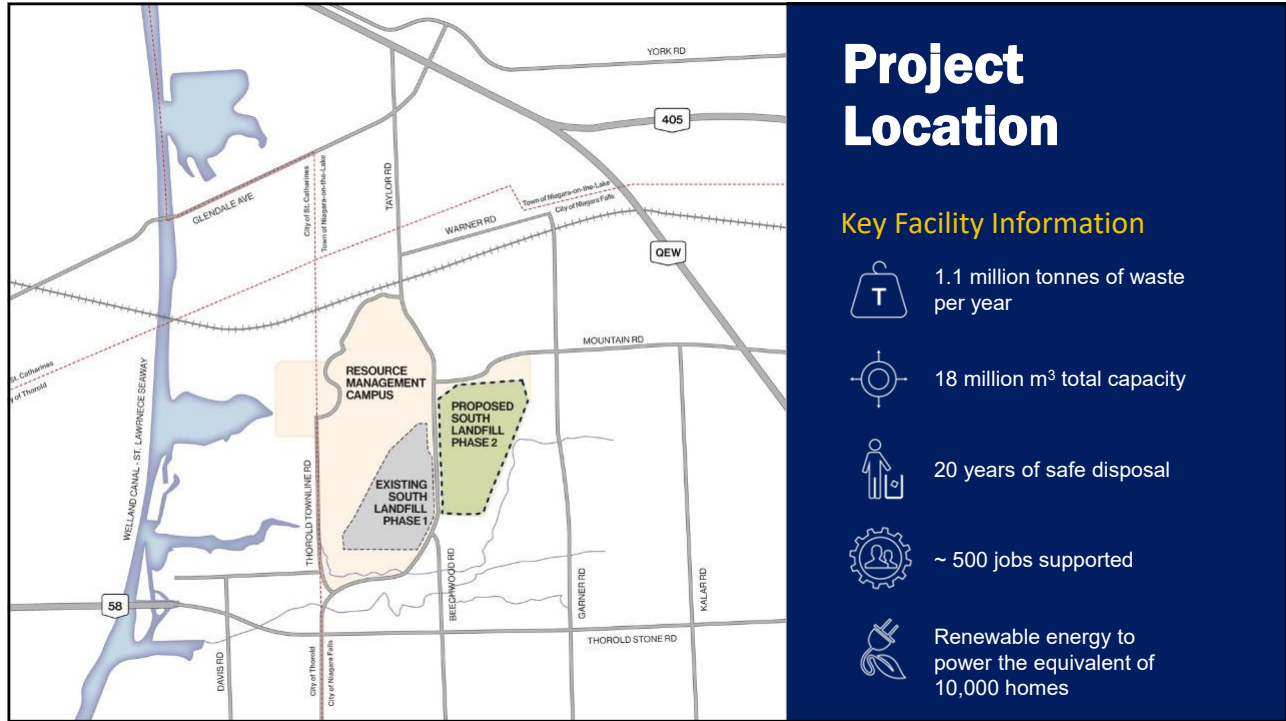
Despite recycling and green bin composting efforts, landfill space is still needed for non-recyclable materials.

Phase 2 Development of the South Landfill

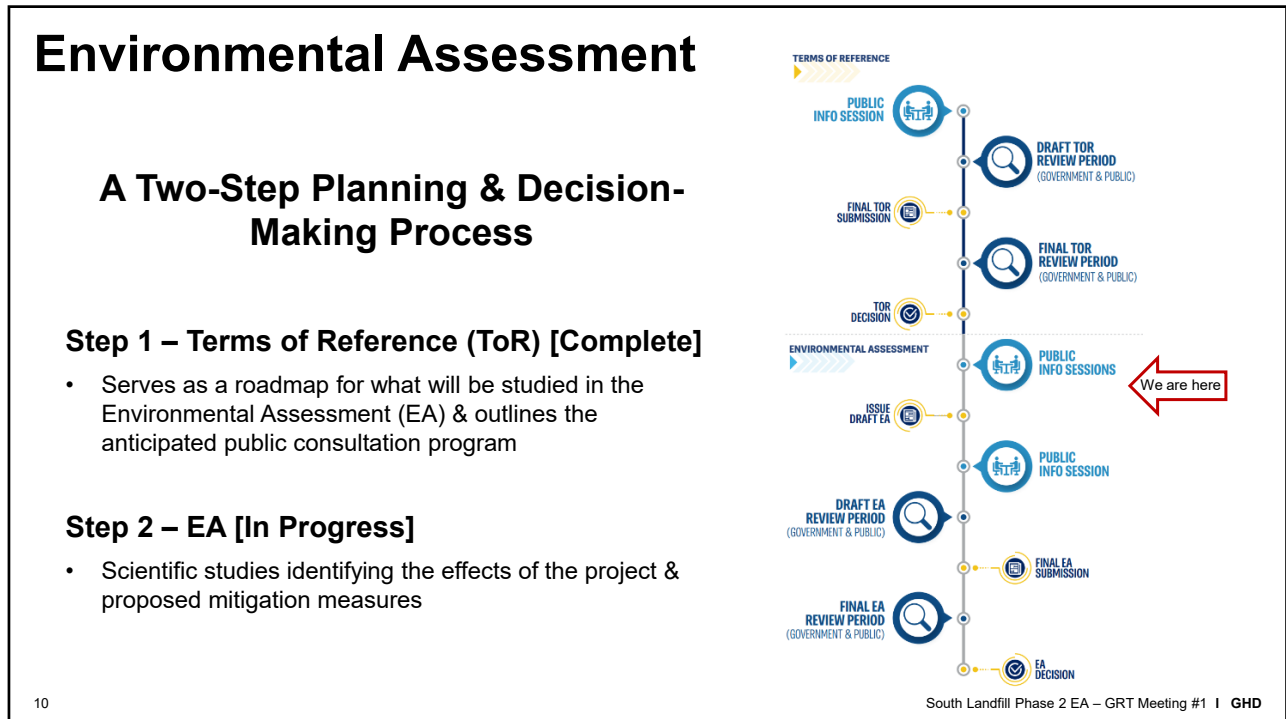
- State-of-the-art engineered landfill
- Designed with exceptional safety & environmental controls
- Accepts solid non-hazardous waste only
- Located immediately east of the current landfill operations
- Existing waste management infrastructure, such as the site entrance will not change

South Landfill Phase 2

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Environmental Assessment

Notice of Commencement for the EA

- Issued on October 17, 2024, initiating the EA phase of the project.

Existing Conditions

- Studies and reporting to establish conditions in and around the project location.

Conceptual Design Report

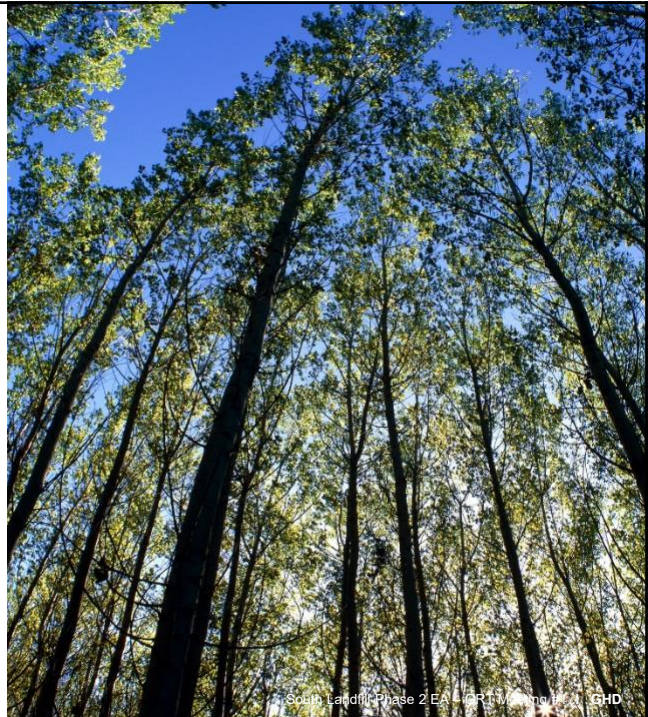
- Alternative landfill footprint configurations are being developed to a conceptual level of detail.
- These will form the Alternative Methods for comparative evaluation in the EA.



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Existing Conditions

- Establishes the existing environmental conditions within the study area so that potential effects of the alternatives can be identified and assessed.
- Builds on the work completed for the Preliminary Description of the Environment in the ToR.
- Guided by the Work Plans included in the approved ToR.
- Further detailed information will be collected as part of the impact assessment of the preferred method.
- Preliminary Draft Existing Conditions Reports were posted to the Project Website on **March 6, 2025**



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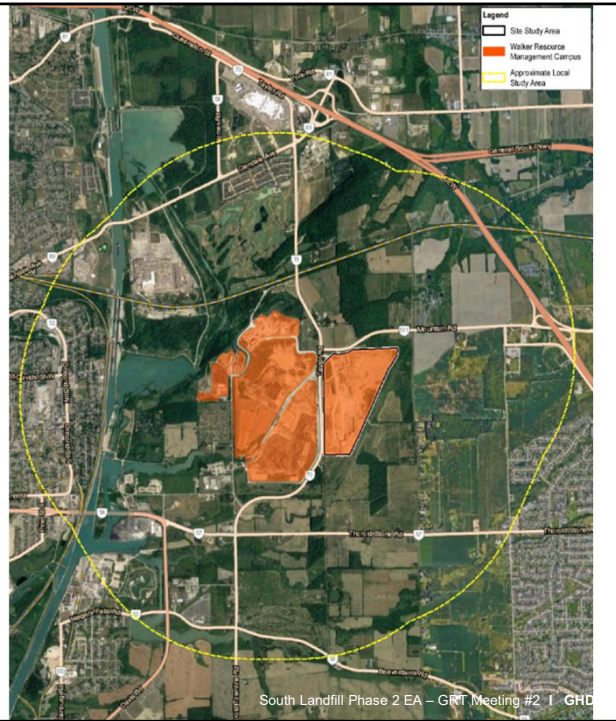
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Existing Conditions Study Areas

Local Study Area	Discipline
1 km radius of Site Study Area	Ecology, Air Quality, Noise, Land Use (also includes Glendale and Northwest Secondary Plan Areas), Heritage, Archaeology
1 km radius of Walker Campus	Geology and Hydrogeology (aligned with the Lockport Scarp)
1.2 km radius of Walker Campus	Surface Water Resources
2 km radius of Walker Campus	Visual, Social Environment
Nearest major intersections	Transportation
Niagara Falls, Niagara-on-the-Lake, St. Catharines, Thorold	Economic Environment

Additional Regional Study Areas defined for: Geology and Hydrogeology, Surface Water Resources, Air Quality, Noise, Economic and Social Environments

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South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Considering the Natural Environment



Geology & Hydrogeology

- Effect on groundwater quality
- Effect on groundwater flow

Surface Water Resources

- Effect on surface water quality
- Effect on surface water quantity


Atmospheric Environment

- Effect of air quality on off-site receptors
- Effect of odours on off-site receptors
- Effect of noise on off-site receptors

South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Considering the Natural Environment




Terrestrial & Aquatic Environment

- Effect on terrestrial ecosystems
- Effect on aquatic ecosystems
- Effect on culturally significant species to Indigenous peoples, and rare (vulnerable), threatened or endangered species or their habitat
- Effect on wetlands
- Effect on wildlife habitat, populations, corridors or movement
- Effect on fish or their habitat, spawning, movement or environmental conditions
- Effect on locally important or valued ecosystems or vegetation

South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Considering the Built Environment



Land Use

- Effect on existing and proposed planned future land uses and associated infrastructure

Agriculture, soils and mining

- Effects on existing Agricultural Land Base
- Effects on Agri-Food Network

Transportation

- Effect on traffic
- Road Safety and Geometry

South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Considering the Social, Economic and Cultural Environment



Social Environment

- Displacement of Residents from Houses
- Disruption to Use and Enjoyment of Residential Properties
- Disruption to Use and Enjoyment of Public Facilities and Institutions
- Changes to Community Character
- Changes to Community Cohesion

Economic Environment

- Effect on Local Economy
- Effect on Real Estate
- Effect on Public Finance
- Cost of Services

Cultural Heritage Resources

- Effect on archaeological resources and areas of archaeological potential
- Effect on known or potential built heritage resources and cultural heritage landscapes

South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Alternative Methods & Conceptual Design Report

Alternative Methods

- Describes the different ways of doing/ achieving the same activity.
- Alternative Methods included as part of this EA:
 - Site configuration (e.g., footprint dimensions, height, contours, side slopes, etc.)
 - Landfill gas collection system
 - Leachate treatment system

Conceptual Design Report

- Conceptual level of design, reflecting regulatory requirements (i.e., O. Reg. 232/98) & operational aspects of Walker's Campus (e.g., required on-site infrastructure).
- Allows the technical team to assess the potential environmental effects of the Alternative Methods & forms the basis of the comparative analysis.

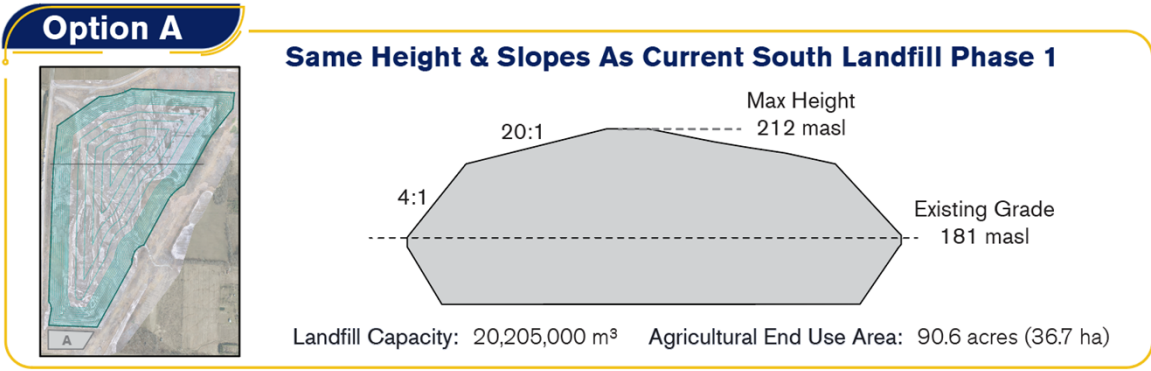
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South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Option A

Same height and slope as current South Landfill Phase 1



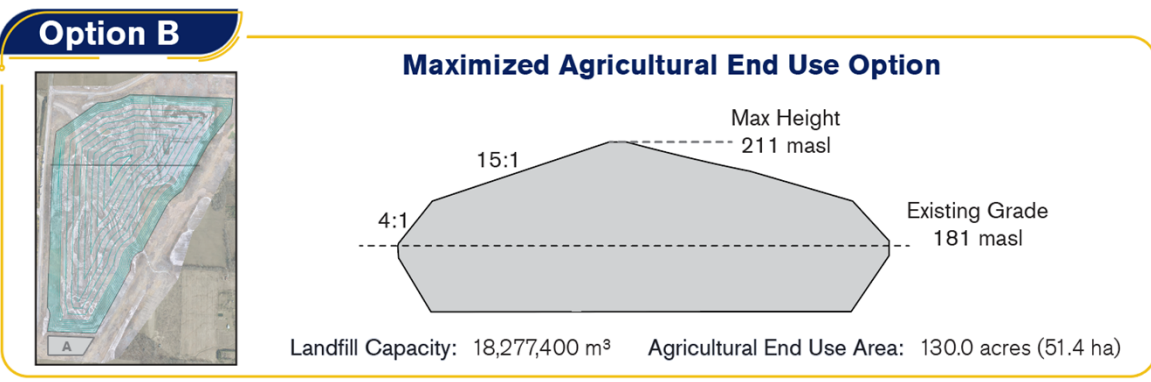
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South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Option B

Maximized agricultural end use option



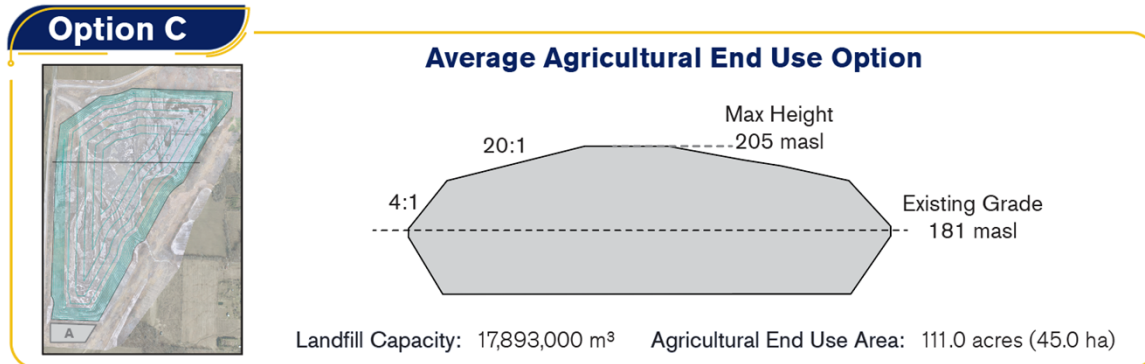
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South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Option C

Average agricultural end use option



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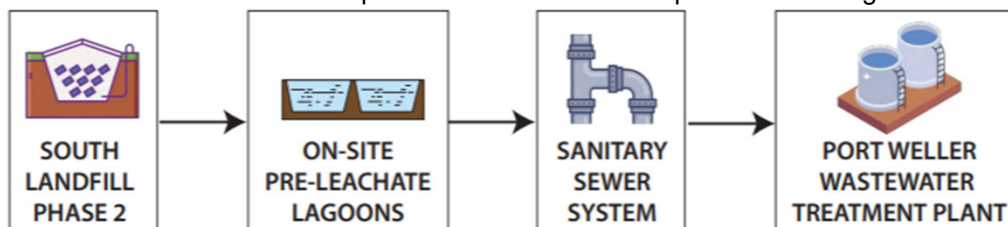
South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Option A

Continued & Expanded Use of the Municipal Wastewater Treatment System

- Building upon the pre-existing leachate management system but would include the necessary expansion of the system capacity (maximum of 104,500 m³)
- The expansion would include:
 - A leachate sump, including a pump equipped with the needed metering equipment and controls for monitoring and contingency
 - A 3rd on-site lagoon for aeration and eventual discharge
 - An additional force main to transport the leachate to a new pre-treatment lagoon



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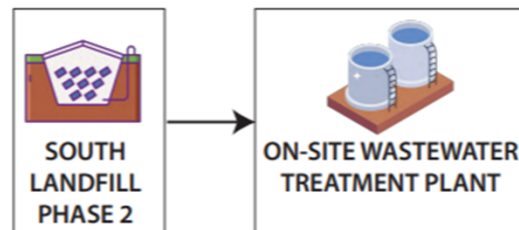
South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Option B

Development of an On-Site Wastewater Treatment Plant

- Option B consists of developing an on-site wastewater treatment plant located within the Campus boundary
- Feasibility/municipal system capacity assessment of this option is currently underway



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South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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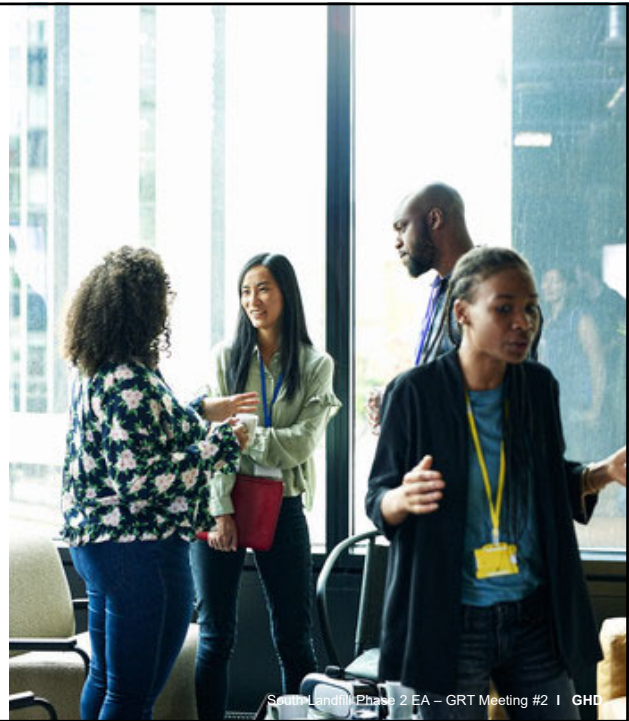
Overview of Public Event #1

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Public Event #1

- March 18, 2025, 5-8 pm at Club Italia in Niagara Falls
- Advertised via mailouts, courtesy calls, notice in the local newspapers, and the project website
- Run in open house /information station style, to enable one-on-one conversations and small group discussions
 - 14 attendees
- Virtual component was available March 6-21
- Feedback from event
 - Neutral to positive
 - Questions around study area, process, leachate options, agricultural end use
 - Landfill Configuration Option B preferred
 - Both leachate options were selected

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Next Steps

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Comparative Evaluation of Alternative Methods

A three-step process:

01

Assessment of alternative methods, using criteria & indicators grouped into the five environmental components: natural, built, social, economic and cultural

02

Comparative evaluation of the Alternative Methods & selection of the Recommended Method

03

Identification of the Preferred Method following consultation with review agencies during GRT meeting #3, Indigenous communities & the public during Public Event #2

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South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Impact Assessment & Environmental Assessment Report

Impact Assessment

- Facility Characteristics Report – further developing Conceptual Design based on Preferred Method.
- Confirmatory fieldwork, as required.
- Detailed Impact Assessment Reports (including assessment of cumulative impacts & climate change considerations).

Environmental Assessment Report

- Must be prepared in accordance with the approved ToR.
- **Draft EA Report** – released for public, Indigenous community and government review & comment.
- **Final EA Report** – formally submitted to the Minister for approval and subject to public, Indigenous community and government review & comment.
- Note: contributing reports will form appendices of the EA report.

28


South Landfill Phase 2 EA – GRT Meeting #2 | GHD

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Consultation


Consulting During the EA

Consultation Methods




Website

A dedicated project website is available online.
southlandfillphase2.com




Email

A dedicated project email has been created.
info@southlandfillphase2.com



Phone

A toll-free phone line for questions related to the EA is available.
1-866-699-9425



Events

Public information sessions, open houses, Advisory Committee meetings and stakeholder meetings.

29 South Landfill Phase 2 EA – GRT Meeting #2 | GHD

Schedule Review

➡ Upcoming Dates

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Late Spring 2025

- **Public Event #2 & GRT EA Meeting #3** to present Comparative Evaluation of Alternatives and Recommended Method

Summer 2025

- Prepare Detailed Design of Preferred Alternative
- Commence Detailed Impact Assessment of the Preferred Method

Fall 2025 & Winter 2026

- Prepare and consult on Draft EA

Please reach out with any questions or comments to:

<p>Darren Fry, Walker Email: Dfry@walkerind.com Office: 1-866-699-9425</p>	<p>Erika Brown, GHD Email: Erika.Brown@GHD.com Office: 416 866 2351</p>
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South Landfill Phase 2 EA – GRT Meeting #2 | GHD



*** Thank You**

→ ghd.com

July 2, 2025

Subject/Client:	Walker South Landfill Phase 2 EA – GRT EA Meeting #3	Ref. No.	12567140
From:	Erika Brown	Tel:	416 866-2351
Date/Time:	June 25, 2025, 10:00 AM – 10:45 AM		

Attendees

Ministry of the Environment, Conservation, and Parks (MECP)

- Stephen Deneault, Project Officer, Environmental Assessment Branch
- Ron Nielsen, Senior Policy Advisor, Policy Development
- Tianchu Zhang, Quality Analyst, Air, Pesticides and Environmental Planning
- Rick Li, Senior Waste Engineer, Waste Approvals division
- Jon Averill, Senior Advisor (Acting), Environmental Assessment Program Support
- Gloria Suarez, Hydrogeologist, Ground Water Unit

Ministry of Natural Resources (MNR)

- Christa Rigney, Regional Planner, Land Use Planning Unit

Ministry of Citizenship and Multiculturalism (MCM)

- Dan Minkin, Heritage Planner, Heritage Planning

Niagara Peninsula Conservation Authority (NPCA)

- Kim Peters, Manager, Environmental Planning and Policy

Niagara College

- Nadeen Shehaiber, Senior Director Planning, Sustainability, and Capital Projects

Brock University

- John Dick, representative for Scott Johnstone

Walker

- Darren Fry, Project Director

GHD

- Erika Brown, Waste & Environmental Planner, Project Manager
- Janet Oswald, Environmental Planner, Project Coordinator

Topics Discussed

1. Introductions & Key Meeting Objectives
2. Review of the Alternative Methods
3. Comparative Analysis
4. Presenting the Recommended Method
5. Overview of Public Event #2
6. Next Steps – Detailed Impact Assessment

Summary (*Action items in italics*)

Action

Attendees were welcomed, introductions made, and agenda and objectives presented.	None
GHD outlined the South Landfill Phase 2 Alternative Options for Site Configurations: <ul style="list-style-type: none"> – Option A – Same height and slope as current South Landfill Phase 1 – Option B – Maximized Agricultural end use option – Option C – Average agricultural end use option 	None

<p>GHD outlined the South Landfill Phase 2 Alternative Options for Municipal Wastewater Treatment System:</p> <ul style="list-style-type: none"> – Option A – Continued & Expanded Use of the Municipal Wastewater Treatment System – Option B – Development of an On-Sie Wastewater Treatment Plan 	None
<p>GHD provided an overview of the comparative evaluation of the three landfill configuration options. Option A was identified as the preferred configuration, and the rationale for this recommendation was discussed.</p>	None
<p>GHD provided an overview of the comparative analysis undertaken for the leachate management options. Option A was identified as the preferred configuration, and the rationale for this recommendation was discussed.</p>	None
<p>An overview of Public Event #2 was provided.</p>	None
<p>GHD provided description of Next Steps including responding to GRT comments on preliminary draft Existing Conditions Reports, preparation of the draft Impact Assessment Reports and draft Environmental Assessment Report, ongoing consultation, and review project timeline.</p>	None
<p>John Averill (MECP) inquired about engagement with Indigenous communities.</p> <ul style="list-style-type: none"> – Walker confirmed that engagement is ongoing with Mississaugas of the Credit First Nation, Six Nations of the Grand River Elected Council, and the Haudenosaunee Development Institute. Information is being provided, and feedback has been received. – Ecological monitors have been participating in field work. – Archaeological field work will begin in August and monitors will be invited to participate. 	None
<p>Kim Peters (NPCA) inquired if there will be an opportunity to review the draft Impact Assessment Reports ahead of release of the full draft EA Report. The preference would be to preview the technical reports in advance of reviewing the full draft EA report. This suggestion was supported by Christa Rigney (MNR).</p> <p>GHD confirmed that the current schedule has review of detailed impact assessment reports as part of the review of the draft EA report (i.e., not in advance). <i>GHD and Walker to consider building opportunities for preview of the technical reports into the project schedule.</i></p>	GHD/Walker
<p>Kim Peters (NPCA) flagged that the stoplight (red, yellow, green) diagrams used to illustrate the comparative evaluation results may be misinterpreted. Readers may interpret green as “no effect” as opposed to “most preferred”.</p> <p>GHD noted the comment. The colours are defined as “Most preferred”, “Less preferred”, “Least preferred” as part of each graphic, and the net effects are available in tables within the Alternative Methods Report. <i>GHD and Walker will consider an alternative approach to representing the options in the final reporting.</i></p>	GHD/Walker
<p>Dan Minkin (MCM) asked about the status of the Archaeological Assessment.</p> <p>Walker confirmed the Archaeological Assessment field work is scheduled to commence in August. A combined Stage 1-2 report will be prepared.</p>	None
<p>Christa Rigney (MNR) noted the original intent was to rehabilitate the quarry to an agricultural end use upon closure and inquired if there will be an examination of the impact of the change in this commitment and its long-term cumulative effects.</p> <p>GHD and Walker provided the following information in response:</p> <ul style="list-style-type: none"> – There is a land use component to the EA that recognizes the current aggregate operation and the approved end use. – Development of a new landfill in other areas was assessed and development within the quarry footprint was preferred. – Compatibility with agricultural end use has been considered within the comparative evaluation and will be examined in the detailed impact assessment as well. 	GHD/Walker

<ul style="list-style-type: none">- Walker has successfully implemented an agricultural end use on portions of the East Landfill, in collaboration with researchers from the University of Guelph.- <i>Walker suggested a discussion take place at a future meeting about the sequence of events associated with the transition from quarry to landfill.</i>- Impacts to abutting land uses, agricultural operations, and natural heritage features associated with the interim use of the landfill (and deferred rehabilitation) will be considered within individual impact assessment reports, and within the EA Report.	
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Attachments: Meeting Presentation

Attachments

Attachment 1

Meeting Presentation



→ June 25, 2025

Walker South Landfill Phase 2 EA GRT EA Meeting #3

Welcome

1

Agenda

- **Introductions & Meeting Objectives**
- **Review of the Alternative Methods**
- **Comparative Analysis**
- **Presenting the Recommended Method**
- **Overview of Public Event #2**
- **Next Steps – Detailed Impact Assessment**

2

Introductions & Meeting Objectives

3

Introductions

Proponent: Walker Environmental Group Inc. (Walker)

- Project Director: Darren Fry
- Project Support Specialist: Leticia Koole

Primary Consultant: GHD

- Project Advisor: Blair Shoniker
- Project Manager: Erika Brown
- Project Coordinator: Janet Oswald
- Project Support: Emma Simioni and Anna Zarina

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Meeting Objectives

- Provide a progress update
- Review the alternative methods
- Provide an overview of the comparative evaluation and present the recommended method
- Share feedback received from Public Event #2
- Outline next steps and the role of GRT
- Address questions from the GRT

South Landfill Phase 2 EA – GRT Meeting #3 | GHD

5

Review of the Alternative Methods

6

Landfill Site Configuration Summary

– Three Landfill Configuration Options were explored

	Option A Same as existing South Landfill (Phase 1)	Option B Maximized agricultural area	Option C Average agricultural area
Maximum height (m)	212 m	211 m	205 m
Total capacity (m³)	20,205,000 m ³	18,277,400 m ³	17,893,000 m ³
Area available for agricultural end-use (m²)	366,719 m ²	513,600 m ²	450,216 m ²

South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Leachate Management Summary

– Two Leachate Management Options were explored

Option A	Option B
Continued & Expanded Use of the Municipal Wastewater Treatment System	Development of an On-Site Wastewater Treatment Plant

South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Community Feedback

Landfill Configurations

- Minimize visibility
- Maximize volume/capacity
- Maximize agricultural end-use
- Ensure cost-effectiveness to residents & businesses

Leachate Management

- Ensure cost effectiveness to residents & businesses
- Source of revenue for municipalities
- Utilize existing infrastructure
- Do not displace future WWTP capacity for community
- Reduce impacts at Campus



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Comparative Evaluation and Recommended Methods

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Landfill Configuration Comparative Analysis

Environmental Component	Option A	Option B	Option C	Rationale
Natural Environment <i>(Includes Geology & Hydrogeology, Surface Water, Atmospheric, and Terrestrial & Aquatic)</i>	●	●	●	No material difference between options
Built Environment* <i>(Includes Land Use, and Agriculture)</i>	●	●	●	Options B & C have slightly lesser visual and agricultural net effects
Social Environment <i>(Includes Transportation, and Social)</i>	●	●	●	No material difference between options
Economic Environment <i>(Includes Economic)</i>	●	●	●	Option A has slightly greater economic net (positive) effects
Cultural Environment ** <i>(Includes Cultural Heritage Resources)</i>	●	●	●	No material difference between options

* Visual considerations are included in the Land Use subcomponent.

● Most Preferred ● Less Preferred ● Least Preferred

** Cultural Heritage Resources considers built heritage resources, cultural heritage landscapes and archaeological resources.

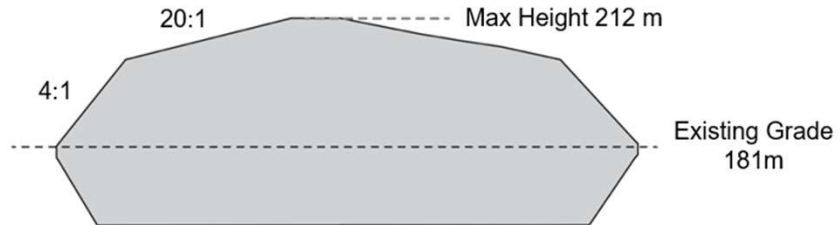
South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Preferred Landfill Configuration – Option A



Same Height & Slopes as Current South Landfill Phase 1



Landfill Capacity: 20,205,000 m³
Agricultural End Use Area: 366,719 m²

South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Preferred Landfill Configuration

Reasons for recommendation:

- Most substantial long-term benefits
- Moderate visual impact that can be mitigated/ managed
- Economic benefits
- Longer lifespan/greater waste capacity = extended employment & increased municipal revenue
- Offers enhanced regional waste management stability
- Design refinements and mitigation can offset the minor differences between Option A vs Options B & C



South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Leachate Management Comparative Analysis

Environmental Component	Option A	Option B	Rationale
Natural Environment <i>(Includes Geology & Hydrogeology, Surface Water, Atmospheric, and Terrestrial & Aquatic)</i>	●	●	Option A has lesser net effects due use of existing infrastructure (vs constructing & operating a new facility)
Built Environment* <i>(Includes Land Use, and Agriculture)</i>	●	●	Option A has lesser net effects due use of existing infrastructure (vs constructing and operating a new facility)
Social Environment <i>(Includes Transportation, and Social)</i>	●	●	No material difference between options
Economic Environment <i>(Includes Economic)</i>	●	●	No material difference between options
Cultural Environment ** <i>(Includes Cultural Heritage Resources)</i>	●	●	No material difference between options

* Visual considerations are included in the Land Use component.

** Cultural Heritage Resources considers built heritage resources, cultural heritage landscapes and archaeological resources.

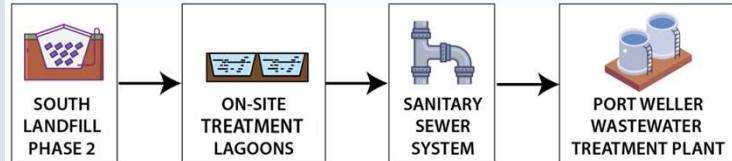
● Most Preferred ● Less Preferred ● Least Preferred

South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Preferred Leachate Management – Option A

Continued & Expanded Use of the Municipal Wastewater Treatment System



Reasons for recommendation:

- Reduced impacts from construction & operation of new infrastructure
- Capacity exists within existing municipal sewer system
- Most cost-effective option for customers

South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Overview of Public Event #2

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Public Event #2

- June 18, 2025, 5-8 pm at Club Italia, Niagara Falls
- Advertised via mailouts, courtesy calls, notice in the local newspapers, and the project website
- Run in open house/information station style, to enable one-on-one conversations and small group discussions
 - 8 attendees
- Virtual component available June 18 to July 7
- Feedback from event:
 - Neutral to positive
 - Questions around capacity of Port Weller Wastewater Treatment Plant, process and next steps
 - Interest in Walker Campus tours



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Next Steps

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Impact Assessment & Environmental Assessment Report

Impact Assessment

- Facility Characteristics Report – further developing Conceptual Design based on Preferred Method.
- Confirmatory fieldwork, as required.
- Detailed Impact Assessment Reports (including assessment of cumulative impacts & climate change considerations).

Environmental Assessment Report

- Must be prepared in accordance with the approved ToR.
- **Draft EA Report** – prepared for public, Indigenous community and government review & comment.
- **Final EA Report** – formally submitted to the Minister for approval and subject to public, Indigenous community and government review & comment.
- Note: contributing reports will form appendices of the EA report.

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South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Consultation

Consulting During the EA

Consultation Methods



Website

A dedicated project website is available online.
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A toll-free phone line for questions related to the EA is available.
1-866-699-9425



Events

Public information sessions, open houses, Advisory Committee meetings and stakeholder meetings.

20

South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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Schedule Review

↳ Upcoming Dates

Remainder of 2025


- Update Existing Conditions Reports and provided responses to GRT comments (in progress)
- Prepare Detailed Design of Preferred Alternative
- Commence Detailed Impact Assessment of the Preferred Method

Winter and Spring 2026

- Prepare and consult on Draft EA

Please reach out with any questions or comments to:

<p>Darren Fry, Walker Email: Dfry@walkerind.com Office: 1-866-699-9425</p>	<p>Erika Brown, GHD Email: Erika.Brown@GHD.com Office: 416 866 2351</p>
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South Landfill Phase 2 EA – GRT Meeting #3 | GHD

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* Thank You

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South Landfill Phase 2 EA

City of Niagara Falls – Meeting #3

Notes

Date: August 6th, 2024

Time: 10:00 – 11:00 am

Location: MS Teams (Virtual)

Attendees:

- Asad Rizwan, Engineering Manager, SS Wilson Associates
- Benjamin Peachman, Project Manager, Infrastructure Planning, GEI Consultants
- Brett Sears, Project Manager, Transportation & Planning Department, WSP
- Chris Denich, Sr Water Resources Engineer, Aquafor Beech
- Chris Millar, Sr Project Manager – Secondary Plans, City of Niagara Falls
- Darren Fry, Project Director, Walker
- Elizabeth Duguay, Planning & Community Engagement Lead, Walker
- Hazem Gidamy, B.Sc., M.Eng., Principal, SS Wilson Associates

Questions / Comments (*Action items in italics*)

Action

Walker presented a slide deck, which included the following information: <ul style="list-style-type: none">- Overview of Walker’s Niagara Resource Management Campus- Introduction to South Landfill Phase 2- Summary of the Environmental Assessment and Approvals Process <p><i>A copy of the presentation will be shared with Chris Millar.</i></p>	Walker
C. Millar requested clarification as to whether Walker’s Agricultural Rehabilitation Area was once a landfill.	N/A
Walker confirmed that yes, this area is located on top of a closed portion of its East Landfill. This agricultural end-use was determined in consultation with the community.	N/A
C. Millar inquired about the current rehabilitation plan for the Walker Brothers Quarry.	N/A



<p>Walker responded that the existing rehabilitation plan for the quarry is agricultural use. To develop Phase 2 of the South Landfill, Walker will seek approval to amend the aggregate license to permit the establishment of a waste disposal facility. This process was undertaken for both the East Landfill and South Landfill Phase 1. Walker will be engaging the Ministry of Natural Resources (MNR), and an agricultural expert will be studying/evaluating the potential impacts associated with the loss of agricultural land.</p>	
<p>C. Millar asked whether landfill technologies have improved since Phase 1 became operational.</p> <p>Walker indicated that yes – there are continuous improvements to landfill technologies. Examples include continued enhancements to Walker’s existing Landfill-Gas-to-Energy facility which further increases landfill gas collection efficiency, monitoring and measurement technology advancement such as use of satellites and drones to monitor for any fugitive emissions. Additionally, new regulations aimed at prevent methane emissions from landfills (https://www.canada.ca/en/environment-climate-change/corporate/transparency/consultations/proposed-regulations-respecting-reduction-release-methane-waste-sector.html) will drive continuous improvement.</p>	<p>N/A</p>
<p>C. Millar requested confirmation as to which technical studies will have expanded study areas (i.e., beyond 1-2km).</p> <p>Walker specifically noted that the neighbourhood of Niagara-on-the-Green will be included in the Odour Study. Study areas, which are generally illustrated in the ToR, will be discipline-specific and confirmed during the preparation of the EA.</p>	<p>N/A</p>
<p><i>Walker and the City of Niagara Falls to identify data sharing opportunities.</i></p>	<p>Walker, City of Niagara Falls</p>
<p>SS Wilson Associates inquired about blasting activities at the Walker Brothers Quarry; specifically, whether there is blasting taking place, if fly rock is an issue, and if Walker has a blasting design.</p> <p>Walker responded that yes – blasting is currently taking place in the northeast corner of the quarry and that there are approximately 7 years of blasting activities remaining. The blasting is designed to meet specific noise and vibration regulations, which are reported on for compliance. Walker</p>	<p>Walker</p>



<p>discussed specific actions taken to reduce impacts from blasting including blast/face direction (west), consideration to meteorological conditions, and prevention of fly rock.</p> <p>Walker to share blasting monitoring information with SS Wilson Associates.</p>	
<p>An inquiry was made about potential impacts to traffic patterns as a result of Phase 2.</p> <p>Walker responded that overall, Walker Campus related traffic will decrease as quarry operations cease. Additionally, Phase 2 will be utilizing the same haul route (406/Hwy 58/Taylor Rd/Phase 1) as Phase 1, which is a dedicated haul route. Any potential impacts will be identified and evaluated during the EA.</p>	<p>N/A</p>
<p>A question was raised about whether there will be any impacts to the groundwater table from the transition of the site from a quarry to a landfill.</p> <p>Walker indicated that generally speaking, no changes to groundwater conditions are expected; however, the Hydrogeological Assessment will further investigate this during the EA.</p>	<p>N/A</p>
<p>C. Denich asked whether the technical studies for the EA have been initiated.</p> <p>Walker responded no – studies have not commenced as the study methodology is not yet approved (i.e., the ToR). However, being an operating Campus, Walker has a lot of existing data.</p> <p>C. Denich expressed interest in ecology, surface water, and groundwater information.</p> <p>Walker to share any background info available on ecology, surface water, and groundwater per the City’s request.</p>	<p>Walker</p>
<p>C. Millar shared that an “Existing Conditions Report” on the Northwest Secondary Plan Area will be submitted to council by the end of October 2024. In the meantime, the City will be looking to host a series of open houses for the Secondary Plan.</p>	<p>N/A</p>



South Landfill Phase 2

Environmental Assessment



Walker's Resource Management Campus



Campus Operations

- A** Residential Drop-off
- B** Niagara Compost Facility
- C** Resource Recovery Area
- D** N-Viro® Biosolids Facility
- E** Agricultural Rehabilitation
- F** Landfill Gas to Energy Facility
- G** Aggregates Recycling & Processing Area
- H** South Landfill

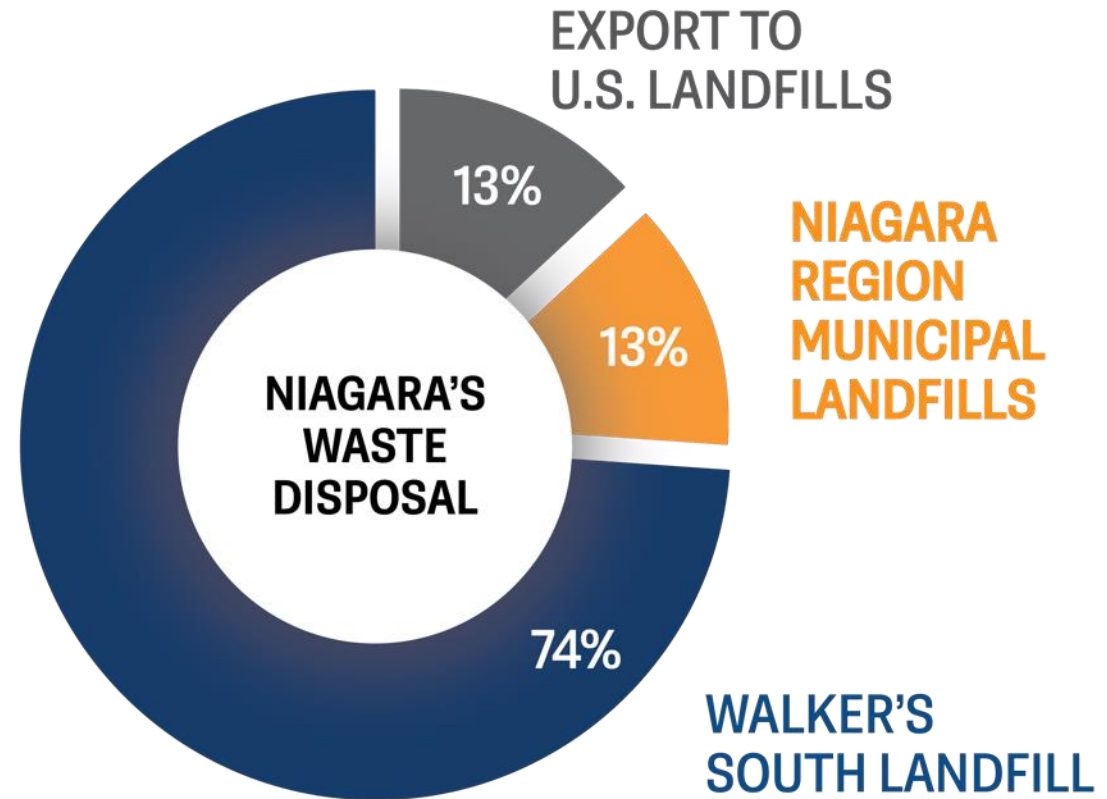


Niagara's Waste Disposal Solution

South Landfill Phase 2

Planning for Niagara's Future

Over 2/3 of Niagara's waste is currently managed at the South Landfill, which is expected to reach capacity by 2030



* Based on historical recycling trends

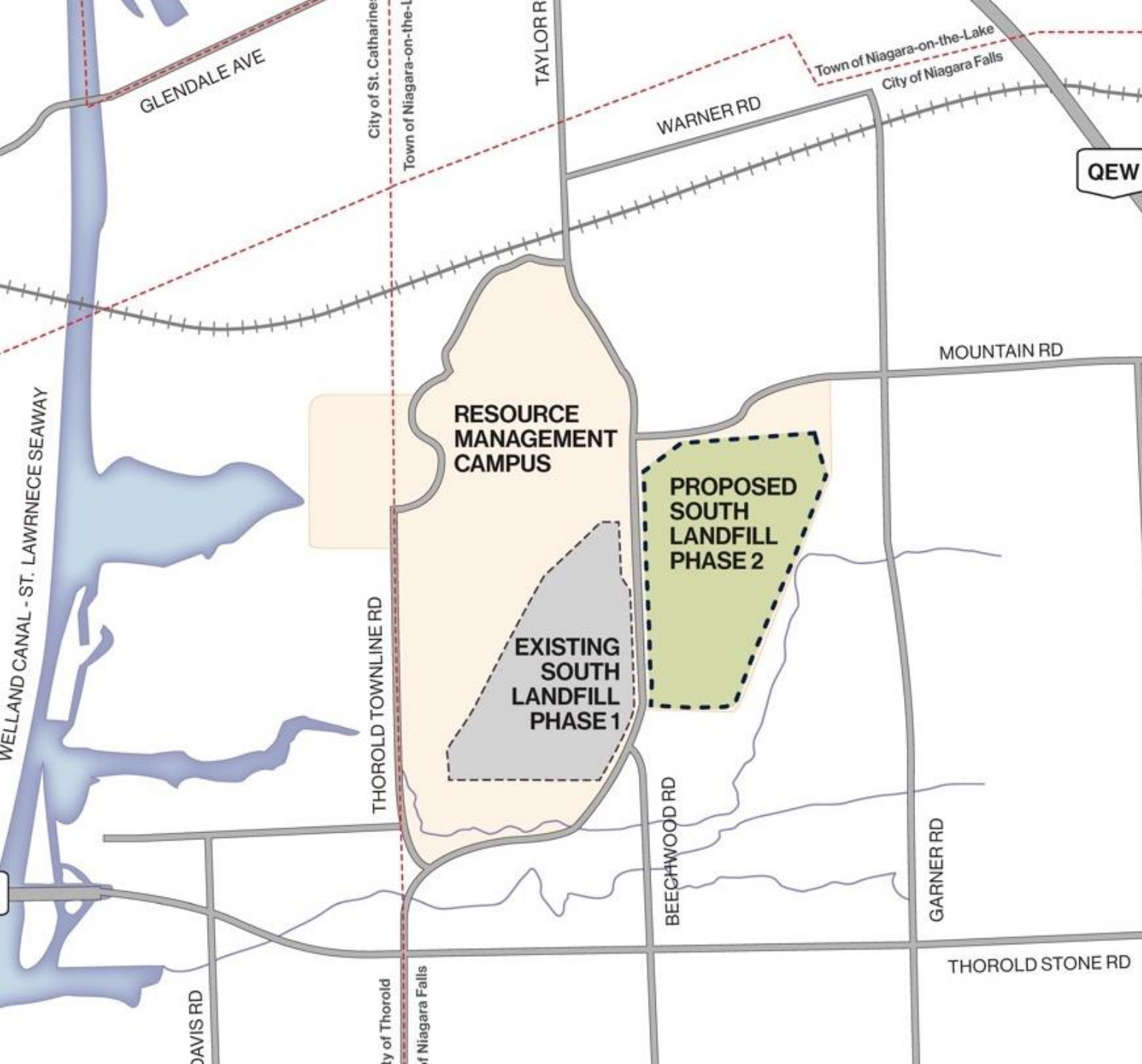


South Landfill Phase 2

Continuing to provide **critical infrastructure** for Niagara by developing the **next phase** of the **South Landfill**

- Located immediately east of the current landfill operations
- Key operational aspects **not expected to change**
 - Annual/Daily waste receipt
 - Type of waste received
 - Operational life
- Existing waste management infrastructure, such as the **site entrance will not change**
 - EA will evaluate leachate management alternatives





Phase 2 South Landfill

Key Facility Information



1.1 million tonnes of waste per year



18 million m³ total capacity



20 years of safe disposal



~ 500 jobs supported



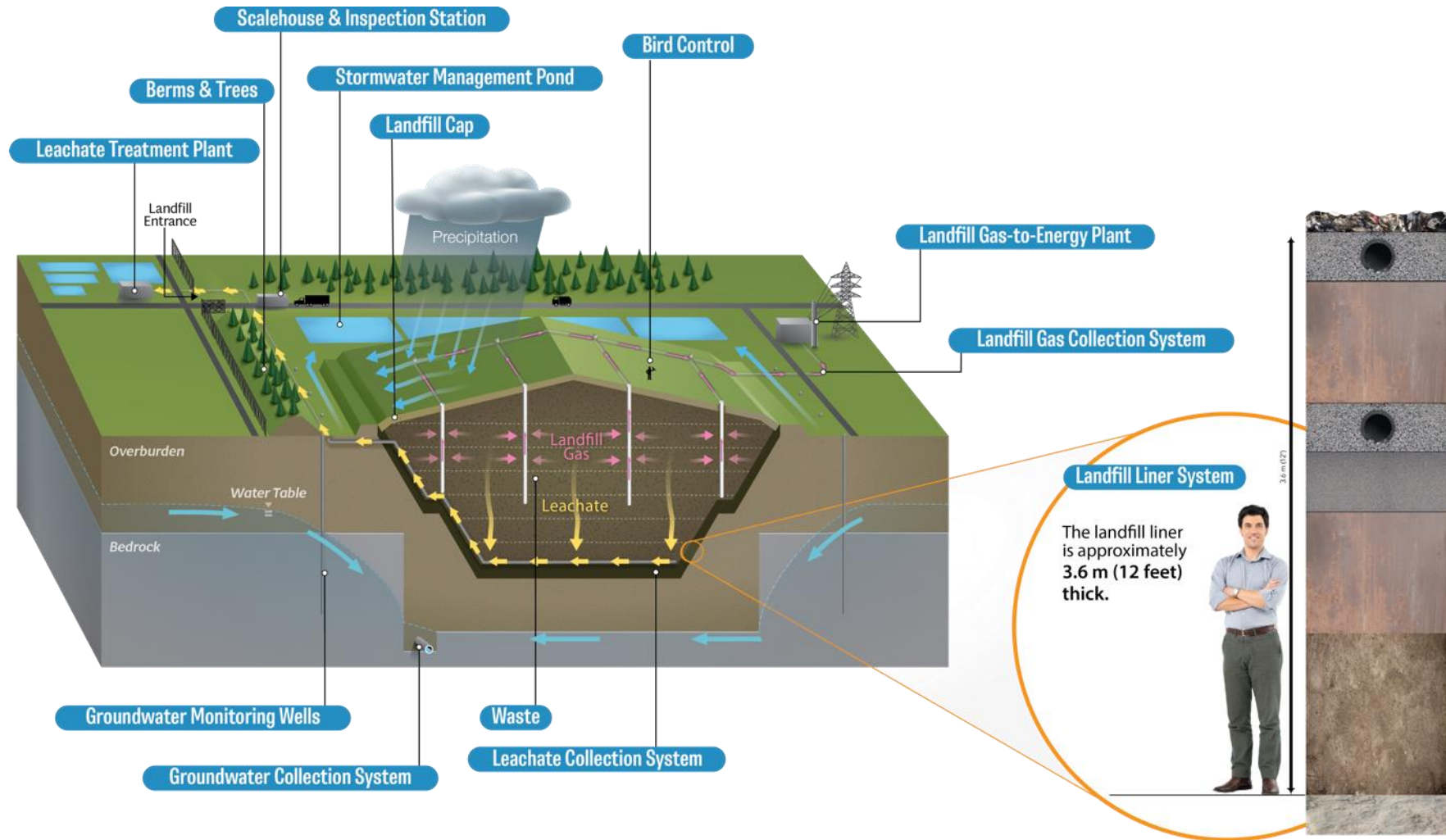
Renewable energy to power the equivalent of 10,000 homes

South Landfill

Designed & Operated to the highest standard

Key Features

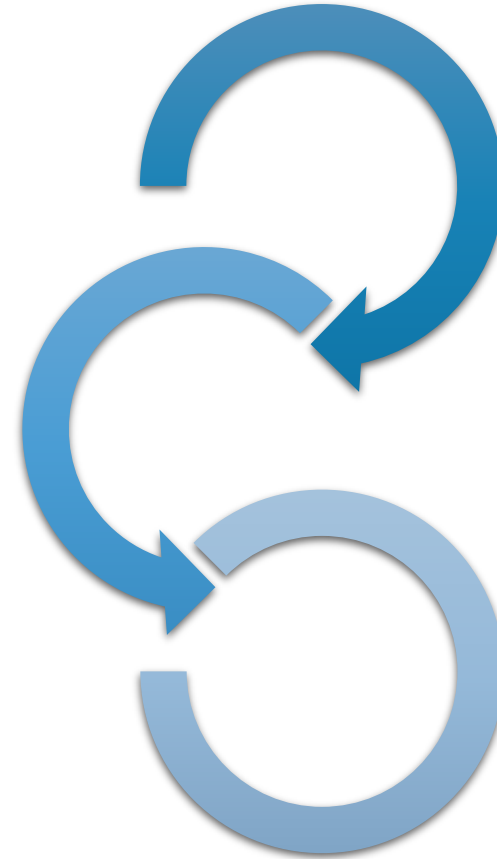
- 12-foot-thick liner
- Leachate collection & treatment system
- Landfill gas collection utilization
- Final landfill cap & end-use options



Approvals Process Overview



**Environmental
Protection
Act**



**Environmental
Assessment
Act**

**Local
Approvals**

Environmental Assessment Process

A Two-Step Planning & Decision-Making Process

Step 1: Terms of Reference (ToR)

- **Roadmap** for what will be studied in the EA

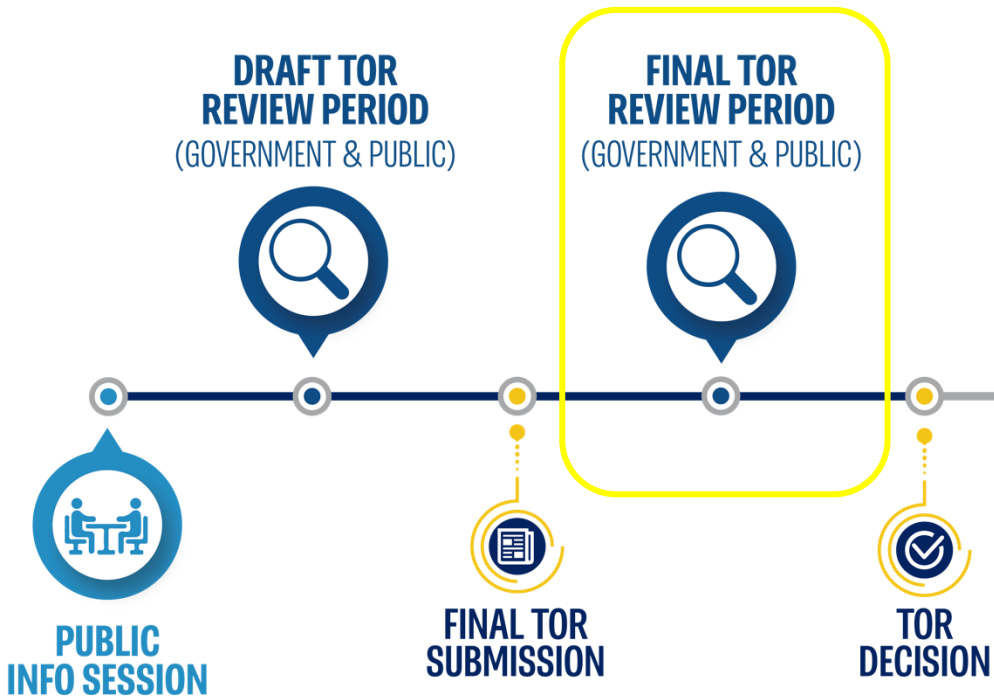
Step 2: Environmental Assessment (EA)

- **Scientific studies** identifying the effects of the project

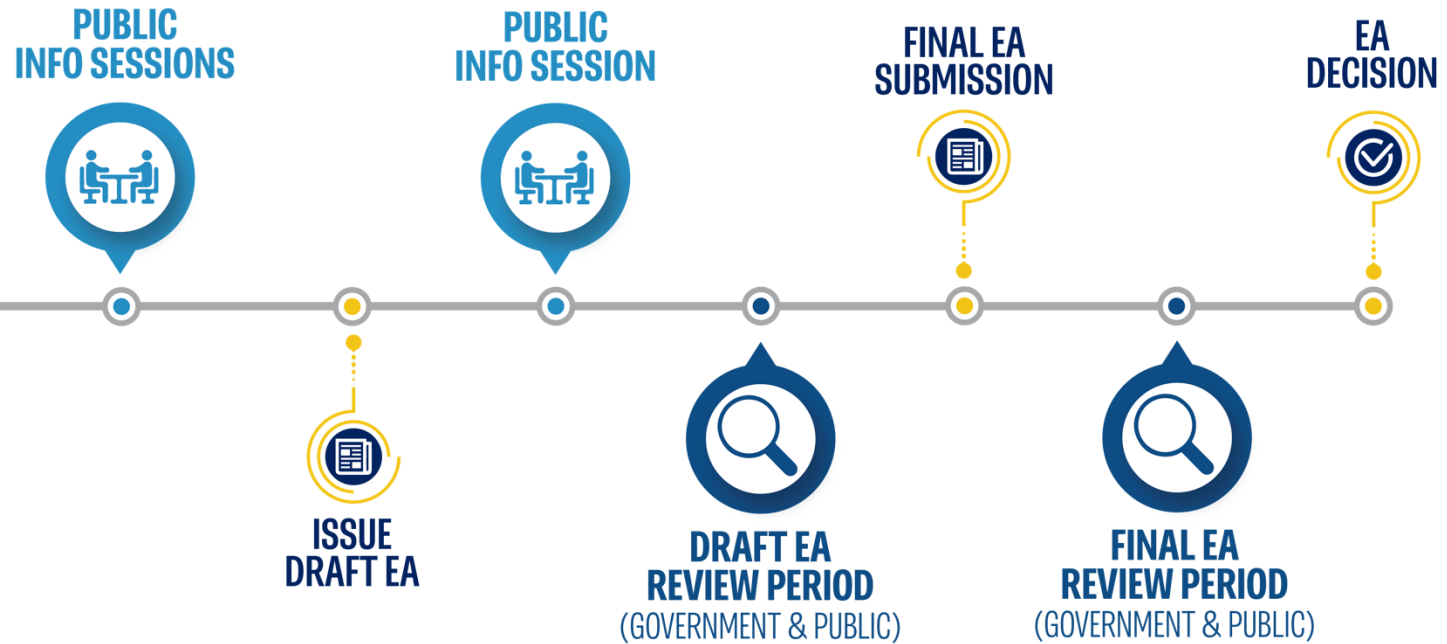


Environmental Assessment Process

TERMS OF REFERENCE (TOR)



ENVIRONMENTAL ASSESSMENT (EA)



Technical Studies

South Landfill Phase 2 EA



Agriculture



Air Quality



Archaeology



Cumulative Effects



Cultural Heritage



Ecology



Economic



Noise



Social



Surface Water & Groundwater



Traffic



Visual



Technical Team

South Landfill Phase 2 EA

Discipline	Consultant
Agriculture	Colville Consulting Inc.
Air Quality	RWDI
Archeology	ARA
Cultural Heritage	MHBC
Cumulative Effects	GHD
Ecology	GHD
Economic	AVAANZ Ltd.
GHG	GHD
Land Use	MHBC
Noise & Vibration	RWDI
Social	SLR Consulting
Surface & Groundwater	WSP
Traffic	TYLin Group
Visual	GHD



Project Information / Stay Connected



PROJECT WEBSITE

Learn more & sign up
to receive notifications
southlandfillphase2.com



PHONE

Call us at:
1-866-699-9425



EMAIL

Email us at:
info@southlandfillphase2.com



EVENTS

Public Information Sessions
at key milestones



Meeting Summary

Meeting: Niagara Region

Date: November 4, 2024

Location: Virtual Meeting

Time: 3 pm – 4 pm

Attendees:

Niagara Region

- Sean Norman, Senior Planner
- Erik Acs – Manager, Community Planning

Walker

- Darren Fry, Project Director – Walker
- Chris Breen, VP Community/Gov't Relations

Meeting Materials:

Purpose of Meeting

To provide the Niagara Region with an update on the Approval of the Terms of Reference and Notice of Commencement of the EA.

Summary of Discussion

- Provided an update on the Approval of the Terms of Reference and Notice of Commencement of the EA.
- Discussed next steps in the EA; specifically Alternative Methods, Preferred Methods, and Draft ToR in late 2026
 - Darren offered consultation meetings, information at key milestones
- Provided an overview of the EA Advisory Committee and the Niagara Regions involvement
 - Darren to send a formal request to Sean Norman
- Requested introductions to Niagara Regions Wastewater Treatment staff for leachate treatment discussions and Traffic Services staff regarding the tunnel.
 - Darren to send Sean Norman a reminder email

Meeting Summary

Meeting: Niagara Region

Date: November 20, 2024

Location: Virtual Meeting

Time: 11 am – 12 pm

Attendees:

Niagara Region

- Sean Norman, Manager Strategic Initiatives
- Maged Elmadhoon, Manager Transportation Planning
- Ayat Khalil, Transportation Planning Coordinator

Walker

- Darren Fry, Project Director – Walker
- Dan Mohr (WSP)

Meeting Materials:

Purpose of Meeting

The purpose of this meeting was to provide an overview of the South Landfill Phase 2 Environmental Assessment and discuss the transportation aspects and proposed tunnel/under-pass at Taylor Rd, its rationale, design concept, and timing.

Summary of Discussion

- Walker provided an overview of the South Landfill Phase 2 Environmental Assessment
- The group discussed the transportation and tunnel Rationale, the overall tunnel design concept and anticipated timing

Walker South Landfill Phase 2

Meeting with MECP Surface Water Engineering Staff

November 28th 2024

Agenda

- ▶ Meeting Objectives
- ▶ Status of surface water studies
- ▶ Review previous MECP comments on Surface Water Components of the TOR
- ▶ Discussion of discipline specific study area boundaries
- ▶ Additional MECP feedback and discussion
- ▶ Conclusion

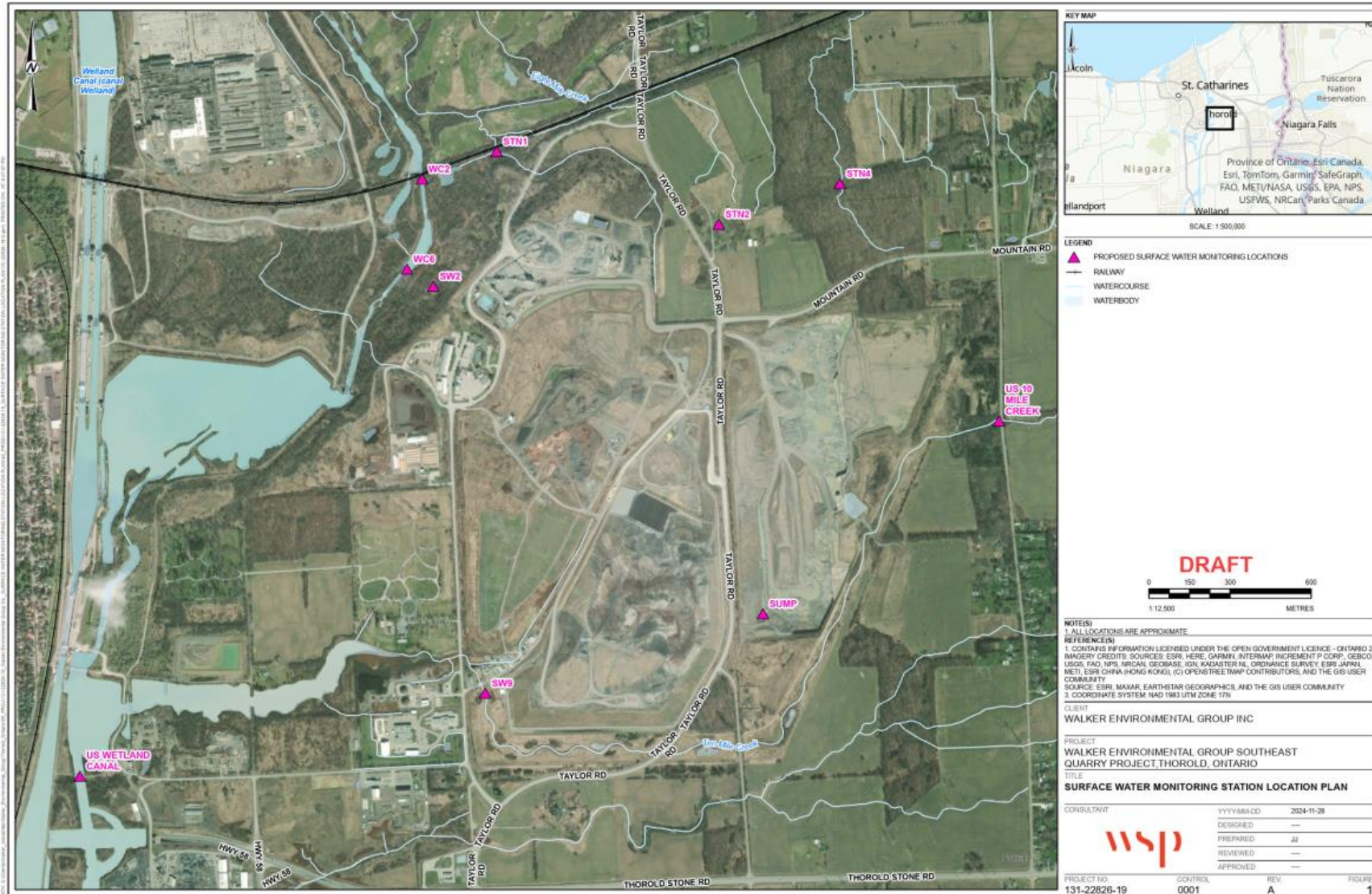
Meeting Objectives

- ▶ Introduce members of the Walker team working on surface water
- ▶ Provide an update on the status of surface water studies
- ▶ Review previous MECP comments on surface water components
- ▶ Discuss surface water specific study boundaries
- ▶ Solicit any further MECP comments or feedback prior to completing EA studies

Status of Surface Water Studies

- ▶ Baseline Field Program initiated - hydrology and surface water quality
- ▶ Background data collection and review underway
- ▶ Scoping of desktop studies required to meet the TOR underway.

Status of Surface Water Studies



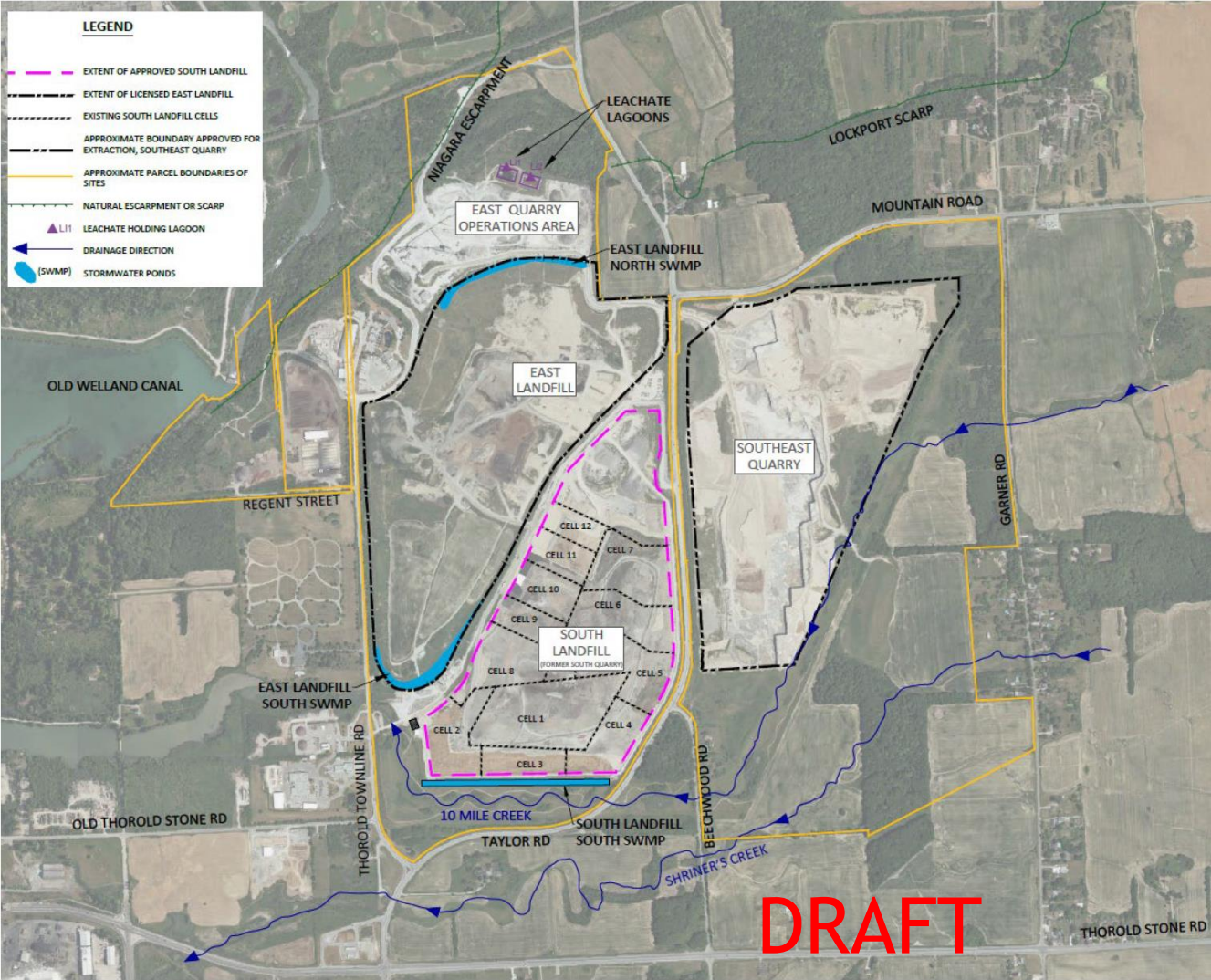
Previous MECP comments

Mohammad Sajjad Khan – MECP, re. 6.2.1.2 Surface Water

- ▶ The final TOR must include a schematic diagram showing Walker's drainage system and its interconnected elements. A flowchart-style illustration with arrows connecting various pathways of water movement will enhance the reader's comprehension of site water dynamics and facilitate the assessment of its impact.

This diagram should encompass the movement of both impacted and unimpacted surface runoff, groundwater collected from landfill and quarry bases, leachate, inflow and outflow from stormwater ponds, the WBQ Service Pond, and the eventual discharge routes into surface watercourses, namely 10 Mile Creek and the Welland Canal.

Previous MECP Comments



Previous MECP comments

Khalid Hussain – MECP, re. Stormwater Management

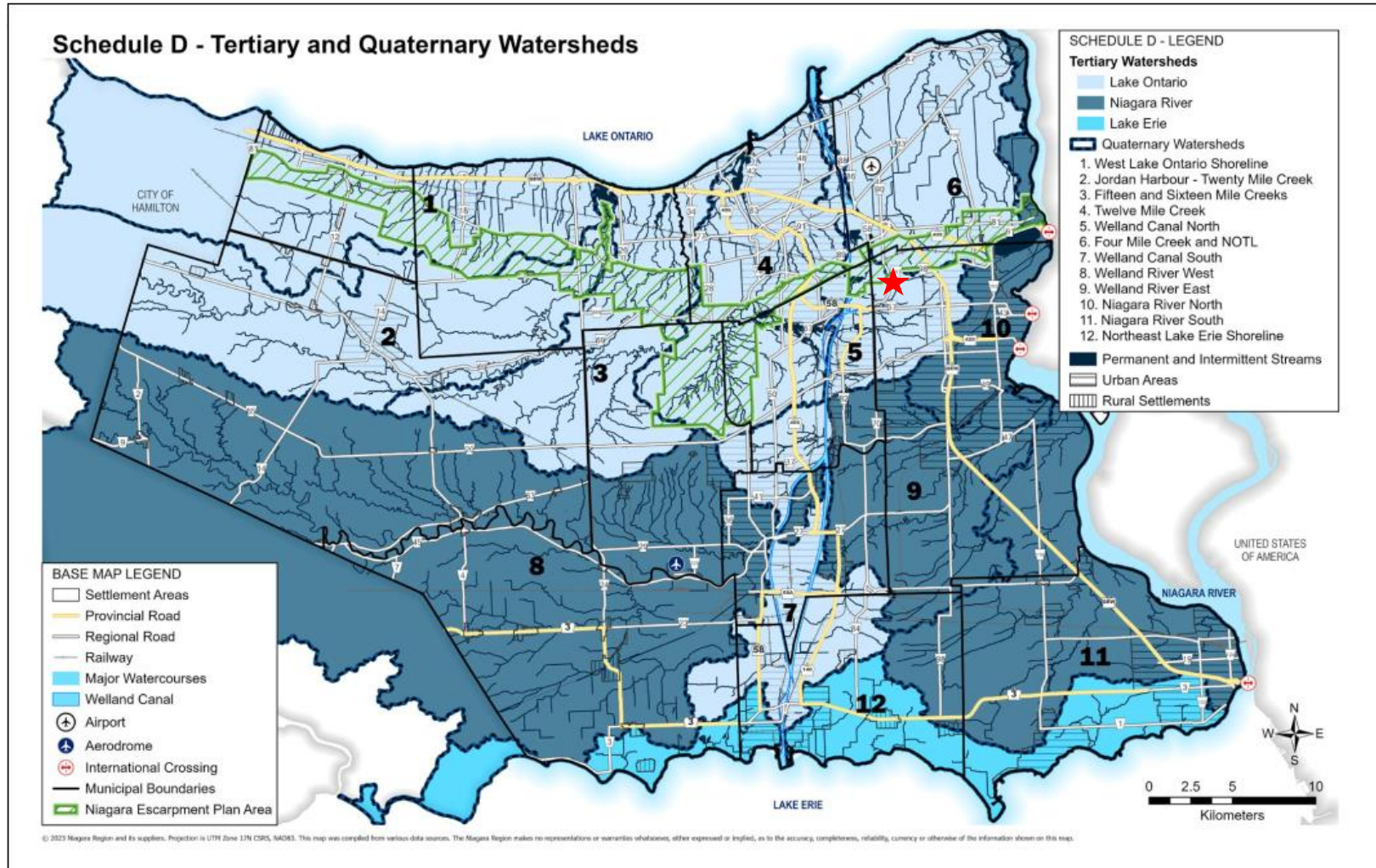
- ▶ The draft ToR report does not provide adequate historical information in a chronological order about the past undertakings, expansion or other work at the landfill site that may have caused changes in the stormwater management works at the site, during all such amended site design and operation changes. As per the TOR document, the Campus is an old site and recent historical changes in the last few decades have caused the site usage change to activities like quarrying/mining, closed landfill areas, composting operations, and other waste processing operations. These changes may have caused variations in the stormwater quantity, quality, changes in the drainage areas, or other site adjustments; and the documentation and analysis of site design and operation changes is important to assess the wastewater effluent and treatment requirements. The EA should assess stormwater management for the proposed expansion and its inter-relationship with other existing and proposed site uses e.g. quarry, waste storage/processing, landfill leachate etc.

Previous MECP comments

Khalid Hussain – MECP, re. Stormwater Management

- ▶ As per the TOR document, non-contact stormwater from the Campus is being collected in the North Pond and then batch discharged to the WBQ Service Pond, which is used as a water source for quarry operations and dust suppression. We could not determine if use of this sewage/wastewater is permitted under any of the ECAs for the quarry and/or landfill site approvals. The Work Plan should include a study to;
 - a) Review and confirm whether the non-contact stormwater is only from the quarry site or also includes impacted and non-impacted surface water from the landfill areas, waste processing areas like storage and composting etc.,
 - b) Characterize quality of the collected non-contact stormwater
 - c) Assess risk of contamination of this stormwater
 - d) Evaluate that the re-use of the stormwater (sewage) does not cause any human health and other environmental impacts under the current and proposed conditions during the design life of the proposed undertaking.

Surface Water Study Areas



- ▶ Site Study Area
- ▶ Local Study Area
- ▶ Regional Study Area

Additional MECP feedback and discussion

The background of the slide is white with abstract, overlapping geometric shapes in various shades of blue (light blue, medium blue, and dark blue) on the right side, creating a modern, professional look.



Walker South Landfill Phase 2 Environmental Assessment Meeting Minutes

Project No.: CA0037248.1905

Date: November 29, 2024

Time: 2:00 PM EST - 2:36 PM

Location: Virtual Platform - MS Teams

Meeting Organizer: Erika Brown, GHD Representative

Chairperson: Kevin MacKenzie, WSP Representative

Minute Taker: Nick Peppiatt, WSP Representative

Attendees: Craig Leger, WSP Representative
Darren Fry, Walker Representative
Erika Brown, GHD Representative
Kevin MacKenzie, WSP Representative
Mohammad Sajjad Khan, MECP Representative
Nick Peppiatt, WSP Representative
Stephen Deneault, MECP Representative

Not Present: Blair Shoniker
Janet Oswald
Khalid Hussain

Agenda Items	
1.	Meeting Objectives
2.	Status of surface water studies
3.	Review previous MECP comments on Surface Water Components of the TOR
4.	Discussion of discipline specific study area boundaries
5.	Additional MECP feedback and discussion
6.	Conclusion



Meeting Notes

- Introductions of the WSP, Walker, and MECP individuals working on and reviewing reporting for the project works.
- Presentation of the proposed Surface Water Monitoring Program with a map view of the specific surface water locations that will be targeted.
- Review of previous MECP comments from earlier drafts of the ToR, specifically Mohammad's comment schematic of Walker's drainage system.
 - Presented mapping of the Site stormwater and drainage works.
 - Noted that WSP and Walker are unsure what flow data will be available and what format it will be provided in from the St. Lawrence Seaway Corp.
 - Mohammad provided contact for the Seaway representative, identified below:

Leonard R. Swift
St. Lawrence Seaway Management Corp., Business Improvement
Manager, Automation/Gestionnaire, Automatisation
Voice: 905-641-1932 x5458, Fax: 905-641-1745, Cell: 905-736-0566
E-mail: lswift@seaway.ca
- Darren noted that although we have a current map showing alignments of the stormwater management and drainage networks, additional details will be included in subsequent EA documents for the site works.
- Kevin presented Khalid Hussain's comment, which describe requested additional information over that presented in the draft ToR.
 - WSP requested what specific information should be included in future EA reporting.
 - Mohammad commented to use best judgement for what can be presented (i.e., figures and text details) as the details were not readily available.
 - Darren noted that the report will present the integrated relations between the water networks and update the narrative of how the site has changed throughout its existence, while emphasizing the current network configuration will be described in detail.
- Kevin presented Khalid's second comment regarding what was permitted under existing site ECAs (i.e., various pond permitting) and how that can be presented in a work plan.
 - Kevin emphasized that the work plan details can be included in subsequent reporting.
 - Mohammad's expressed interest in how non-contact water is handled and emphasized that the program should include the water quality parameters that have been verified in the past.
 - Darren agreed that water quality information will be collected in line with past studies and that information for various site programs is available in past reports.
- Kevin displayed a slide showing the Surface Water Study Areas, showing the various watershed areas (i.e., Tertiary and Quaternary) that are intersected by site works.



Meeting Notes

- For the Local Study Area - radius of 3km is around the site.
 - For the Regional Study Area - limited to Welland Canal North and Welland Canal East catchments, along with 12 Mile Creek and 4 Mile Creek.
 - Mohammad emphasized that other agency guidelines (i.e., Conservation Authority and municipal) should be reviewed to find if any other water quality objectives are required. Also, requested review of local subwatershed studies so that the plans are consistent with the necessary guidelines and requirements.
 - Kevin noted that WSP will review the study area and may contact Mohammad regarding what may be required if other guidelines are identified.
 - Darren noted that the groundwater team can assist in providing guidance for watershed information as well.
-
- Mohammad inquired if different treatments can be implemented for the planned works and for groundwater interactions.
 - Darren noted existing work with municipality input for leachate treatment at the east and south landfill. Stated that no leachate/groundwater interaction is present as there is a subdrain under the current site. Water drains to a low point near the Walker service pond to ensure and monitor the performance of the liner. Emphasized no impact observed to groundwater from that location.
 - Darren also noted that for the expansion, the groundwater zone of influence is currently being analyzed. Stated that there are numerous options, such as replicating an underdrain, being identified for the works. Emphasized that the expansion would likely utilize similar practices, but are still being studied.

Meeting Summary

Meeting: Niagara-on-the-Lake

Date: December 4, 2024

Location: Virtual Meeting

Time: 3 pm – 4 pm

Attendees:

Niagara-on-the-Lake

- Kirsten McCauley
- Darrin Wills

Walker

- Darren Fry, Project Director – Walker
- Elizabeth Duguay, Project Planner - Walker

Meeting Materials:

Purpose of Meeting

To provide an update on the South landfill Phase 2 EA and meet the new Niagara-on-the-Lake Planner.

Summary of Discussion

- Provided an update on the Approval of the Terms of Reference and Notice of Commencement of the EA.
- Discussed next steps in the EA; specifically Alternative Methods, Preferred Methods, and Draft ToR in late 2026
 - Darren offered consultation meetings, information at key milestones
- Provided an overview of the EA Advisory Committee and the NOTL's involvement
 - Darren to send a formal request to Kristen
- Requested introductions to Niagara Regions Wastewater Treatment staff for leachate treatment

Meeting Summary

Meeting: Niagara-on-the-Lake & Niagara Region

Date: December 12, 2024

Location: Virtual Meeting

Time: 2:30 pm – 3:30 pm

Attendees:

Niagara-on-the-Lake

- John Federici, Senior Planner
- Darrin Wills, Supervisor of Environmental Services

Niagara Region

- Susan Dunsmore, Associate Director of Development Engineering

Walker

- Darren Fry, Project Director – Walker

Meeting Materials:

Purpose of Meeting

The purpose of the meeting with Niagara-on-the-Lake and Niagara Region was to discuss leachate treatment options with respect to the proposed South Landfill Phase 2.

Summary of Discussion

- Walker provided an overview of the Environmental Assessment Process (Alternative Methods)
- Discussion to determine if continued / expanded use of the municipal system is a viable option for inclusion in the Alternative Methods
- It was noted that the Glendale Secondary Plan completed studies that shows capacity exists but required further evaluation
- Discussion around existing draft sewer use agreement took place.



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Tel: +1.519.823.1311
E-mail: solutions@rwdi.com

MINUTES OF MEETING

DATE: 2024-12-13

PROJECT/SUBJECT: Walker South Landfill Phase 2 EA
Meeting with the Ministry of Environment, Conservation and Parks (MECP) Regarding
Proposed Existing Conditions Work Plan

LOCATION: Virtual Microsoft Teams Meeting

ATTENDEES:

MECP

Stephen Denault, Project Officer
Abigail Amponsah, Air Quality Analyst
Tianchu (Mark) Zhang, Air Quality Analyst
(taking over from Abigail)

Walker Industries

Darren Fry, Project Director

RWDI

Brad Bergeron, Vice President – Industry
Anthony Vanderheyden, Project Manager
Sarah Pellatt, Air Quality Team Leader

GHD

Erika Brown, Environmental Planner
Janet Oswald, Environmental Planner

No.	Items
1.	<p>Existing Conditions and Baseline</p> <ul style="list-style-type: none"> Initial thoughts were presented to the MECP – looking for feedback on proposed work plan). Mixture of modeling and monitoring. Lots of historical data collected over time (Phase 1 EA, ECAs, etc.). Presentation of proposed work plan given by RWDI.
2.	<p>Particulate Matter</p> <ul style="list-style-type: none"> Data on correlation between TSP/PM10/PM2.5 from historical monitoring has already been gathered. The hope is to use the data for the two PM10 stations (A & B) and apply the TSP and PM2.5 ratios to calculate. Background will be upwind, existing conditions would be downwind.
3.	<p>Pause for Questions</p> <p>Abigail: Is the plan to use the existing monitoring data to characterize the fractions including TSP?</p> <p>Brad: Yes, the two PM10 stations have been running for over 10 years. When we did the Phase 1 EA, we also had TSP and PM2.5 samplers at this location.</p> <ul style="list-style-type: none"> The plan is to use 1 years’ worth of PM10 data from Station A and Station B and use the relationship we gathered from the Phase 1 study to calculate TSP and PM2.5.





No.	Items
	<p>Abigail: No major concerns based on the last monitoring report; it makes sense. How are we going to account for different phases based on the monitoring data?</p> <p>Brad: We are talking about baseline/existing conditions now. When we model the future, we are going to consider the landfill phases and moving around.</p> <ul style="list-style-type: none"> • Interested in what is happening now, what may happen in the future, and the change due to the expansion. • When we pick the existing conditions side, we will pick the modelling scenario based on what is occurring on the site now. • Comparing the model to the measurement data to get a sense of how they relate to each other. • Use upwind samples to determine background. <p>Abigail: Happy with the plan.</p>
4.	<p>VOCs</p> <ul style="list-style-type: none"> • Updated LFG composition is to be used. • Flux chamber measurements for some areas (contaminated soils, ponds). Updated measurements for VOCs wanted. • Fenceline: <ul style="list-style-type: none"> ○ Phase 1 has set times for upwind and downwind samples to be collected for VOCs; there is some additional data. ○ For this study, we are looking to take more samples. ○ Modelling: phasing based on existing condition year used for the modelling assessment. ○ Compare modelling to monitoring and background and existing conditions.
5.	<p>Pause for Questions</p> <p>Abigail: VOCs in general looked good from past monitoring reports. Where were the monitoring locations before?</p> <p>Brad: They were never fixed. 24-hour samples were taken based on upwind/downwind, no rain, calm conditions.</p> <ul style="list-style-type: none"> • Now we are looking to sample on a more regular schedule. <p>Abigail: Need to make sure that the locations are reasonable based on the current operations.</p> <p>Brad: Will be mindful of this and will take that into consideration.</p> <p>Mark: Sample at nearby sensitive receptor locations/residences.</p> <p>Brad: This is something that can be considered. We would need to see if there were any willing participants. We can also look at locations on Walker's property that would be representative of residential receptors (i.e., abutting a residential property).</p> <p>Darren: This is something to consider. Walker does own property that abuts onto the residences. Trying to keep a good relationship with the neighbours.</p>
6.	<p>H2S</p> <ul style="list-style-type: none"> • Gas collection data. • Flux chamber sampling for on-site measurements. • Off-site, one continuous monitor in a fixed location: <ul style="list-style-type: none"> ○ For comparison between modelling and measurements.

No.	Items
	<ul style="list-style-type: none"> ○ To understand how the model is predicting compared to what is being seen offsite.
7.	<p>Pause for Questions</p> <p>Abigail: H2S only or other sulphur compounds?</p> <p>Brad: Looking at other compounds too.</p> <p>Abigail:</p> <ul style="list-style-type: none"> • H2S is something they would focus on. We would like to see some data from within the community. • Model was recently updated, combining modelling and monitoring results. • Looking for an opportunity to develop and apply a scaling factor to make sure the model is more representative. We want this to be considered going forward as well as they would be expecting to see this. <p>Brad: Yes, I will take this back to discuss.</p> <p>Darren: Agreed.</p>
8.	<p>Odour</p> <ul style="list-style-type: none"> • Field measurement activity with modelling. • Flux chamber sampling, using historical and taking some new samples. • We will then model.
9.	<p>Pause for Questions</p> <p>Abigail: Odour is an area of focus.</p>
10.	<p>In Conclusion</p> <p>Abigail:</p> <ul style="list-style-type: none"> • No comments on the ToR; happy with it. A thorough review of the site is to be done. It had everything she was hoping to see. • Happy to see that the plan was to update things and not just rely on the Phase 1. • What about reviewing complaint history? <p>Brad: This is something we will be doing.</p> <p>Abigail:</p> <ul style="list-style-type: none"> • Would like to get a grasp on this as Walker has been getting quite a few odour complaints and that has been increasing. Would like to understand what is happening now. • Modelling is one thing, used for compliance, but complaint history and monitoring tells the story in a different way. • If there is an impact, how can we make the odour management more robust? Is there something we can do to help mitigate the odour, especially as we are moving closer to receptors? • What are the complaints? Are they increasing? Are the complaints regarding certain receptors or is it more widespread? How are things changing? <p>Brad:</p> <ul style="list-style-type: none"> • There are various steps as we go through the process, but complaint history will be considered to help to determine upset conditions (that wouldn't be captured in the model) vs more normal operations. • The first side of things is really about establishing the background and existing conditions.



No.	Items
	<ul style="list-style-type: none">• We will look at phasing and where it's going. What are the worst-case phasing and locations from an air quality side of it?• At the back end of the study, we will be looking at enhancing and updating the BMPs for the site.• At the end of the impact assessment, we will be reviewing the change and what provisions will need to be added to the conditions of the EA.• You will see this in the whole package at the end but not at the beginning. <p>Abigail:</p> <ul style="list-style-type: none">• This is recognized but wanted to give an overall picture because Abigail won't be as involved going forward. Wanted to highlight some of the things they'd be looking for.• Wants to make sure all the relevant sources are included, especially for odour. Background sources, cumulative effects.• If we hear of or know of any potential future developments, this should be considered. <p>Brad: If there is zoning that allows a receptor to be there, then we would consider it, but just because there is a proposal, then we wouldn't consider it as there would be pushback.</p> <p>Abigail: If things are coming down the pipe and are more concrete, then consider it. We don't want any surprises to the plan. We want to make sure we are capturing baseline conditions.</p> <p>Darren:</p> <ul style="list-style-type: none">• One of the steps we are taking is to develop a land use planning report and have land use planners looking for any land use changes, etc. This will be incorporated into the assessment.• On the topic of odours, there have been some changes on the site for the better. The RNG facility has been commissioned and has helped with gas. In general, we have had around 60 odour complaints per year for the past couple of years. For 2024, they have 15 thus far. <p>Abigail: Good to know. Trends, etc., are good to share with the stakeholders.</p> <p>Mark: If there is an emergency diesel generator on-site, that should be included in the air report.</p> <p>Abigail: NOx, CO, etc. – doing a full ESDM report – will that make things negligible?</p> <p>Brad: For EA, we can't make anything negligible. We are going to look at combustion byproducts as part of the EA.</p> <ul style="list-style-type: none">• Emergency generators, flares, generators, etc. For EA, we will also look at tailpipe emissions from haul trucks and heavy equipment. <p>Abigail:</p> <ul style="list-style-type: none">• In the later stages of EA, when modelling different phases, we need to make sure that future analysis is sync'd with what would be happening in phase 1 at the same time.• Liked what she saw in the terms of reference. Liked that we are doing a deep dive and updating things. <p>No further questions from RWDI or Walker.</p>

Minutes completed by Katie Allen on December 19, 2024.

Existing Conditions Evaluation

Overview of data collection

- Particulate Matter (PM/PM₁₀/PM_{2.5})
- Volatile Organic Compounds
- Hydrogen Sulphide
- Odour



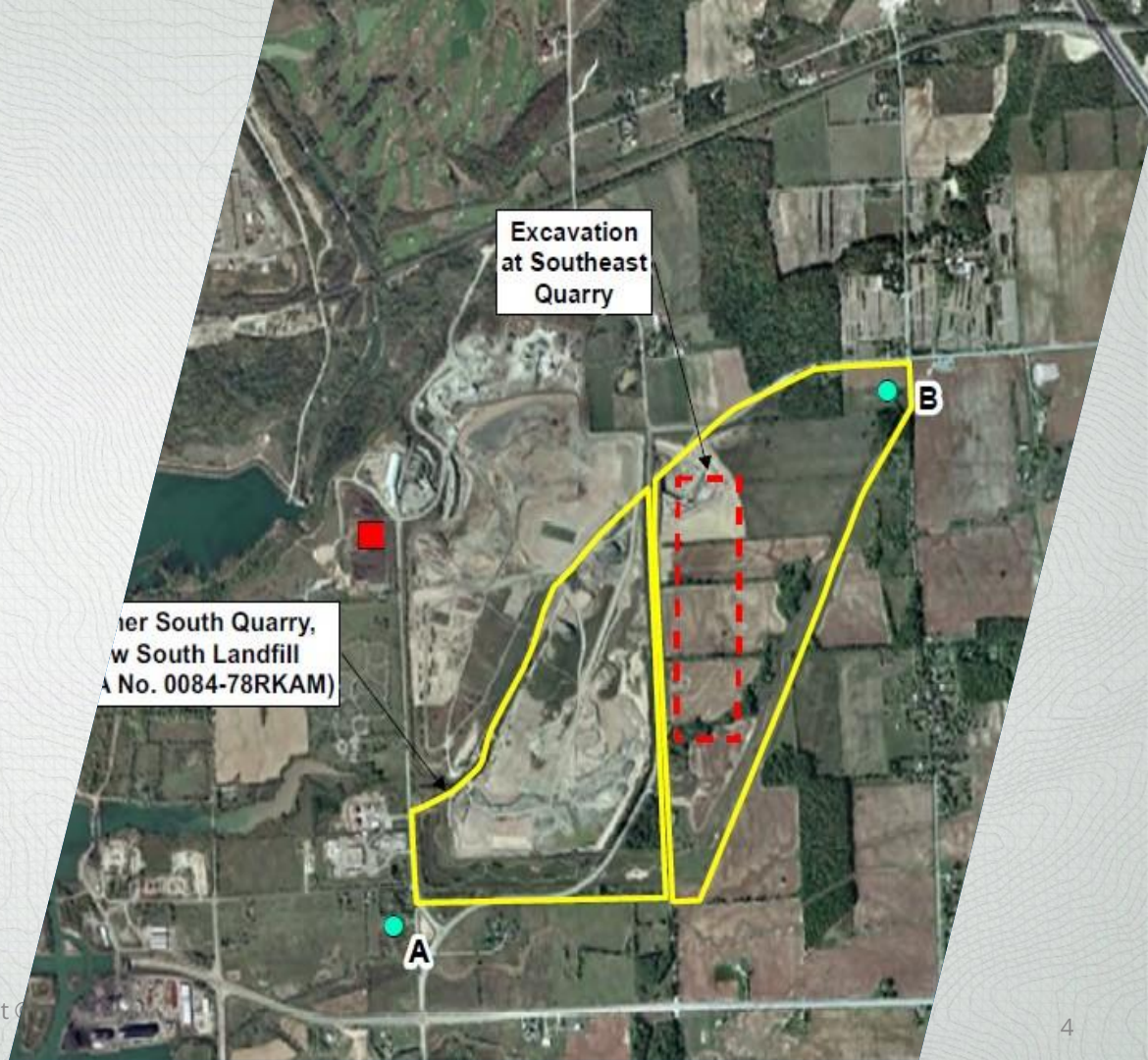
Particulate Matter (PM/PM₁₀/PM_{2.5})

- **PM10 sampling has occurred annually for more than 10 years at 2 locations**
- **For the South Landfill Phase 1 EA, co-located samples of PM and PM2.5 were taken at both locations**
- **For measurement data, we propose using latest 1-year of PM10 data and applying historical PM and PM2.5 fractions to derive data for all fractions of dust.**



Particulate Matter (PM/PM₁₀/PM_{2.5})

- Site would also be modelled using AERMOD to evaluate existing conditions. The modelling would take into consideration current operations at the site
- On-site field measurements would include bulk samples for particle size determination from unpaved and paved roads, as well as soils.
- Data would be used to include deposition and depletion of dust from the modelling



Volatile Organic Compounds (VOCs)

- **On-site field measurements would include:**
 - recent landfill gas composition samples
 - Flux chamber measurements from areas such as contaminated soils and ponds



Volatile Organic Compounds (VOCs)

- **Fenceline field measurements would include:**
 - VOC samples on a 6-day cycle from May to September and 12-day cycle for periods outside
 - VOC sampling would include two (2) locations located at dominant upwind and downwind locations from the site
 - Two (2) duplicate samples would be taken over the period.



Volatile Organic Compounds (VOCs)

- **Site would also be modelled using AERMOD to evaluate existing conditions. The modelling would take into consideration current operations at the site**



Hydrogen Sulphide

- **On-site field measurements would include:**
 - recent landfill gas composition samples
 - Flux chamber measurements from areas such as contaminated soils, ponds and interim and final cover areas



Hydrogen Sulphide

- **Fenceline field measurements would include:**
 - One (1) location for continuous monitoring for a 3-month period from May through July



Hydrogen Sulphide

- **Site would also be modelled using AERMOD to evaluate existing conditions. The modelling would take into consideration current operations at the site**



Odour

- **On-site field measurements would include:**
 - Review of data collected over last few years
 - Flux chamber measurement of:
 - Working Face
 - Interim cover areas
 - Final Cover areas
 - Contaminated soils
 - Ponds



Odours

- **Site would be modelled using AERMOD to evaluate existing conditions. The modelling would take into consideration current operations at the site**





Questions

Meeting notes

23 January 2025

Project name	Walker Sunrise	Project no.	12567140
Subject	Walker South Landfill Phase 2 EA	Location	Virtual
Date / Time	December 18, 2024		
Attendees inc. company	Erika Brown (GHD) Nancy Rutherford (OMAFRA)		
Objective	Notice of Commencement Follow-up		

Notes / Questions raised	Response / Follow-up
MNR has flagged to OMAFRA that the Project land is under an ARA license and its current final use/rehabilitation is classified as Agriculture.	Noted, MNR also provided these comments to GHD during the ToR phase.
There is no mechanism for OMAFRA to follow through on the ARA license commitments for Agriculture.	Noted.
When will the ARA license be surrendered?	GHD to send a follow-up regarding the Proponent's response to MNR comments.
Under the new Provincial Policy Statement, there are requirements for the completion of an Agricultural Impact Assessment (AIA) for non-agriculture uses in prime agricultural areas. However, the EA studies may cover these requirements.	Noted, GHD will confirm this further.
The Draft Agriculture Impact Assessment Guidelines and Checklist from The Growth Plan for the Greater Golden Horseshoe may apply to the EA.	OMAFRA to provide these documents to GHD.

Attachments: Meeting follow-up email regarding MNR comments, dated January 8, 2025

This document is in draft form. The contents, including any opinions, conclusions or recommendations contained in, or which may be implied from, this draft document must not be relied upon. GHD reserves the right, at any time, without notice, to modify or retract any part or all of the draft document. To the maximum extent permitted by law, GHD disclaims any responsibility or liability arising from or in connection with this draft document.

From: Erika Brown
Sent: Wednesday, 8 January 2025 11:39 AM
To: Rutherford, Nancy (OMAFRA)
Cc: Janet Oswald; Darren Fry; South Landfill Phase 2
Subject: RE: Walker South Landfill EA

Follow Up Flag: Follow up
Flag Status: Flagged

CompleteRepository: 12567140
Description: Walker Sunrise
JobNo: 12567140
OperatingCentre: 6626
RepoEmail: 12567140@ghd.com
RepoType: Project

Good morning Nancy,

Happy New Year!

It was a pleasure speaking with you on December 18. As discussed, please find below the MNR comment regarding site plan amendment and licence surrender under the *Aggregate Resources Act* raised during the Terms of Reference phase and the response provided by Walker.

Review Agency	Contact Name	Comment Date	Comment	Response
Ministry of Natural Resources	Christa Rigney	2024-04-12	<p>We realize you are in the early planning stages but be advised that the Aggregate Resources Act approval will require a site plan amendment and a surrender. The project for the South Landfill Phase 2 EA encompasses most of aggregate licence 11175 issued to Walker Aggregates Inc. This licence is for a Class A Quarry. Since MNR does not regulate waste disposal sites on private land, a surrender of the licence would be most appropriate to facilitate this request. In order to surrender the licence the Act requires the site be rehabilitated in accordance with the site plan. The site plan requires the site to be rehabilitated to an agricultural land use. This will require a site plan amendment process to occur to change the rehabilitation plan. The process would occur in the following order:</p> <ul style="list-style-type: none"> - Site plan amendment: The stage of the process which the waste disposal site proposal is at under other required approvals/processes (e.g. EA or ECA's) would be considered during this process. Further discussions will be required to better understand the project and outline the process. - Licence Surrender. <p>The aggregate approval review processes can occur concurrently. We also encourage you to review your site plan (to rehabilitate to agricultural land use) in relation to the proposal to convert to a landfill.</p>	<p>Comment noted. Walker will consult with the MNR, MECP, the City of Niagara Falls and other agencies as required on a proposed sequence involving EAA, ARA, EPA and local approvals (i.e., Official Plan and By Law amendments). This sequence will be included in the Other Approvals section of the Final EA Report.</p>

From: [Darren Fry](#)
To: [Deneault, Stephen \(MECP\)](#)
Cc: [Janet Oswald](#); [Sarah Pellatt](#); [Anthony Vanderheyden](#)
Subject: Walker, Notes from MECP AQ H2S Monitoring Discussion
Date: Wednesday, 2 April 2025 10:25:42 AM
Attachments: [20250324 RWDI 2402272 MeetingMinutes WalkersNiagaraSouthLandfill.pdf](#)

Good morning Stephen,

Attached are notes prepared by RWDI from our discussion with your Air Quality specialist. Can you distribute to Mark as we don't have his email.

Also, if there is anything you would like to add or correct from the notes, please let me know.

Regards,
Darren

Darren Fry, A.Sc.T
Project Director
Environmental Division

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MINUTES OF MEETING

DATE: 2025-03-24

PROJECT/SUBJECT: Walker South Landfill Phase 2 EA
Meeting with the Ministry of Environment, Conservation and Parks (MECP) Regarding H2S

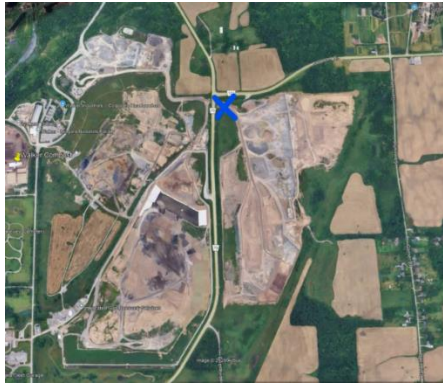
LOCATION: Virtual Microsoft Teams Meeting

ATTENDEES:

MECP
Stephen Denault, Project Officer
Tianchu (Mark) Zhang, Air Quality Analyst

Walker Industries
Darren Fry, Project Director

RWDI
Brad Bergeron, Vice President – Industry
Anthony Vanderheyden, Project Manager
Sarah Pellatt, Air Quality Team Leader

No.	Items
1.	<p>Agenda</p> <p>Darren: Last time this group met, we had discussed determining an H2S location, as well as the monitoring period. Anything we want to add to today's call?</p> <p>Mark: Nothing to add.</p>
2.	<p>H2S Monitoring Plan</p> <p>Sarah: Landfilling is occurring in Phase 1 of the South Landfill right now. RWDI conducted H2S monitoring a few years ago directly north of Phase 1. This location would be our preference for monitoring for the Phase 2 EA (see below image). It is relatively collocated to existing landfill operations and would provide an apples-to-apples comparison to previous monitoring data. We can then scale results out to receptors.</p> 





No.	Items
	<p>Sarah: Our proposed monitoring period is three months of monitoring from July through September.</p>
3.	<p><i>Pause for Questions</i></p> <p>Mark: Do you have any preliminary modelling for H2S?</p> <p>Brad: Not yet but has been modelled previously.</p> <p>Mark: Would this location be worst-case for TRS?</p> <p>Brad: We have a dominant southwest wind in summer, when worst-case conditions are predicted. The location is dominantly downwind of landfilling activities.</p> <p>Sarah: Does the MECP have any comments on the location?</p> <p>Stephen: Defers to Mark.</p> <p>Brad: We are at a critical time with monitoring coming up. We want to make sure we are aligned with the MECP.</p> <p>Mark: No concerns with this monitoring location.</p> <p>Brad: And the proposed monitoring period?</p> <p>Mark: Agree with the proposed monitoring period of July through September. What about monitoring for methane?</p> <p>Brad: Walker collects landfill gas data and puts into LandGem. We will use this data as an input to our air emission model.</p> <p>Mark: Happy with this. Will the H2S monitoring equipment used be the same as previous monitoring?</p> <p>Brad: Yes, real-time data over a 3-month period.</p> <p>Mark: Happy with this.</p> <p>No further questions from Walker, the MECP, or RWDI.</p>

Minutes completed by Katie Allen April 1, 2025.



**Walker South Landfill Phase 2 EA
Proposed Liner Design
Consultation Meeting Minutes**

Project No.: CA0037248.1905
Date: March 25, 2025
Time: 1:00 PM EST - 2:00 PM
Location: Virtual Platform - MS Teams

Meeting Chair: Darren Fry – Project Director, Walker

Attendees: Stephen Deneault – Project Officer, MECP
Gloria Suarez – Hydrogeologist, MECP
Rick Li – Senior Reviewer, Waste Projects, MECP
Darren Fry – Project Director, Walker
Frank Barone – Landfill Design, WSP
Dan Mohr – Groundwater, WSP
Leigh Davis – Groundwater, WSP
Blair Shoniker – Project Advisor, GHD
Erika Brown – Project Manager, GHD

Agenda Items	
1.	Introductions
2.	Status of South Landfill Phase 2 EA
3.	South Landfill Phase 2 – site setting
4.	Overview of proposed alternative liner design for South Landfill Phase 2
5.	Liner performance modelling
6.	Conclusion

Meeting Notes

- Introductions of the Walker, MECP, GHD, and WSP individuals on the call.
- Verbal update on the status of the South Landfill Phase 2 EA.
- Presentation of the South Landfill Phase 2 site setting.
 - Reviewed key engineered features of the existing South Landfill Phase 1
 - Reviewed the groundwater setting within the study area, showing inward gradients toward the South Landfill Phase 1 and proposed Phase 2, within both the Lockport and Rochester bedrock Formations, and showing how groundwater in the shallow Rochester bedrock flows beneath the engineered sites toward the WEG groundwater collection system.
 - **Gloria** noted that she will be looking for additional data to understand groundwater conditions northeast of the South Landfill Phase 2.
 - WSP noted that additional monitoring wells have been installed around the South Landfill Phase 2 site as part of the EA, in particular to the north and northeast of the study area.
- Presentation of proposed alternative to Reg. 232/98 double composite liner design for the South Landfill Phase 2
 - **Frank** presented proposed alternative double composite liner design incorporating GCL, including advantages of GCL over compacted clay liner, and examples of GCL composite liner applications at landfills in Ontario.
 - **Rick** noted that although GCL tends to perform better than clay, the proponent will need to ensure the GCL material is chemically compatible with MSW leachate.
 - The design team will be drawing on research from late 1990's / early 2000's that shows that GCL is chemically compatible with MSW leachate. The research shows that under confining stress, the sodium bentonite component of the GCL is "self-healing" of any chemically induced changes to its micro-fabric on exposure to MSW leachate. No further testing on this is planned.
- Discussion on liner performance modelling
 - **Frank** reviewed the approach to demonstrating equivalent or better performance to Reg. 232/98 Double Composite Liner through contaminant transport modelling using POLLUTE for Reg. 232/98 key leachate parameters and comparison of predicted contaminant loadings exiting the base of the attenuation layer.
 - **Rick** noted need to consider adsorption capacity provided by clay layer.
 - The modelling would be carried out for both the generic double composite liner design and a similar site specific liner design which replaces the primary clay layer with a GCL for comparison to show equivalent or better performance to the generic liner design.
 - **Gloria** indicated the focus of her review will be the contaminant loadings entering the flow system below the liner. Gloria emphasized the importance of good quality data for the model input and quality of calibration.
 - WSP noted their practice of routine manual calculation checks, such as mass balance, to verify the validity of model results.

Meeting Notes

- **Rick** noted that it is up to the proponent to select the Reg. 232/98 generic liner design or the equivalent site-specific liner design as presented. It is the proponent's responsibility, however, to demonstrate that the proposed site-specific liner-design will provide the protection required to comply with Reasonable Use Criteria for groundwater quality in the underlying bedrock groundwater flow system.
- If the proponent proceeds with the site-specific design and must demonstrate compliance with Reasonable Use Criteria, modelling of both the site-specific and generic liner designs for comparison will not be undertaken.

Meeting Summary

Meeting: Niagara-on-the-Lake

Date: April 9, 2025

Location: In-Person Meeting

Time: 10:15 am – 12:15 pm

Attendees:

Niagara-on-the-Lake

- Kassie Burns, Climate Change Coordinator
- John Federici, Senior Planner
- Kirsten McCauley, Director of Community and Development Services

Walker

- Darren Fry, Project Director – Walker

Meeting Materials:

Purpose of Meeting

To provide the Town of Niagara on the Lake an update on the South Landfill Phase 2 EA, Tour the Walker Niagara Resource Management Campus.

Summary of Discussion

- Tour of Walker’s Niagara Resource Recovery Campus and the proposed South Landfill Phase 2 footprint
- Walker provided an update on the South Landfill Phase 2 EA, specifically the Alternative Methods and existing conditions.
- Discussion occurred about the Leachate Treatment and Draft FSR results



Meeting Summary

Subject/Client:	Walker South Landfill Phase 2 EA – MECP Update Meeting	Ref. No.	12567140
From:	Erika Brown	Tel:	416-866-2351
Date/Time:	April 24, 2025, 1:00 PM – 2:00 PM		

Attendees

Ministry of the Environment, Conservation, and Parks

- Andrew Evers, Manager, Environmental Assessment Services
- Stephen Deneault, Project Officer, Environmental Assessment Branch

Walker

- Darren Fry, Project Director

GHD

- Erika Brown, Waste & Environmental Planner, Project Manager
- Janet Oswald, Environmental Planner, Project Coordinator

Topics Discussed

1. Key Meeting Objectives
2. Consultation Process Update
3. MECP Review Progress Update
4. Role of Recent Legislative Changes

Summary (*Action items in italics*)

Action

Summary (<i>Action items in italics</i>)	Action
Walker provided a progress update on the Alternative Methods Report	None
Walker noted that the public has generally shown low interest in the project, with the feedback received ranging from neutral to positive. Walker will consider one-on-one meetings with nearby property owners as to receive additional responses. Some feedback has been received through the Environmental Assessment Advisory Committee, and changes made to engagement material as a result. The Niagara Escarpment Commission has provided feedback on the Visual Existing Conditions Report.	None
MECP provided an update on their internal discipline-specific reviews. While some feedback has been received, an extension to May 8, 2025 will be required for other reviewers. Walker confirmed the extension of the review.	None
<i>MECP to submit comments on the Existing Conditions Reports by May 8, 2025.</i>	MECP
Walker provided an update on Indigenous community engagement to date. Haudenosaunee Development Institute (HDI) has participated in the ecological fieldwork. Additional field monitoring may be taking part of the archaeological field investigations in the summer.	None
MECP noted that feedback from the discipline reviewer regarding RWDI's request to delay air quality monitoring will be sent out later the same day.	None
<i>MECP to provide a response on RWDI's request to delay air quality monitoring by April 24, 2025.</i>	MECP
MECP and Walker discussed any potential implications on the EA regarding the newly released Bill 5, <i>Protect Ontario by Unleashing our Economy Act</i> . MECP noted that any environmental assessment related implications of the Bill were largely project-specific and are not expected to impact the South Landfill Phase 2 Process.	None
Walker provided an update on the Functional Servicing Report, which has concluded that there is both quantity and quality capacity within the existing sewage system to accommodate for the landfill expansion.	None

May 6, 2025

Subject/Client:	Walker South Landfill Phase 2 EA – City of Niagara Falls EA Meeting #1	Ref. No.	12567140
From:	Erika Brown	Tel:	416 866-2351
Date/Time:	April 29, 2025, 11:00 AM		

Attendees

City of Niagara Falls

- Tarra O'Toole, Senior Manager of Current Development
- Signe Hansen, Director of Planning
- Kira Dolch, General Manager of Planning, Building and Development

Walker

- Darren Fry, Project Director

GHD

- Erika Brown, Waste & Environmental Planner, Project Manager

Topics Discussed

1. Introductions & Key Meeting Objectives
2. Overview of South Landfill Phase 2 Environmental Assessment (EA) and Process Update
 - a. Existing conditions
 - b. Alternative Methods
3. Overview of Public Event #1
4. Next Steps

Summary (*Action items in italics*)

Action

Attendees were welcomed, introductions made, and agenda and objectives presented.	None
Walker provided a project overview including the background on Walker’s Resource Management Campus, Phase 2 Development of the South Landfill, and the Project Location.	None
GHD provided an overview of the EA process and noted the commencement of the EA on October 17, 2024.	None
GHD provided information on the purpose of establishing Existing Conditions and confirmed that Preliminary Draft Existing Conditions Reports were posted to the Project Website on March 6, 2025.	None
GHD defined the Existing Conditions Study Areas for the discipline.	None
GHD provided information on the Consideration of the Natural Environment, Built Environment, and Social, Economic, and Cultural Environment from each relevant discipline’s perspective.	None
The Alternative Methods will be described in the Conceptual Design Report and will include alternative landfill footprint configurations. Existing landfill gas and leachate treatment at the South Landfill will be reviewed as part of the South Landfill Phase 2 EA and may form additional Alternative Methods for evaluation.	None
GHD outlined the South Landfill Phase 2 Alternative Options for Site Configurations: Option A – Same height and slope as current South Landfill Phase 1 Option B – Maximized Agricultural end use option Option C – Average agricultural end use option	None
GHD outlined the South Landfill Phase 2 Alternative Options for Municipal Wastewater Treatment System: Option A – Continued & Expanded Use of the Municipal Wastewater Treatment System Option B – Development of an On-Sie Wastewater Treatment Plan	None

Walker provided an overview of Public Event #1	None
Walker provided description of Next Steps including completion of the Three Step Comparative Evaluation of Alternative Methods, Impact Assessment and Environmental Assessment Report, and Consultation.	
Walker provided a high-level schedule for the next 12 months, highlighting the upcoming Public Event #2.	None
Questions and Comments	
Attendees expressed interest in a tour of the Campus. <i>Walker to organize a Campus tour.</i>	Walker
Kira Dolch asked about the plan for Phase 1 in 5-7 years, once closed, and construction start timing. <ul style="list-style-type: none"> – A Closure Plan is prepared not later than the date 90 per cent of the total waste disposal volume is reached or two years before the anticipated date of closure – Consultation on end use would occur two years out from submitting Closure Plan – Currently considering agriculture and passive recreation. 	None
Kira Dolch asked when Phase 2 was first contemplated. <ul style="list-style-type: none"> – Phase 2 proposal came about based on continuation of need for landfill capacity. 	None
Kira Dolch asked about odour receptors in the Northwest Secondary Plan area and noted the Secondary Plan is anticipated to be in place by end of the year. <ul style="list-style-type: none"> – There are no proposed odour receptors within the Northwest Secondary Plan area. – <i>Will discuss the nearest proposed odour receptor(s) with the Air Quality consultant. A Common Receptor is proposed at the western boundary of the Northwest Secondary Plan area and will be confirmed through discussion with the Air Quality consultant and other members of the technical team.</i> 	Walker
Signe Hansen asked about consultation with local environmental groups, such as PALS, who have been actively engaged in Northwest Secondary Plan consultation. <ul style="list-style-type: none"> – Walker engaged with PALS during the ToR phase. PALS was specifically interested in invasive species. – Key interests include the current quarry rehabilitation plans and agricultural end use for South Landfill Phase 2. – Walker has also been engaging with specific interest holders and Indigenous communities, including participation of ecological and archaeological monitors. 	None
It was noted there will be a municipal election in 2026.	None
Signe Hansen asked about the composition of the Government Review Team (GRT). <ul style="list-style-type: none"> – Walker has been liaising individually with local municipalities and jointly with the broader GRT, which includes local schoolboards, colleges, Conservation Authority, Seaway, provincial agencies such as MECP, MNRF, NEC, MTO, Ministry of Energy, as well as some federal agencies. There are currently 34 members of the GRT. 	None
Kira Dolch asked about greenhouses as a consideration for agricultural end use as well as users for renewable natural gas produced at Walker's campus and noted opportunity for southern portion of escarpment. <ul style="list-style-type: none"> – Greenhouses have been considered in the broader sense; though more so in the buffer lands. – Local renewable natural gas source beneficial to attracting development to the region, such as data centres. 	None
Signe Hansen asked if Project team is in contact with Chris Millar (City of Niagara Falls, Senior Project Manager – Secondary Plans) on Northwest Secondary Plan. <ul style="list-style-type: none"> – <i>Project team will stay in contact.</i> 	Walker
Signe Hansen asked if Project team is in contact with local municipal works departments. <ul style="list-style-type: none"> – The operations team is in contact with the Region's Municipal Works department regarding leachate treatment, proposed tunnel, and waste management. – <i>City will consider bringing Municipal Works into the engagement regarding potential impact to traffic.</i> 	City

Attachments: Meeting Presentation

Attachments

Attachment 1

Meeting Presentation



→ March 2025

Walker South Landfill Phase 2 EA GRT Update

Welcome

1

Project Team & Update Objectives

2

Project Team

Proponent: Walker Environmental Group Inc. (Walker)

- Project Director: Darren Fry
- Project Support Specialist: Leticia Koole

Primary Consultant: GHD

- Project Advisor: Blair Shoniker
- Project Manager: Erika Brown
- Project Coordinator: Janet Oswald
- Project Support: Emma Simioni and Anna Zarina

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Update Objectives

- Provide a Project & Process Overview
- Present the Alternative Methods
- Share feedback received from Public Event #1
- Outline next steps and the role of GRT
- Invite feedback on Draft Preliminary Existing Conditions and Alternative Methods

South Landfill Phase 2 EA – GRT Update March 2025 | GHD

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Overview of South Landfill Phase 2 EA and Process Update

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Walker's Resource Management Campus

More than a landfill
A dynamic operation that efficiently manages waste and sustainably recovers resources.

Campus Operations Include:

- A** Residential Drop-off
- B** Niagara Compost Facility
- C** Resource Recovery Area
- D** N-Viro® Biosolids Facility
- E** Aggregates Recycling & Processing Area
- F** Agricultural Rehabilitation
- G** Landfill Gas to Energy Facility
- H** South Landfill

South Landfill Phase 2

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South Landfill Residual Waste Management



South Landfill Phase 2



South Landfill – Phase 1
Safe & Reliable waste management



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South Landfill - Phase 2

Continuing to provide essential infrastructure for Niagara by developing the next phase of the South Landfill

- Located immediately east of the current landfill operations
- Key operational aspects **not expected to change (from Phase 1)**
 - Annual/Daily waste receipt
 - Type of waste received
 - Operational life
- Existing waste management infrastructure, such as the **site entrance will not change**








South Landfill Phase 2



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Project Location

Key Facility Information

-  1.1 million tonnes of waste per year
-  18 million m³ total capacity
-  20 years of safe disposal
-  ~ 500 jobs supported
-  Renewable energy to power the equivalent of 10,000 homes

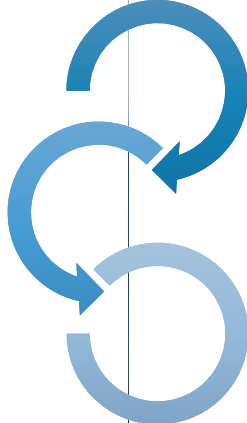
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Approvals Process Overview




✓
✓
✓
✓

Environmental Protection Act



Environmental Assessment Act

Local Approvals

South Landfill Phase 2 

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Environmental Assessment

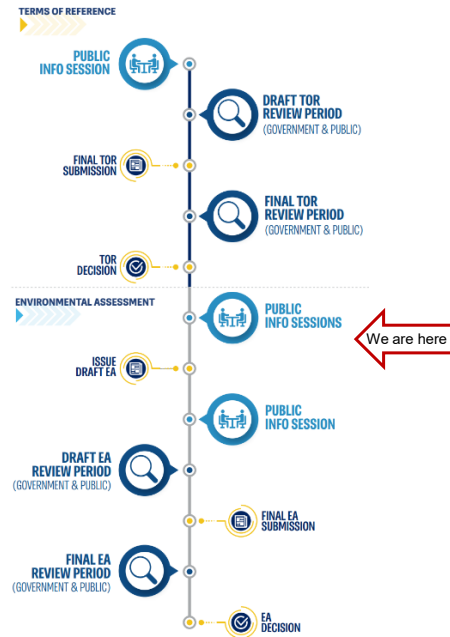
A Two-Step Planning & Decision-Making Process

Step 1 – Terms of Reference (ToR) [Complete]

- Serves as a roadmap for what will be studied in the Environmental Assessment (EA) & outlines the anticipated public consultation program

Step 2 – EA [In Progress]

- Scientific studies identifying the effects of the project & proposed mitigation measures



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Environmental Assessment

Notice of Commencement for the EA

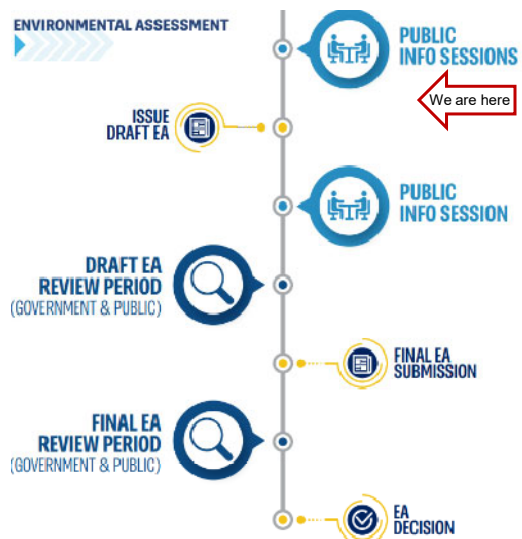
- Issued on October 17, 2024, initiating the EA phase of the project.

Existing Conditions

- Studies and reporting to establish conditions in and around the project location.

Conceptual Design Report

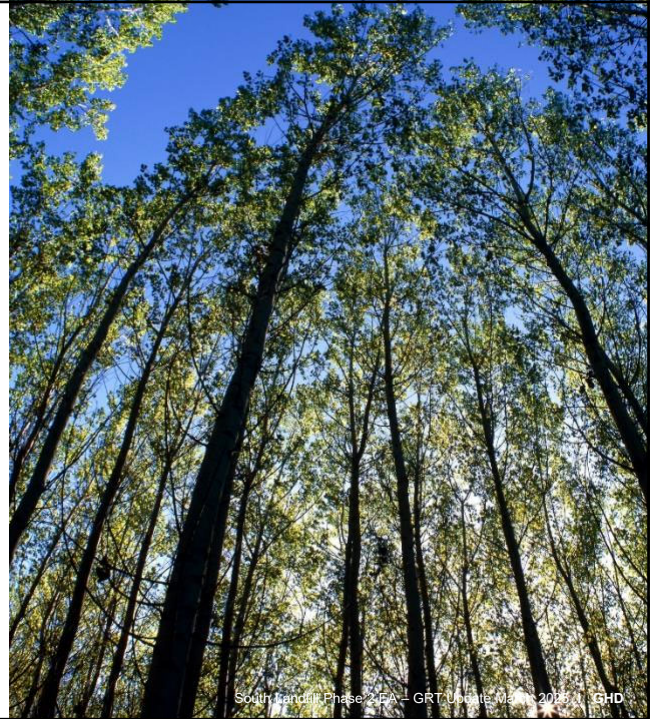
- Alternative landfill footprint configurations are being developed to a conceptual level of detail.
- These will form the Alternative Methods for comparative evaluation in the EA.



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Existing Conditions

- Establishes the existing environmental conditions within the study area so that potential effects of the alternatives can be identified and assessed.
- Builds on the work completed for the Preliminary Description of the Environment in the ToR.
- Guided by the Work Plans included in the approved ToR.
- Further detailed information will be collected as part of the impact assessment of the preferred method.
- Preliminary Draft Existing Conditions Reports were posted to the Project Website on **March 6, 2025**



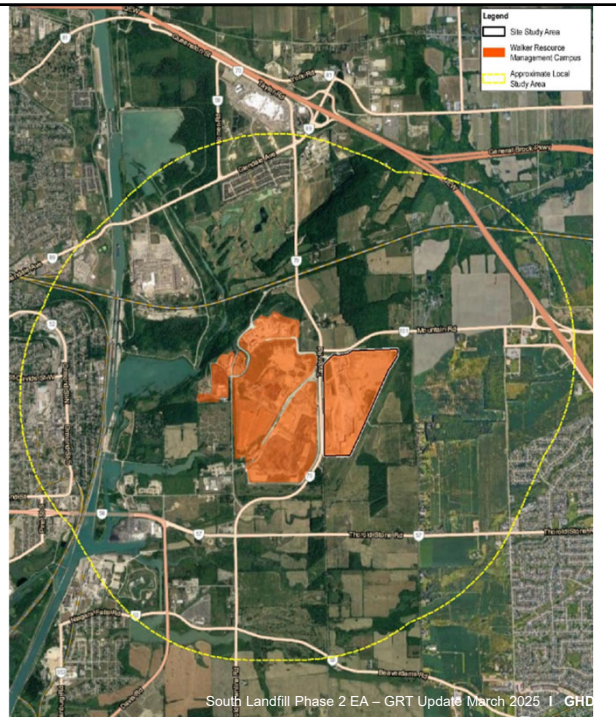
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Existing Conditions Study Areas

Local Study Area	Discipline
1 km radius of Site Study Area	Ecology, Air Quality, Noise, Land Use (also includes Glendale and Northwest Secondary Plan Areas), Heritage, Archaeology
1 km radius of Walker Campus	Geology and Hydrogeology (aligned with the Lockport Scarp)
1.2 km radius of Walker Campus	Surface Water Resources
2 km radius of Walker Campus	Visual, Social Environment
Nearest major intersections	Transportation
Niagara Falls, Niagara-on-the-Lake, St. Catharines, Thorold	Economic Environment

Additional Regional Study Areas defined for: Geology and Hydrogeology, Surface Water Resources, Air Quality, Noise, Economic and Social Environments



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Considering the Natural Environment



Geology & Hydrogeology

- Effect on groundwater quality
- Effect on groundwater flow

Surface Water Resources

- Effect on surface water quality
- Effect on surface water quantity

Atmospheric Environment

- Effect of air quality on off-site receptors
- Effect of odours on off-site receptors
- Effect of noise on off-site receptors

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Considering the Natural Environment



Terrestrial & Aquatic Environment

- Effect on terrestrial ecosystems
- Effect on aquatic ecosystems
- Effect on culturally significant species to Indigenous peoples, and rare (vulnerable), threatened or endangered species or their habitat
- Effect on wetlands
- Effect on wildlife habitat, populations, corridors or movement
- Effect on fish or their habitat, spawning, movement or environmental conditions
- Effect on locally important or valued ecosystems or vegetation

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Considering the Built Environment



Land Use

- Effect on existing and proposed planned future land uses and associated infrastructure

Visual

- Effect on views of the facility

Agriculture, soils and mining

- Effects on existing Agricultural Land Base
- Effects on Agri-Food Network

Transportation

- Effect on traffic
- Road Safety and Geometry

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Considering the Social, Economic and Cultural Environment



Social Environment

- Displacement of Residents from Houses
- Disruption to Use and Enjoyment of Residential Properties
- Disruption to Use and Enjoyment of Public Facilities and Institutions
- Loss/disruption of recreational resources
- Changes to Community Character
- Changes to Community Cohesion

Economic Environment

- Effect on Local Economy
- Effect on Real Estate
- Effect on Public Finance
- Cost of Services

Cultural Heritage Resources

- Effect on archaeological resources and areas of archaeological potential
- Effect on known or potential built heritage resources and cultural heritage landscapes

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Alternative Methods & Conceptual Design Report

Alternative Methods

- Describes the different ways of doing/ achieving the same activity.
- Alternative Methods included as part of this EA:
 - Site configuration (e.g., footprint dimensions, height, contours, side slopes, etc.)
 - Landfill gas collection system
 - Leachate treatment system

Conceptual Design Report

- Conceptual level of design, reflecting regulatory requirements (i.e., O. Reg. 232/98) & operational aspects of Walker's Campus (e.g., required on-site infrastructure).
- Allows the technical team to assess the potential environmental effects of the Alternative Methods & forms the basis of the comparative analysis.

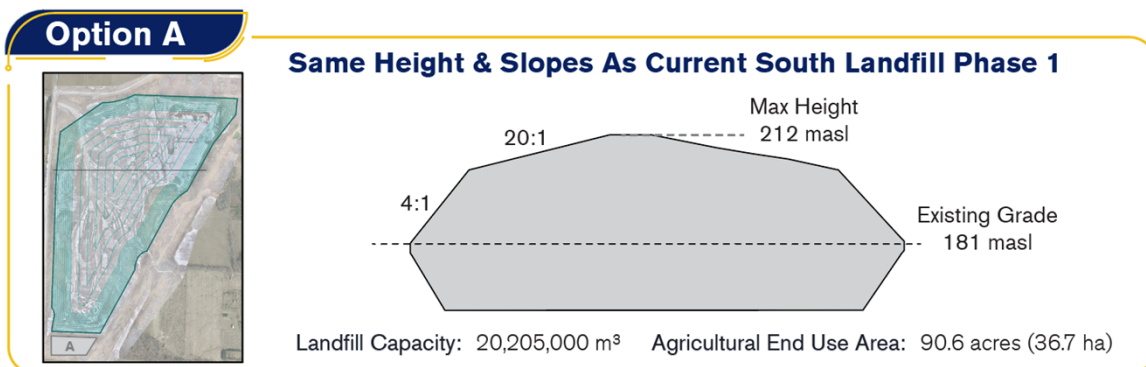
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Option A

Same height and slope as current South Landfill Phase 1



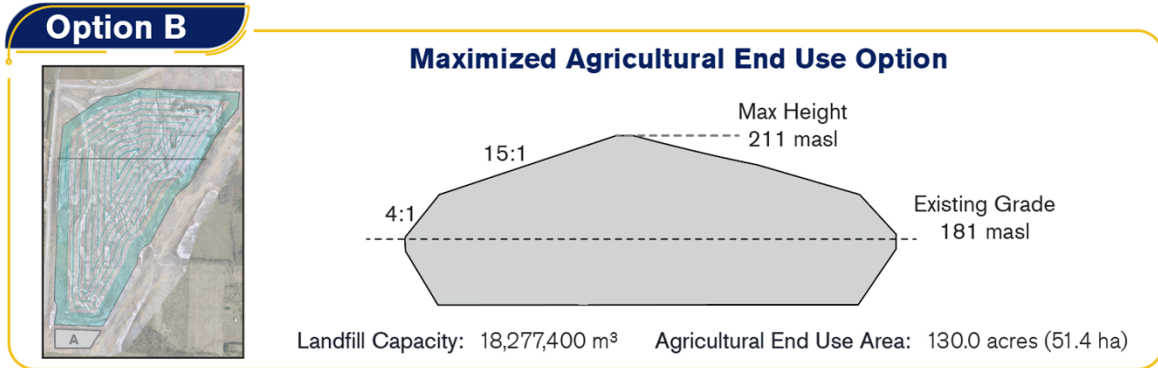
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Option B

Maximized agricultural end use option



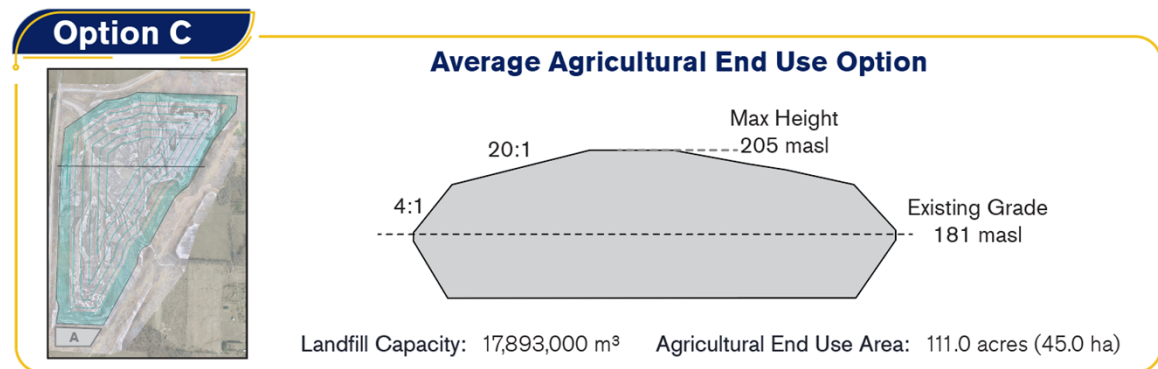
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Option C

Average agricultural end use option



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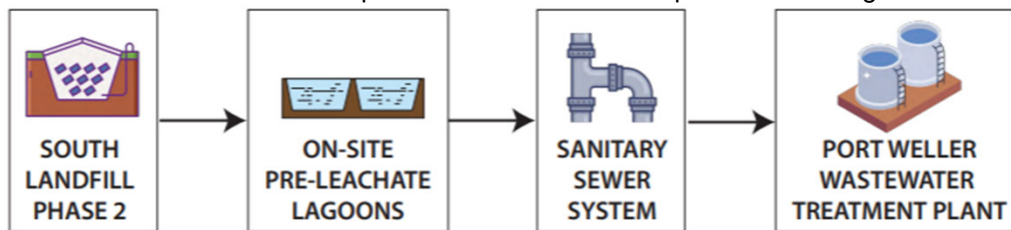
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Option A

Continued & Expanded Use of the Municipal Wastewater Treatment System

- Building upon the pre-existing leachate management system but would include the necessary expansion of the system capacity (maximum of 104,500 m³)
- The expansion would include:
 - A leachate sump, including a pump equipped with the needed metering equipment and controls for monitoring and contingency
 - A 3rd on-site lagoon for aeration and eventual discharge
 - An additional force main to transport the leachate to a new pre-treatment lagoon



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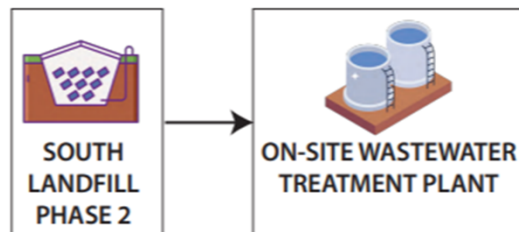
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Option B

Development of an On-Site Wastewater Treatment Plant

- Option B consists of developing an on-site wastewater treatment plant located within the Campus boundary
- Feasibility/municipal system capacity assessment of this option is currently underway



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Overview of Public Event #1

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Public Event #1

- March 18, 2025, 5-8 pm at Club Italia in Niagara Falls
- Advertised via mailouts, courtesy calls, notice in the local newspapers, and the project website
- Run in open house /information station style, to enable one-on-one conversations and small group discussions
 - 14 attendees
- Virtual component was available March 6-21
- Feedback from event
 - Neutral to positive
 - Questions around study area, process, leachate options, agricultural end use
 - Landfill Configuration Option B preferred
 - Both leachate options were selected

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Next Steps

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Comparative Evaluation of Alternative Methods

A three-step process:

<h3>01</h3>	<h3>02</h3>	<h3>03</h3>
<p>Assessment of alternative methods, using criteria & indicators grouped into the five environmental components: natural, built, social, economic and cultural</p>	<p>Comparative evaluation of the Alternative Methods & selection of the Recommended Method</p>	<p>Identification of the Preferred Method following consultation with review agencies during <u>GRT meeting #3</u>, Indigenous communities & the public during <u>Public Event #2</u></p>

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South Landfill Phase 2 EA – GRT Update March 2025 | GHD

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Impact Assessment & Environmental Assessment Report

Impact Assessment

- Facility Characteristics Report – further developing Conceptual Design based on Preferred Method.
- Confirmatory fieldwork, as required.
- Detailed Impact Assessment Reports (including assessment of cumulative impacts & climate change considerations).

Environmental Assessment Report

- Must be prepared in accordance with the approved ToR.
- **Draft EA Report** – released for public, Indigenous community and government review & comment.
- **Final EA Report** – formally submitted to the Minister for approval and subject to public, Indigenous community and government review & comment.
- Note: contributing reports will form appendices of the EA report.

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Consultation

Consulting During the EA

Consultation Methods



Website

A dedicated project website is available online.
southlandfillphase2.com



Email

A dedicated project email has been created.
info@southlandfillphase2.com



Phone

A toll-free phone line for questions related to the EA is available.
1-866-699-9425



Events

Public information sessions, open houses, Advisory Committee meetings and stakeholder meetings.

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Schedule Review

↳ Upcoming Dates

Late Spring 2025

- **Public Event #2 & GRT EA Meeting #3** to present Comparative Evaluation of Alternatives and Recommended Method

Summer 2025


- Prepare Detailed Design of Preferred Alternative
- Commence Detailed Impact Assessment of the Preferred Method

Fall 2025 & Winter 2026

- Prepare and consult on Draft EA

Please reach out with any questions or comments to:

<p>Darren Fry, Walker Email: Dfry@walkerind.com Office: 1-866-699-9425</p>	<p>Erika Brown, GHD Email: Erika.Brown@GHD.com Office: 416 866 2351</p>
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* Thank You

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Meeting minutes

External

30 July 2025

Project name	Walker Sunrise	From	Janet Oswald
Subject	Walker South Landfill Phase 2	Tel / email address	416-866-2354 / janet.oswald@ghd.com
Date / Time	July 22, 2025 / 1:00PM	Project no.	12567401
Attendees inc. company	Andrew Evers, MECP Stephen Deneault, MECP Darren Fry, Walker Blair Shoniker, GHD Erika Brown, GHD Janet Oswald, GHD	Apologies inc. company	
Copy to		Location	Virtual
Objective	Provide project update and discuss EA/EPA review timing and coordination		

Minutes	Action	To be actioned by
<p>Darren provided an update on project status including:</p> <ul style="list-style-type: none"> – The recommended methods – Overview of Public Event #2, held June 18 – Feedback received on alternative methods and comparative evaluation to date – Next steps and timelines 	<ul style="list-style-type: none"> – None 	
<p>Blair provided an update on instances where work carried out for the comparative evaluation of the alternative methods does not yet match the work plans as presented in the ToR. The following information was shared:</p> <ul style="list-style-type: none"> – This is the case for Surface Water, Atmospheric Environment, and Social Environment. – For each case, it was determined that the difference between the landfill configuration methods would not result in material differences in potential effects, and therefore the predictive modelling was deemed unnecessary at this stage. – Predictive modelling will be focused at the detailed impact assessment stage and will be used to re-affirm the comparative evaluation decision-making. – This has been documented in the Comparative Evaluation Memos. <p>Andrew indicated that, process-wise, this should be clearly described in the EA documentation. The relevant technical reviewers will also need to provide input on acceptability of this approach.</p>	<ul style="list-style-type: none"> – This will be flagged for the relevant technical reviewers – Document this in the EA report 	<p>Andrew/Stephen</p> <p>GHD</p>
<p>A discussion around opportunities to improve efficiency related to ECA review took place, summarized by the following points:</p>	<ul style="list-style-type: none"> – Reach out to MECP at the draft EA stage to schedule a pre-consultation meeting with the ECA review team 	Walker/GHD

Minutes	Action	To be actioned by
<ul style="list-style-type: none"> – All understand there can be no ECA approval prior to an EA decision – The ECA application may require amendments as a result of the outcome of the EA review – The draft EA stage may be a good time to engage with the ECA reviewers and begin pre-consultation – Regular update meetings such as this one throughout the EA process will help lead to an efficient ECA process 		

Attachments:

This confirms and records GHD's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

NOTE: If the information in this report does not agree with your record of this meeting or if there are any omissions, will you kindly advise this office immediately, otherwise we shall assume its contents to be correct.

Distribution: All Present/Absent

Meeting minutes

External

1 December 2025

Project name	Walker South Landfill Phase 2	From	Janet Oswald
Subject	Walker South Landfill Phase 2, NPCA Consultation	Tel / email address	+1 416-866-2354 / Janet.Oswald@ghd.com
Date / Time	November 6, 2025 / 10:00 AM	Project no.	12567140
Attendees inc. company	<p>NPCA: Kim Peters, Manager, Environmental Planning and Policy Carly Mason, Water Resources Engineer Theresa Bukovics, Planning Ecologist</p> <p>Walker: Darren Fry, Project Director</p> <p>WSP: Dan Mohr, Senior Principal Engineer, Ontario Earth & Environment Craig Leger, Team Lead / Senior Environmental Consultant Douglas Kerr, Surface Water Resources</p> <p>GHD: Nicole Charlton, Senior Terrestrial Ecologist Erika Brown, Waste & Environmental Planner Janet Oswald, Environmental Planner</p>	Apologies inc. company	Katrina Greenfield – Ecologist
Copy to	NA	Location	Virtual
Objective	The South Landfill Phase 2 project team sought NPCA's guidance and input on design development and impact assessment considerations.		

Item	Minutes	Actions
Stormwater Management Ponds (SWMPs)	<ul style="list-style-type: none"> – Darren provided an overview of SWMP options and requested NPCA feedback. <ul style="list-style-type: none"> • NPCA policy prefers avoiding floodplain impacts; historical realignment data is important. • NPCA is reviewing realignment history and floodplain impacts; municipal guidelines govern quality/quantity; NPCA comments limited to floodplain impacts; existing HEC-2 models outdated; paper copies of reports needed; 	<ul style="list-style-type: none"> – Walker to share information on the realignment from the previous South Landfill Phase 1 EA; confirm discharge feasibility. – NPCA (Carly) to provide realignment

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Item	Minutes	Actions
	<p>will consult NPCA engineer familiar with early 2000s work.</p> <ul style="list-style-type: none"> - Darren confirmed the realignment was linked to quarry; will share information from the previous South Landfill Phase 1 EA; need clarity on whether landfill flows were considered; may require further study; southern pond outside floodplain; northern pond could be designed similarly. - WSP (Dan) asked about preference for discharge to creek vs. canal. <ul style="list-style-type: none"> • Creek preferred unless capacity issues arise; large drainage area likely mitigates impact. • Controlled discharge from ponds reduces peak flow concerns. 	<p>data; consult NPCA engineer; send available reports.</p>
Regulatory Limits of Ten Mile Creek	<ul style="list-style-type: none"> - Top of bank is key reference. - 30 m setback from permanent flow; 15 m from intermittent streams. - Floodplain aligns with top of bank; NPCA uses floodplain as regulatory limit (unlike other CAs that add 15 m). - Surveys needed to confirm elevations; old studies use outdated datum (2878). - Applicants should survey and convert datum to avoid over-regulation. 	<ul style="list-style-type: none"> - Walker to proceed with topographic survey and datum conversion.
Wetland Features	<ul style="list-style-type: none"> - Northern wetland requires permit. - An area inside the eastern buffer continues to show historic wetland features in mapping that has yet to be updated since the realignment of Ten Mile Creek. These areas are anticipated to be removed under current ARA approval for extraction within the quarry limits, and no wetland ELC were identified within these areas during recent field surveys. - NPCA policy allows flexibility for infrastructure-related wetland removal but requires compensation (preferably on-site). - NPCA will stake boundaries if refinements occur; delineation needed for loss/compensation calculations. - NPCA mandate changes emphasize hazard prevention; technical memo required to confirm no added flooding/erosion risk. - Municipal wetland policies also apply. - Outlets to wetlands require 80% solids removal. 	
Temporary Creek Crossing	<ul style="list-style-type: none"> - Walker's existing permit allows for permanent crossing - If additional work is needed, a permit may be required. 	

Attachments:

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NOTE: If the information in this report does not agree with your record of this meeting or if there are any omissions, will you kindly advise this office immediately, otherwise we shall assume its contents to be correct.

Distribution: All Present/Absent

Meeting Summary

Meeting: Niagara Region

Date: December 2, 2025

Location: Virtual Meeting

Time: 3 pm – 4 pm

Attendees:

Niagara Region

- Sean Norman, Senior Planner

Walker

- Darren Fry, Project Director – Walker
- JME Maxwell, Avaanz
- Angus Keir, Avaanz

Meeting Materials:

Purpose of Meeting

To provide the Niagara Region with an update on the Approval of the Terms of Reference and Notice of Commencement of the EA.

Summary of Discussion

- S. Norman stated he was not able to provide answers to the majority of the questions due to the fact they are largely opinion based and that the Region is a government and customer of Walker's current disposal facility (SLF1)
- He did offer to provide reference to any reports and factual information that Avaanz requires/requests.
- Avaanz was understanding and agreed to the approach
- S. Norman offered to send over some recent Economic Development reports and information.

Meeting minutes

External

15 December 2025

Project name	Walker South Landfill Phase 2	From	Janet Oswald
Subject	Site-specific Liner Design	Tel / email address	+1 416 866-2354 / janet.oswald@ghd.com
Date / Time	December 4, 2025 / 10:00 AM	Project no.	12567140
Attendees inc. company	<p>MECP Stephen Deneault, Project Officer Rick Li, Senior Waste Engineer</p> <p>Walker Darren Fry, Project Director</p> <p>WSP Dan Mohr, Groundwater Frank Barone, Landfill Design Leigh Davis, Groundwater Ryan Waud, Waste Engineer</p> <p>GHD Blair Shoniker, Senior Waste and Environmental Planner Erika Brown, Waste and Environmental Planner Janet Oswald, Environmental Planner</p>	Apologies inc. company	Michael Durst, Environmental Compliance Officer, MECP
Copy to		Location	Virtual
Objective	Receive input from the MECP on the site-specific liner information that will be included in the EA and EPA submissions.		

Agenda Item	Minutes	Action
Introductions and agenda overview	– Darren welcomed participants and provided an overview of the agenda.	N/A
Overview of the site's hydrogeologic conditions	– Dan presented an overview of the site's hydrogeologic conditions, including underlying rock formations and the inward gradient.	N/A
Proposed liner design	– Frank described the proposed site-specific liner design.	N/A
Information proposed for inclusion in the Environmental Assessment Report	– Frank shared a list of information proposed for inclusion in the EA Report. Discussion:	N/A

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Agenda Item	Minutes	Action
	<ul style="list-style-type: none"> - Rick asked about the leachate containment system: <ul style="list-style-type: none"> • Dan explained that leachate containment contingency will be addressed in the groundwater detailed impact assessment report. • Containment measures include: <ul style="list-style-type: none"> - Liner extending up the quarry side walls with a maximum slope of 3H to 1V as per O. Reg. 232/98 (quarry walls are backfilled to achieve the necessary slope prior to liner construction). - Inward groundwater gradient providing contingency. 	
Information proposed for inclusion in the EPA submissions	<ul style="list-style-type: none"> - Frank presented a list of information proposed for inclusion in the EPA Submissions. 	N/A
Questions/Discussion	<ul style="list-style-type: none"> - Differences between the proposed site-specific liner and the generic liner were discussed: <ul style="list-style-type: none"> • The proposed site-specific liner will use a double composite Compact Clay Liner (CCL) and Geosynthetic Clay Liner (GCL) in lieu of two double composite CCLs specified in the generic design. • The proposed site-specific liner design is not driven by a unique site condition but rather, was selected to incorporate advancements in liner materials that have emerged since the generic design was originally developed. - Rick asked about alternative methods being assessed: <ul style="list-style-type: none"> • Darren clarified that the alternatives considered focused on landfill configuration (height and contours) and leachate management (on-site treatment vs. continued use of the municipal system). • Alternative liner methods were not evaluated; Walker chose a site-specific design. - Rick and Stephen indicated that the level of detail appeared appropriate for each of the approval stages (EA, EPA). - Rick noted that additional information may be requested during the review. - Stephen emphasized balancing detail at the EA stage to achieve sufficient detail to demonstrate the project is permissible, but not too much as to preclude flexibility at the EPA stage. 	N/A

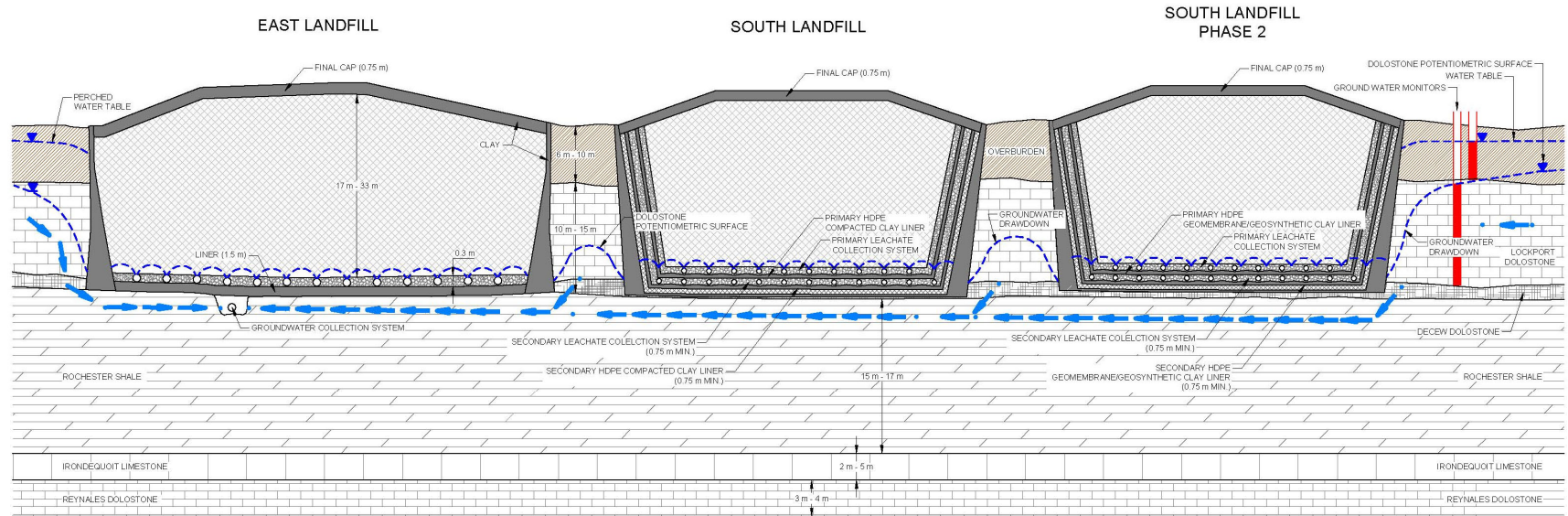
Attachments: 1 of 1) Presentation slides

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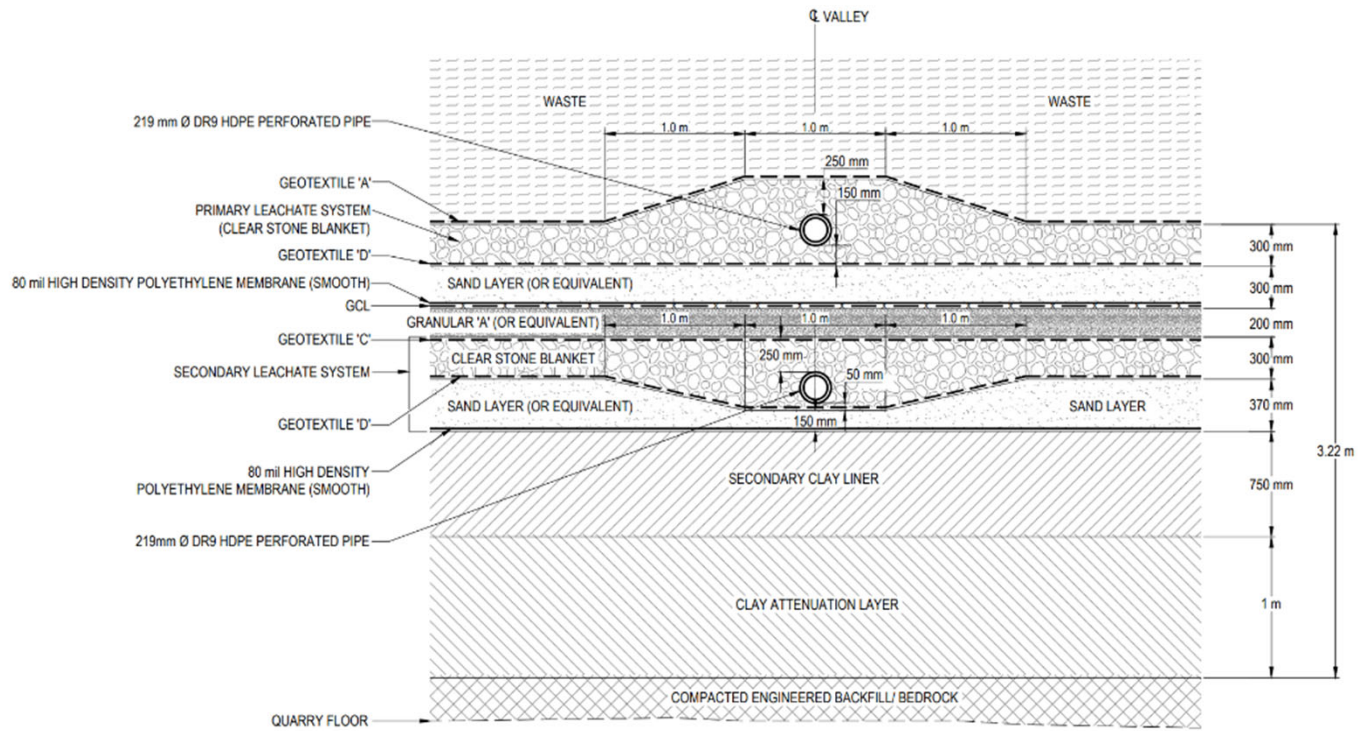
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Distribution: All Present/Absent

Conceptual Groundwater Section



Proposed Site-Specific Double Composite Liner Design



Information To Be Provided for EA Approval

- Liner and LCS material requirements (permeability, grain size, physical and chemical properties)
- Material quantities and potential sources
- Expected leachate quality (key contaminants, mass inventory, half-life)
- Potential leachate quantity and method of disposal
- Liner and LCS component service life versus contaminating lifespan
- Modelling of contaminant transport through the liner system and potential long-term loadings/impacts to groundwater beneath the landfill
- Leachate head monitoring approach
- Maximum allowable leachate head (during and post service life of primary LCS)
- Leachate containment contingency plan

Information To Be Provided for EPA Approval

- Detailed plans, descriptions and specifications
- Geotechnical assessment (liner slope stability, differential settlement)
- Staging plan for liner and LCS construction
- Construction quality assurance and quality control plans
- LCS inspection/cleaning plan
- Detailed liner and LCS monitoring plan
- Leachate head trigger levels and trigger response plan
- Groundwater monitoring plan, trigger levels and trigger response plan
- Design and Operations Plan

From: [Janet Oswald](#)
To: "[Sperling, Janet \(MNR\)](#)"; [Darren Fry](#)
Cc: [Erika Brown](#); [Leticia Koole](#); [South Landfill Phase 2](#)
Bcc: [12567140](#)
Subject: Walker South Landfill Phase 2: tunnel replacement and VIA
Date: Thursday, January 8, 2026 15:03:00
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[12567401-GHD-Walker South Landfill Phase 2-NEC 8Jan25 meeting.pdf](#)

Hello Janet,

Thank you for meeting with us today. I believe we now have a clearer understanding of the key issues around NEP designations in relation to the proposed tunnel and it's permitting. As discussed, Darren will reach out to Joe, and we will follow up once we have more information to share. At that point, we can schedule a meeting to review everything together if helpful.

Regarding the visual impact assessment, I have attached the slides from today's meeting. I will send you an updated viewpoint figure next week, as we are continuing to refine the proposed viewpoints for the detailed assessment. You may want to wait for that update before seeking additional input from your landscape architect; if sharing the figure from the slide, please note it is a working document and does not represent the final set of viewpoints.

We will plan to set up a check-in meeting in about a month, as you suggested, to review progress and revisit the tunnel permitting considerations and process based on the information gathered. When you have a chance, please share your availability, and we will send an invite.

Enjoy the rest of your day,

Janet

Janet Oswald (she/her)
BSc, MES
Environmental Planner

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D +1 416 866-2354 | **E** Janet.Oswald@ghd.com

The Power of Commitment

Connect

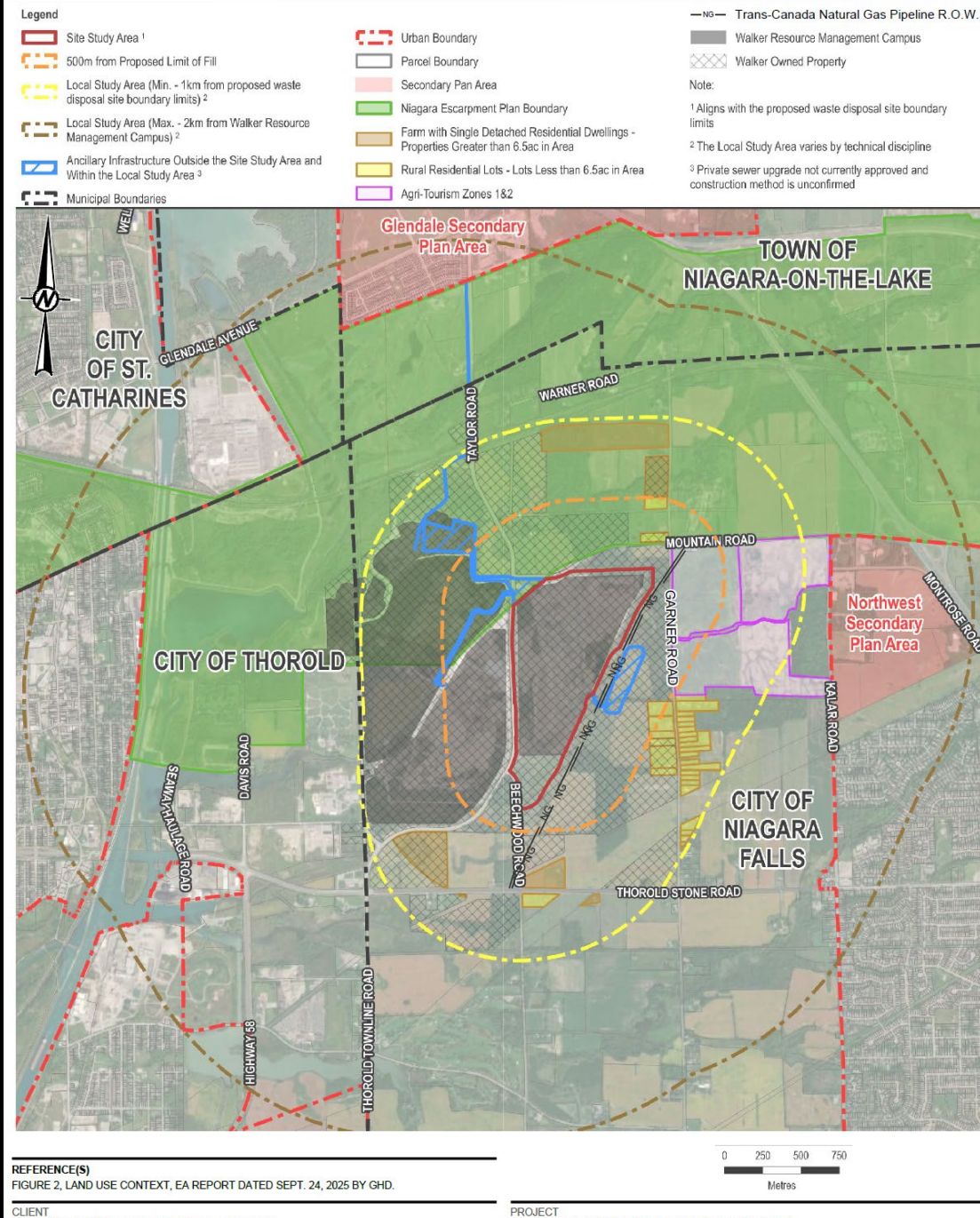


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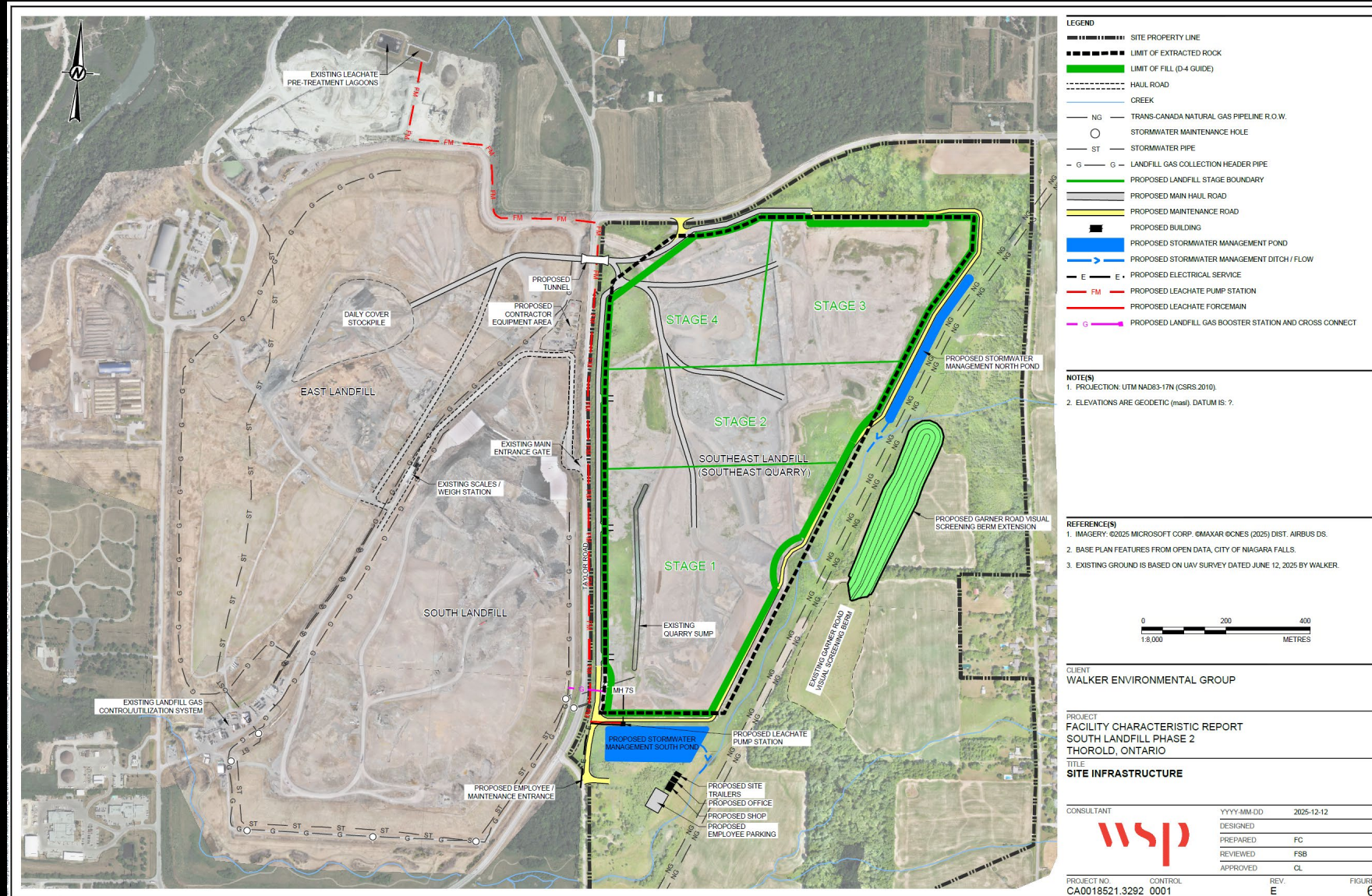
Walker South Landfill Phase 2

→ Overview





Walker South Landfill Phase 2 Proposed Tunnel Replacement





Walker South Landfill Phase 2

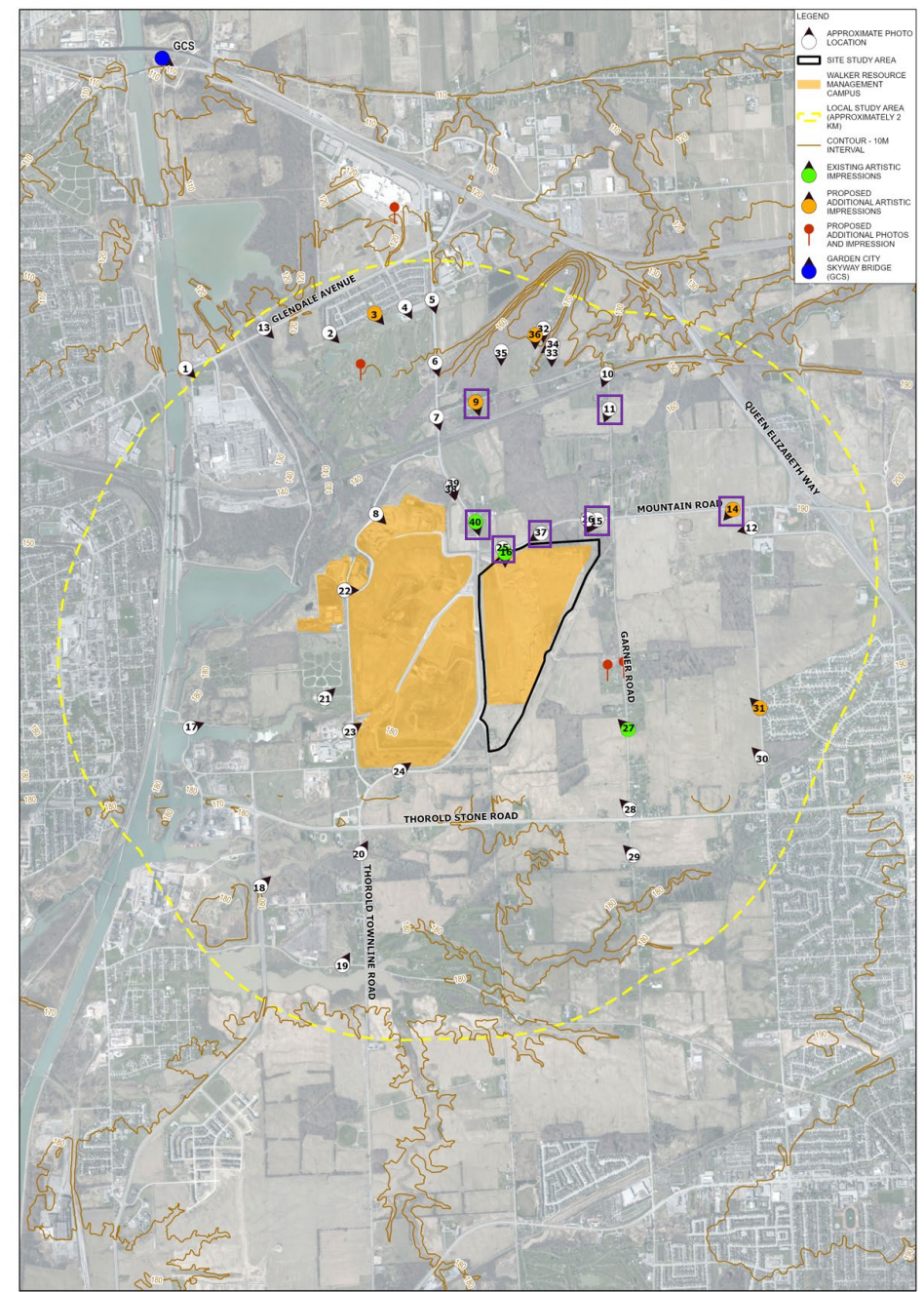
→ Visual Impact Assessment Overview

- 1. Preliminary Existing Conditions**
- 2. Comparative Evaluation of the Alternative Methods**
 - Three landfill configurations (same footprint, differing contours and heights); two leachate management options
 - ZTV
 - Three artistic impressions
- 3. Preferred Alternatives advance to Detailed Impact Assessment**
 - Landfill configuration Option A was refined ahead of commencing the DIA in response to feedback in earlier stages (reduced height and adjusted slopes and boundaries)
 - Additional locations for artistic impressions to be incorporated into the DIA in response to comments and feedback from consultation participants
 - EA Advisory Committee – Warner Rd, golf course, rear yards of Garner Rd
 - NEC viewpoints of interest

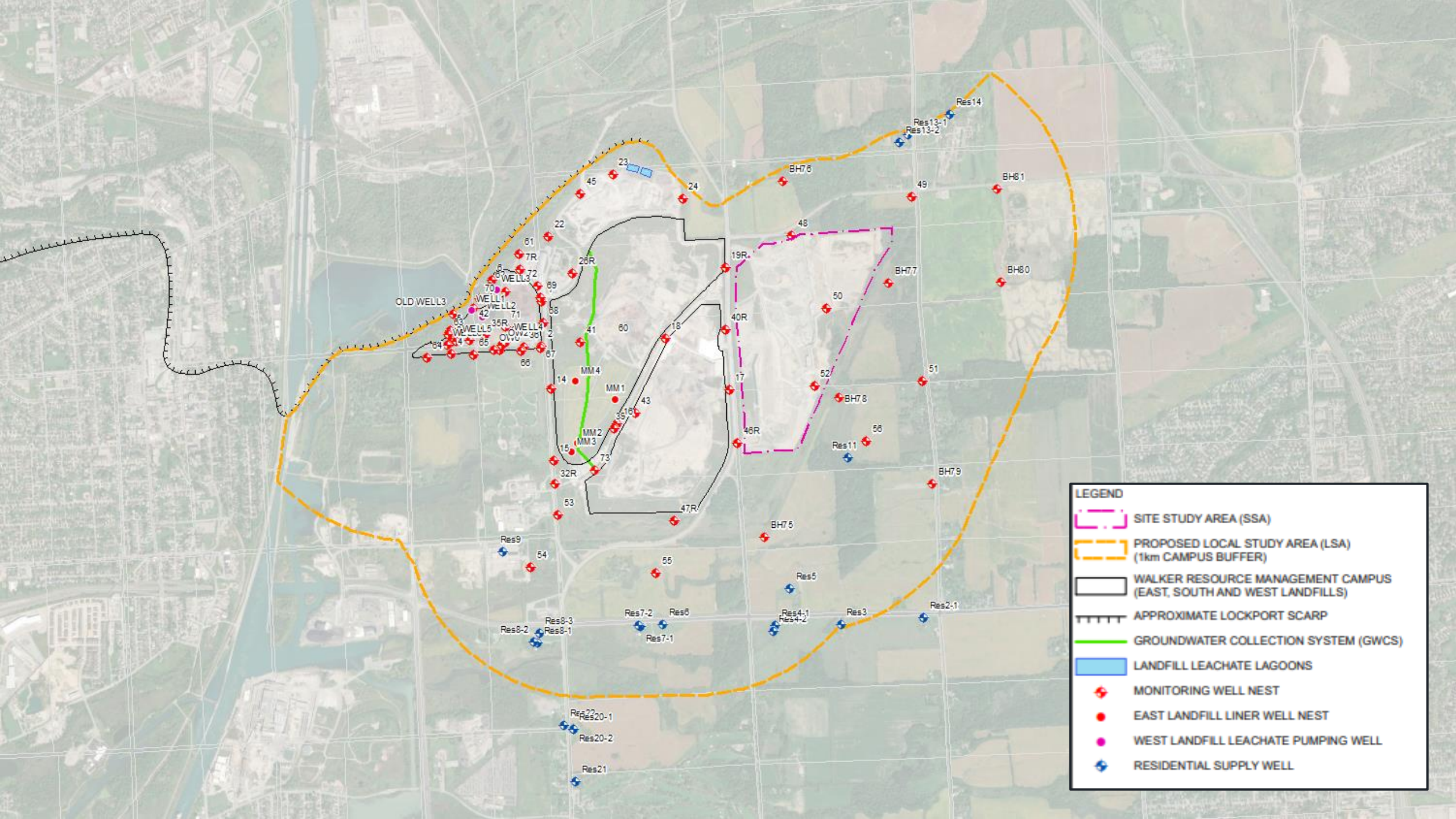
Walker South Landfill Phase 2 VIA Viewpoints Overview

NEC previously indicated interest in views from the following locations:

- Taylor Road, within 1 km – *this was added, #40*
- Mountain Road, between view #16 and view #26 where the road is oriented towards the site – *this was added, #37*
- View #9
- View #11
- View #14
- View #15
- View #16
- View #25



Site Setting and Background Groundwater Investigations for EA Groundwater Modelling for EA Proposed Liner Design

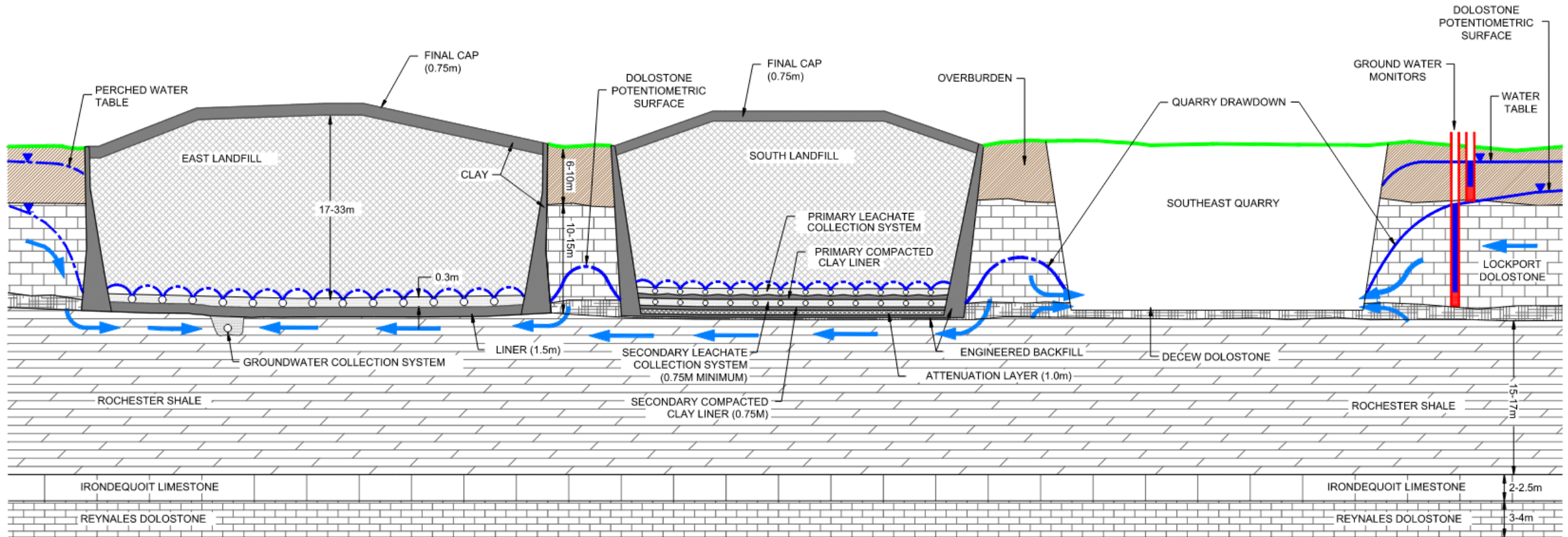


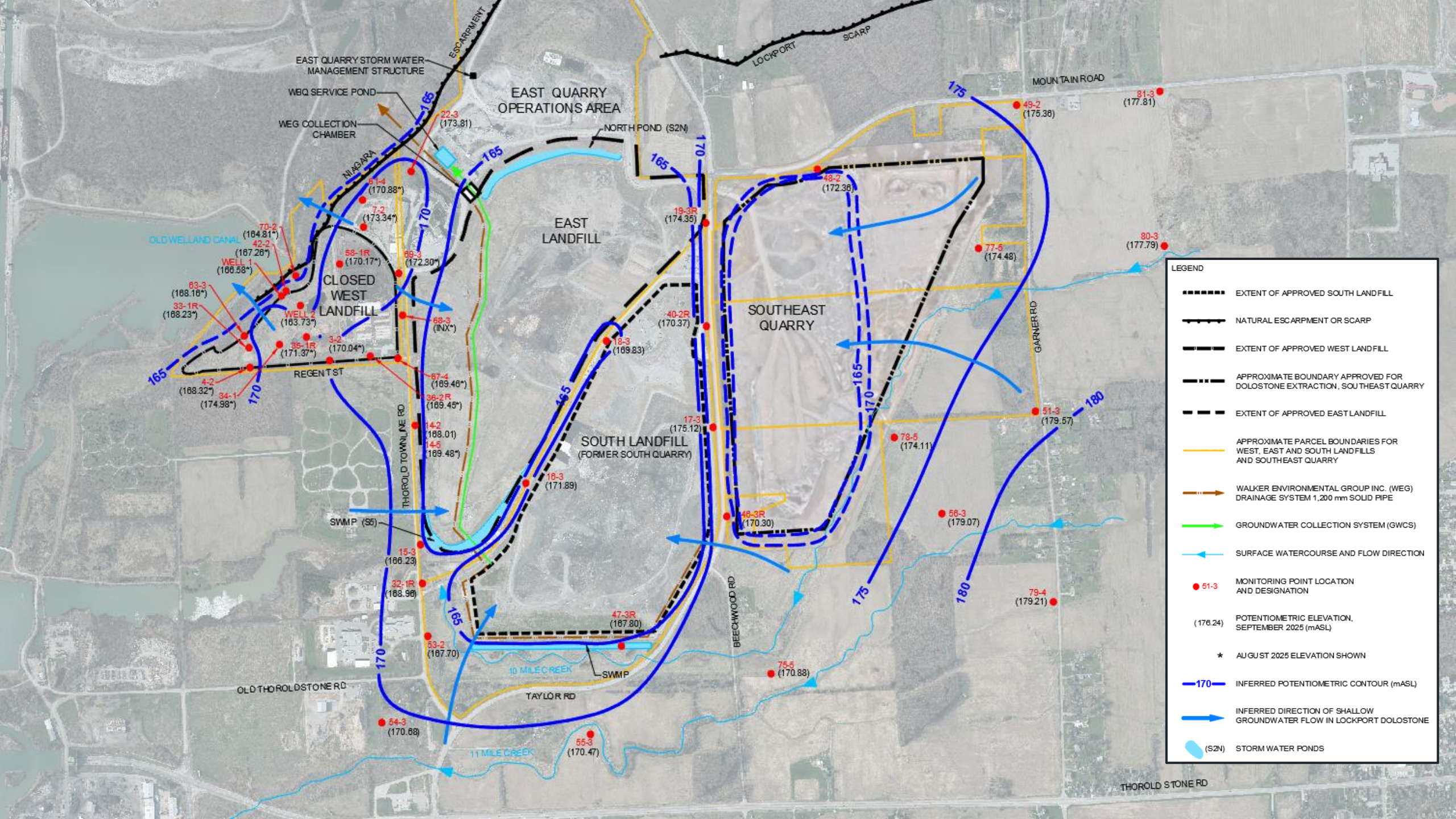
LEGEND

- SITE STUDY AREA (SSA)
- PROPOSED LOCAL STUDY AREA (LSA)
(1km CAMPUS BUFFER)
- WALKER RESOURCE MANAGEMENT CAMPUS
(EAST, SOUTH AND WEST LANDFILLS)
- APPROXIMATE LOCKPORT SCARP
- GROUNDWATER COLLECTION SYSTEM (GWCS)
- LANDFILL LEACHATE LAGOONS
- ◆ MONITORING WELL NEST
- EAST LANDFILL LINER WELL NEST
- ◆ WEST LANDFILL LEACHATE PUMPING WELL
- ◆ RESIDENTIAL SUPPLY WELL

WEST

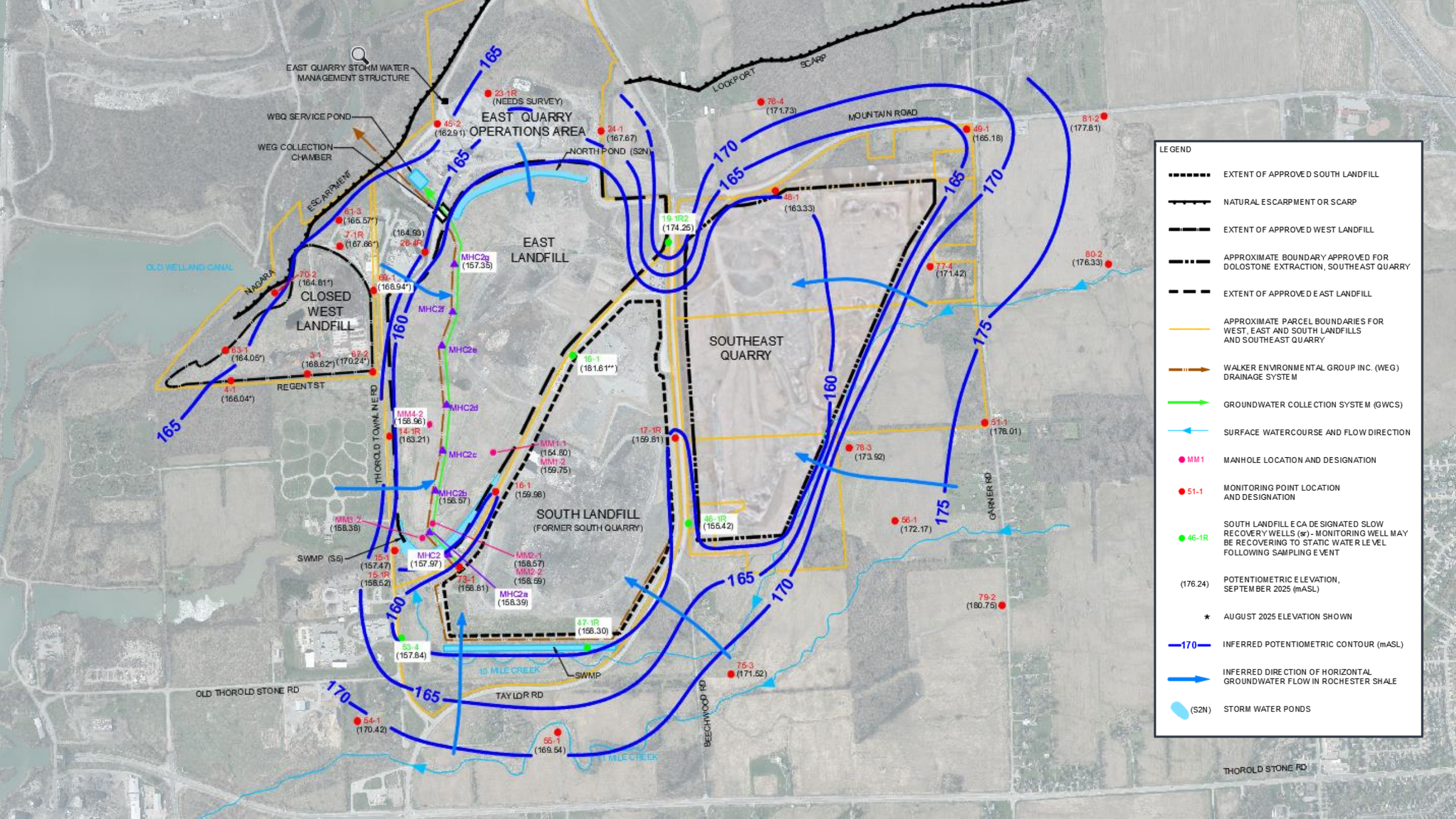
EAST





LEGEND

- EXTENT OF APPROVED SOUTH LANDFILL
- NATURAL ESCARPMENT OR SCARP
- EXTENT OF APPROVED WEST LANDFILL
- APPROXIMATE BOUNDARY APPROVED FOR DOLOSTONE EXTRACTION, SOUTHEAST QUARRY
- EXTENT OF APPROVED EAST LANDFILL
- APPROXIMATE PARCEL BOUNDARIES FOR WEST, EAST AND SOUTH LANDFILLS AND SOUTHEAST QUARRY
- WALKER ENVIRONMENTAL GROUP INC. (WEG) DRAINAGE SYSTEM 1,200 mm SOLID PIPE
- GROUNDWATER COLLECTION SYSTEM (GWCS)
- SURFACE WATERCOURSE AND FLOW DIRECTION
- 51-3 MONITORING POINT LOCATION AND DESIGNATION
- (176.24) POTENTIOMETRIC ELEVATION, SEPTEMBER 2025 (mASL)
- * AUGUST 2025 ELEVATION SHOWN
- 170--- INFERRED POTENTIOMETRIC CONTOUR (mASL)
- INFERRED DIRECTION OF SHALLOW GROUNDWATER FLOW IN LOCKPORT DOLOSTONE
- (S2N) STORM WATER PONDS



EAST QUARRY STORM WATER MANAGEMENT STRUCTURE

WBO SERVICE POND
WEG COLLECTION CHAMBER

EAST QUARRY OPERATIONS AREA

NORTH POND (S2N)

EAST LANDFILL

SOUTHEAST QUARRY

SOUTH LANDFILL (FORMER SOUTH QUARRY)

SWMP (S6)

SWMP

OLD THOROLD STONE RD

TAYLOR RD

10 MILE CREEK

BEECHWOOD RD

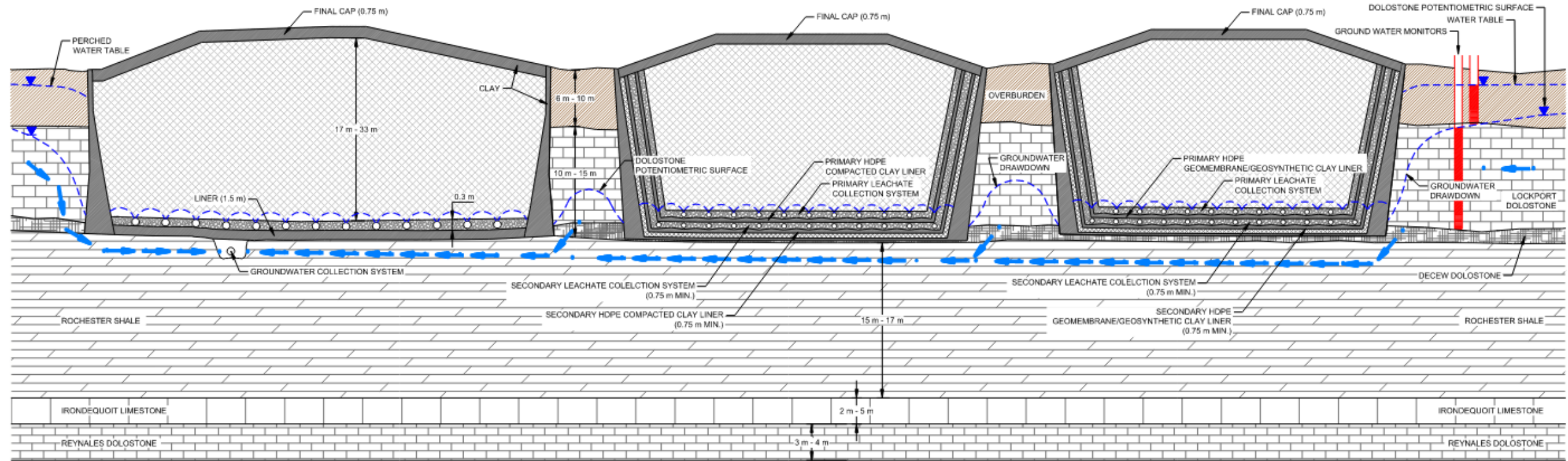
THOROLD STONE RD

- LEGEND**
- EXTENT OF APPROVED SOUTH LANDFILL
 - NATURAL ESCARPMENT OR SCARP
 - EXTENT OF APPROVED WEST LANDFILL
 - APPROXIMATE BOUNDARY APPROVED FOR DOLOSTONE EXTRACTION, SOUTHEAST QUARRY
 - EXTENT OF APPROVED EAST LANDFILL
 - APPROXIMATE PARCEL BOUNDARIES FOR WEST, EAST AND SOUTH LANDFILLS AND SOUTHEAST QUARRY
 - WALKER ENVIRONMENTAL GROUP INC. (WEG) DRAINAGE SYSTEM
 - GROUNDWATER COLLECTION SYSTEM (GWCS)
 - SURFACE WATERCOURSE AND FLOW DIRECTION
 - MM1 MANHOLE LOCATION AND DESIGNATION
 - 51-1 MONITORING POINT LOCATION AND DESIGNATION
 - 46-1R SOUTH LANDFILL E CA DE SIGNED SLOW RECOVERY WELLS (sr) - MONITORING WELL MAY BE RECOVERING TO STATIC WATER LEVEL FOLLOWING SAMPLING EVENT
 - (176.24) POTENTIOMETRIC ELEVATION, SEPTEMBER 2025 (MASL)
 - * AUGUST 2025 ELEVATION SHOWN
 - 170— INFERRED POTENTIOMETRIC CONTOUR (MASL)
 - INFERRED DIRECTION OF HORIZONTAL GROUNDWATER FLOW IN ROCHESTER SHALE
 - (S2N) STORM WATER PONDS

EAST LANDFILL

SOUTH LANDFILL

SOUTH LANDFILL
PHASE 2



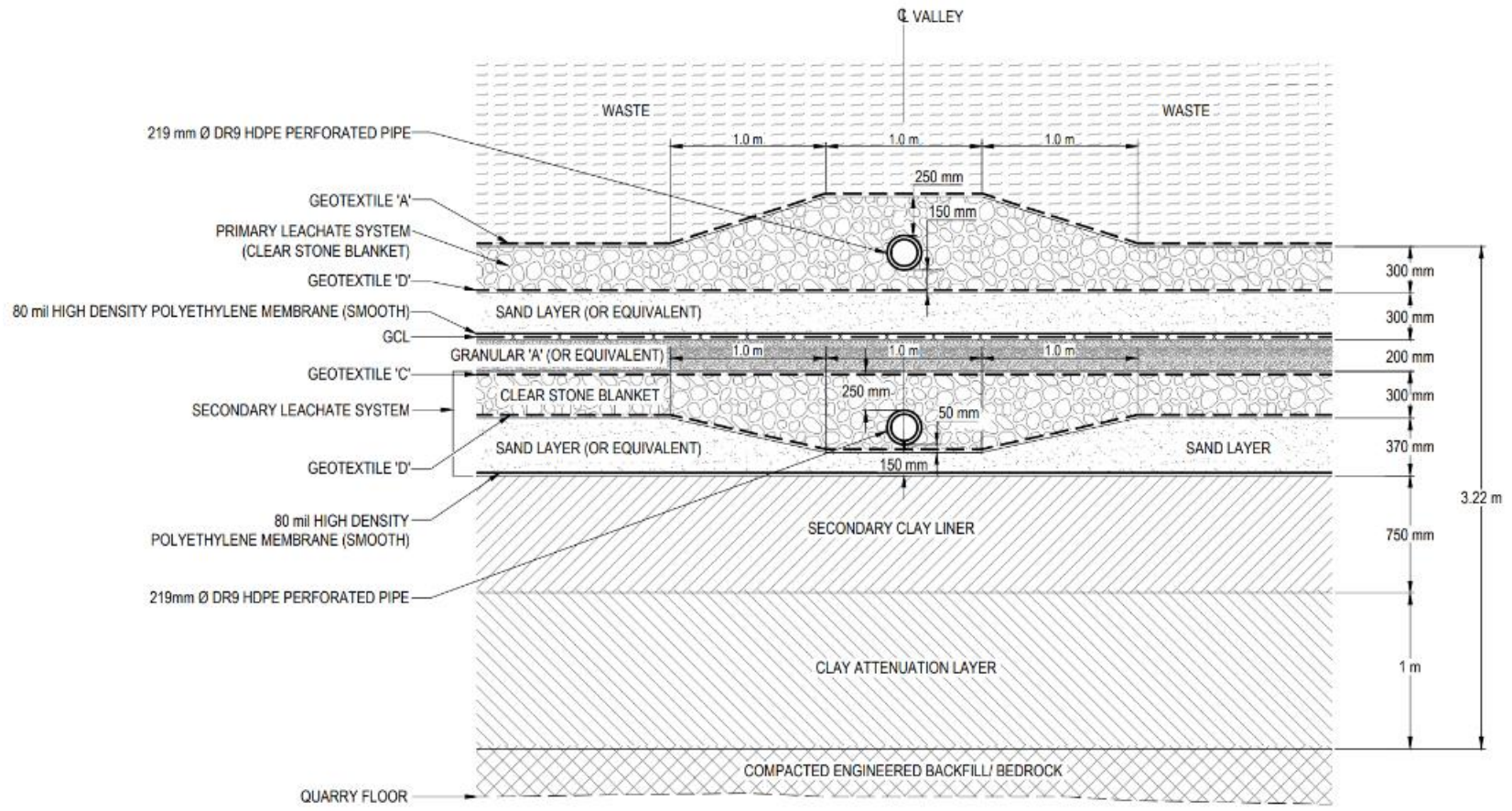
Groundwater Investigations for EA

- Borehole drilling at seven (7) locations to the base of the Irondequoit Formation or the Rochester Formation, depending on location and detailed core logging.
- Hydraulic testing in the open borehole (packer testing) and in the installed monitoring wells.
- Downhole geophysical logging in the deep borehole at four (4) locations closest to the Phase 2 site.
- Installation of monitoring well nests in target bedrock zones at each location (29 wells).
- Slug testing in each newly installed well.
- Installation of water level data loggers (reading 4 x per day) in new wells and pre-existing wells surrounding the Phase 2 site.
- Added loggers to residential wells to the NE of the site (in response to MECP comments).
- Well development and sampling of monitoring wells (typically 4 samples collected depending on recovery).
- Completion of water use survey to identify off-site receptors.

Groundwater Modelling for EA

- Develop a 3-D geologic model using existing and new borehole data (Leapfrog).
- Construct a 3-D numerical groundwater flow model based on site-specific hydrogeology parameters (Groundwater Vistas / MODFLOW).
- Calibrate flow model to baseline Site observation data (groundwater elevation data, Southeast Quarry discharge, hydraulic testing results).
- Create predictive flow model scenarios to simulate long-term performance (post-closure & contingency conditions) and climate conditions.
- Complete flow model uncertainty analysis (varying model parameters and contingency conditions).
- 1-D contaminant transport modelling to assess liner performance (POLLUTE).
- 2-D contaminant transport modelling from base of proposed LF to assess potential impacts on off-site receptors (including manual mass balance calculations).
- Third party peer review throughout modeling process (Chris Neville, SSPA).

Proposed Site-Specific Double Composite Liner Design



Information To Be Provided for EA Approval

- Liner and LCS material requirements (permeability, grain size, physical and chemical properties)
- Material quantities and potential sources
- Expected leachate quality (key contaminants, mass inventory, half-life)
- Potential leachate quantity and method of disposal
- Liner and LCS component service life versus contaminating lifespan
- Modelling of contaminant transport through the liner system and potential long-term loadings/impacts to groundwater beneath the landfill
- Leachate head monitoring approach
- Maximum allowable leachate head (during and post service life of primary LCS)
- Leachate containment contingency plan

Meeting minutes

External

22 January 2026

Project name	Walker South Landfill Phase 2	From	Janet Oswald
Subject	Groundwater Assessment	Tel / email address	+1 416 866-2354 / janet.oswald@ghd.com
Date / Time	January 9, 2026 / 10:00 AM	Project no.	12567140
Attendees inc. company	<p>MECP Stephen Deneault, Project Officer Gloria Suarez, Hydrogeologist Mark Looker, Surface Water Specialist</p> <p>Walker Darren Fry, Project Director</p> <p>WSP Dan Mohr, Groundwater Craig Leger, Groundwater Leigh Davis, Groundwater</p> <p>GHD Erika Brown, Waste and Environmental Planner Janet Oswald, Environmental Planner</p>	Apologies inc. company	Michael Durst, Environmental Compliance Officer, MECP
Copy to		Location	Virtual meeting
Objective	Provide an overview of the site and groundwater condition and address comments from MECP groundwater reviewer.		

Agenda Item	Minutes	Action
Introductions and agenda overview	– Dan welcomed participants and provided an overview of the agenda.	
Site hydrogeologic conditions, and the groundwater investigation	– Dan provided an overview of the hydrogeologic conditions and the groundwater investigation <ul style="list-style-type: none"> • Long history of groundwater monitoring shows established trends and flow regimes, demonstrating consistent inward gradients to the campus, preventing off-site flow • Groundwater investigation included borehole drilling, testing, monitoring well and data logger installations, establishment of an EA specific monitoring network and sampling program. Though there are no off-site receptors, a residential water-use survey was completed to identify surrounding groundwater users. In response to previous MECP comments, data loggers 	

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Agenda Item	Minutes	Action
	were installed in target residential wells to the northeast, and one well nest location was shifted to the northeast.	
Modelling approach	<ul style="list-style-type: none"> – Leigh described the planned approach to groundwater modelling <ul style="list-style-type: none"> • Leapfrog Works • 80+ boreholes • Third-party review by Chris Neville – Gloria raised question about calibration and uncertainty analysis; expressed interest in ensuring additive uncertainty is considered <ul style="list-style-type: none"> • Leigh confirmed model parameters to be based on site specific data or published ranges • Dan and Darren noted strong dataset from the two similar existing facilities that will be used to help support predictions 	
Site-specific liner	<ul style="list-style-type: none"> – Dan described the site-specific liner design – Darren noted ministry feedback incorporated – Gloria raised question about contingency plans and monitoring programs <ul style="list-style-type: none"> • Contingency includes maintaining inward gradient, and redundancy via containment of Phase 2 and Groundwater Collection System. • Gloria acknowledged two layers of contingency as positive 	
Other items and discussion	<ul style="list-style-type: none"> – Dan provided a brief overview of the Site's surface water conditions <ul style="list-style-type: none"> • Walker to schedule meeting with Mark Looker to provide a more thorough orientation to the project and surface water conditions 	Walker/GHD
	<ul style="list-style-type: none"> – Gloria asked about climate change considerations <ul style="list-style-type: none"> • Leigh confirmed climate projection data developed by the Toronto Region Conservation Authority for the Niagara Region will be used by all disciplines to consider both effects to and from climate change 	
	<ul style="list-style-type: none"> – Gloria requested more information about data north of the Site; how did groundwater level change? <ul style="list-style-type: none"> • Dan showed location of new wells; levels from the new wells confirm the prior extrapolations • Leigh explained that although the loggers in the residential wells northeast of the Site are new, manual measurements were previously collected at these locations, so there is already extensive data from the area • Dan further clarified that the Lockport to the north is too thin in some areas to install wells 	

Attachments: Presentation slides

This confirms and records GHD's interpretation of the discussions which occurred and our understanding reached during this meeting. Unless notified in writing within 7 days of the date issued, we will assume that this recorded interpretation or description is complete and accurate.

NOTE: If the information in this report does not agree with your record of this meeting or if there are any omissions, will you kindly advise this office immediately, otherwise we shall assume its contents to be correct.

Distribution: Stephen Deneault (to distribute to MECP reviewers); all Walker, WSP, and GHD participants

Meeting Summary

Meeting: City of Thorold

Date: January 12, 2026

Location: In-Person, City of Thorold, 8 Carelton Street

Time: 1 pm – 2 pm

Attendees:

City of Thorold

- Brian Treble, Associate Director, Planning Development Services
- Marc Davidson, Manager of Development Planning

Walker

- Darren Fry, Project Director – Walker

Meeting Materials:

Purpose of Meeting

To provide an overview and update on the South Landfill Phase 2 EA as well as provide an overview of the EA Advisory Committee.

Summary of Discussion

- Walker provided an overview of the South Landfill Phase 2 EA project
- Walker provided an overview and update on the status of the EA processes
- Walker reviewed the purpose and scope of the EA Advisory Committee as Brian Treble will be attending on behalf of the City of Thorold

Meeting Summary

Meeting: Niagara Region

Date: March 23, 2026

Location: Virtual Meeting

Time: 2:30 pm – 3:15 pm

Attendees:

Niagara Region

- Sean Norman, Manager, Strategic Initiatives
- Graeme Guthrie, Associate Director Transportation Engineering
- Maged Elmadhoon, Manager, Transportation Planning
- Waad Siyam, Transportation Planning Project Manager

Walker

- Darren Fry, Project Director – Walker
- Chris Lowes, Project Manager - Walker

Meeting Materials:

Purpose of Meeting

The purpose of the meeting was to discuss tunnel concepts with Niagara Regions Transportation Services Department staff.

Summary of Discussion

- Walker provided an overview of the South Landfill Phase 2 EA process
- Walker provided a rationale for proposed new under-pass/tunnel, the current design status, proposed timing of construction
- The group discussed future considerations such as design refinement, traffic management plans, approvals and timing

South Landfill Phase 2

Environmental Assessment



Agenda

- Introductions
- About Walker
- Overview of South Landfill Phase 2
 - Recommended Methods
 - Preferred Method
 - Consultation
- Next Steps



Walker Overview

Building a sustainable future, **together.**



Part of the Niagara Community for 136+ Years

- Fifth-generation, Niagara based family-owned company
- 1,200+ employees



Innovative Campus

- Integrated Resource Management Campus
- Safely managed Niagara's waste for over 40 years



Committed to Resource Recovery

- Recover & repurpose landfill-bound waste into sustainable materials & products



Walker's Resource Management Campus



More than a landfill

A dynamic operation that efficiently manages waste and sustainably recovers resources.

Campus Operations Include:

- A** Residential Drop-off
- B** Niagara Compost Facility
- C** Resource Recovery Area
- D** N-Viro[®] Biosolids Facility
- E** Aggregates Recycling & Processing Area
- F** Agricultural Rehabilitation
- G** Landfill Gas to Energy Facility
- H** South Landfill



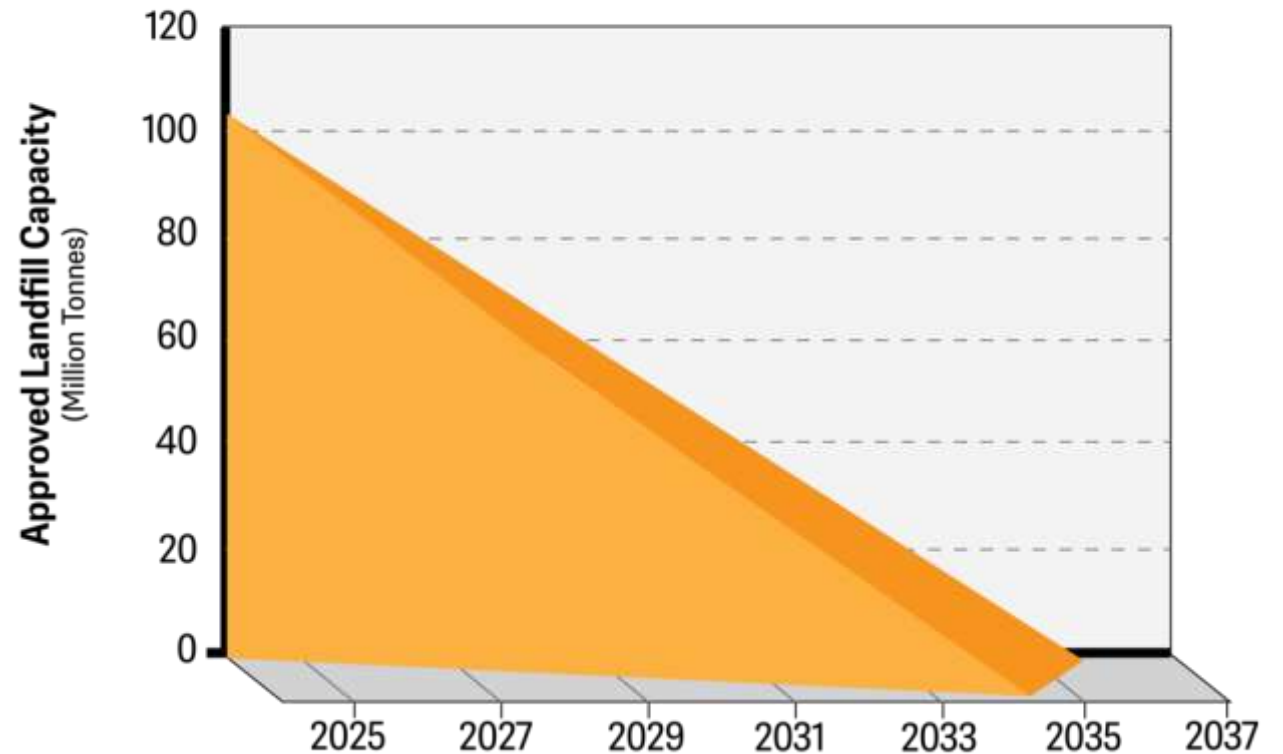
Niagara's Waste Disposal Solution

South Landfill Phase 2

Ontario is expected to run out of landfill capacity by 2035

- Existing landfills are quickly filling up
- Population & waste generation are increasing
- It takes up to 10 years to develop new landfill capacity

ONTARIO'S REMAINING LANDFILL CAPACITY



<https://www.owma.org/articles/2019-owma-landfill-report>

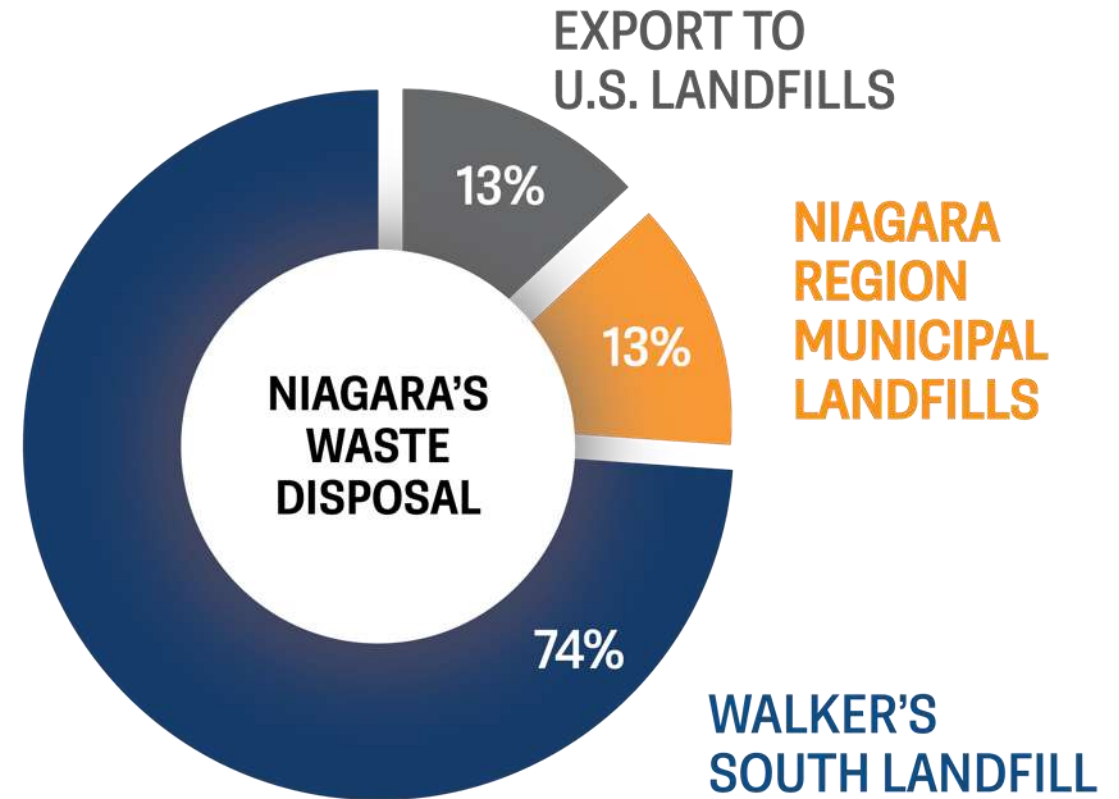


Niagara's Waste Disposal Solution

South Landfill Phase 2

Niagara is no exception, additional disposal capacity is needed

- Over 2/3 of Niagara's waste is currently managed at the South Landfill, which is expected to reach capacity by 2030



* Based on historical recycling trends



South Landfill Phase 2

Residual Waste Disposal

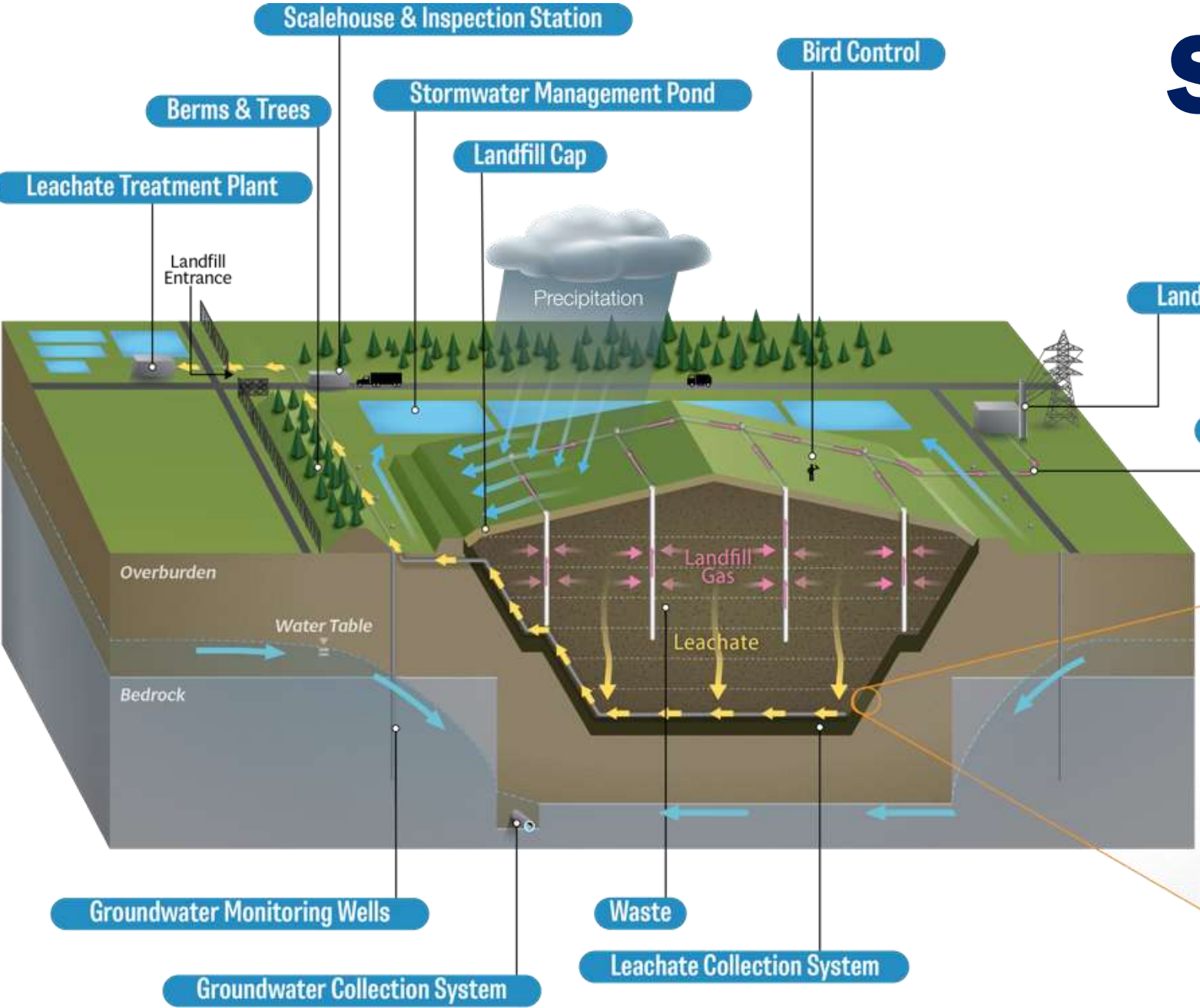


South Landfill – Phase 1
Safe & Reliable waste management



South Landfill

Designed & Operated to the highest standard



A vertical cross-section of the landfill liner system, showing the following layers from top to bottom:

- Top layer: Waste material.
- Second layer: A layer of gravel with a circular hole.
- Third layer: A layer of metal.
- Fourth layer: A layer of gravel with a circular hole.
- Fifth layer: A layer of metal.
- Sixth layer: A layer of metal.
- Bottom layer: A layer of soil.

The landfill liner is approximately 3.6 m (12 feet) thick.

A man is standing next to the liner system for scale.



South Landfill Phase 2

Key Facility Information



**1.1 million tonnes of
waste per year**



**18-20 million m³ total
capacity**



20 years of safe disposal



~ 500 jobs supported



**Renewable energy to
power the equivalent
of 10,000 homes**

SLF2 - Technical Studies



Agriculture



Air Quality



Archaeology



Cultural Heritage



Cumulative Effects



Ecology



Economic



Noise



Social



Surface Water &
Groundwater



Traffic



Visual



Alternative Methods Considered

1 Landfill Site Configurations

Site Configurations are different concepts of the design for the landfill.

Concepts explored included:

- Peak elevation & height
- Slopes / Contours of the final cover
- End use options

2 Leachate Management Options

Leachate is water (typically precipitation) that comes into contact with waste.

Options explored included:

- Continued use of existing municipal wastewater treatment infrastructure
- Development of a wastewater treatment plant on Walker's campus



1

Landfill Site Configurations

South Landfill Phase 2
Options

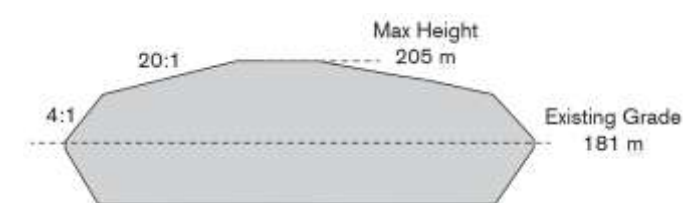
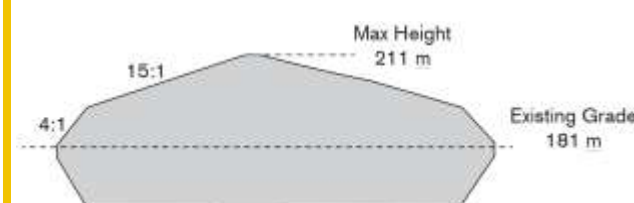
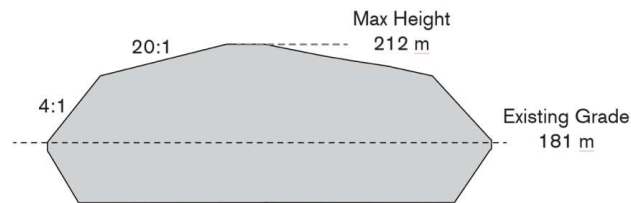
3 Landfill Site Configuration options were evaluated and considered the following differences:

- Height
- Slope
- Capacity
- Area available for agricultural end use.


















Landfill Site Configuration Summary

	Option A	Option B	Option C
Maximum Height (m)	212 m	211 m	205 m
Total Capacity (m ³)	20,205,000 m ³	18,277,400 m ³	17,893,000 m ³
Area Available for Agricultural End-Use	90.6 acres (36.7 ha)	130.0 acres (51.4 ha)	110.0 acres (45.0 ha)



Landfill Configuration Comparative Analysis

Environmental Component	Option A	Option B	Option C	Rationale
Natural Environment <i>(Includes Geology & Hydrogeology, Surface Water, Atmospheric, and Terrestrial & Aquatic)</i>				No material difference between options
Built Environment* <i>(Includes Land Use, and Agriculture)</i>				Options B & C have slightly lesser visual and agricultural net effects
Social Environment <i>(Includes Transportation, and Social)</i>				No material difference between options
Economic Environment <i>(Includes Economic)</i>				Option A has slightly greater economic net (positive) effects
Cultural Environment ** <i>(Includes Cultural Heritage Resources)</i>				No material difference between options

* Visual considerations are included in the Land Use subcomponent.

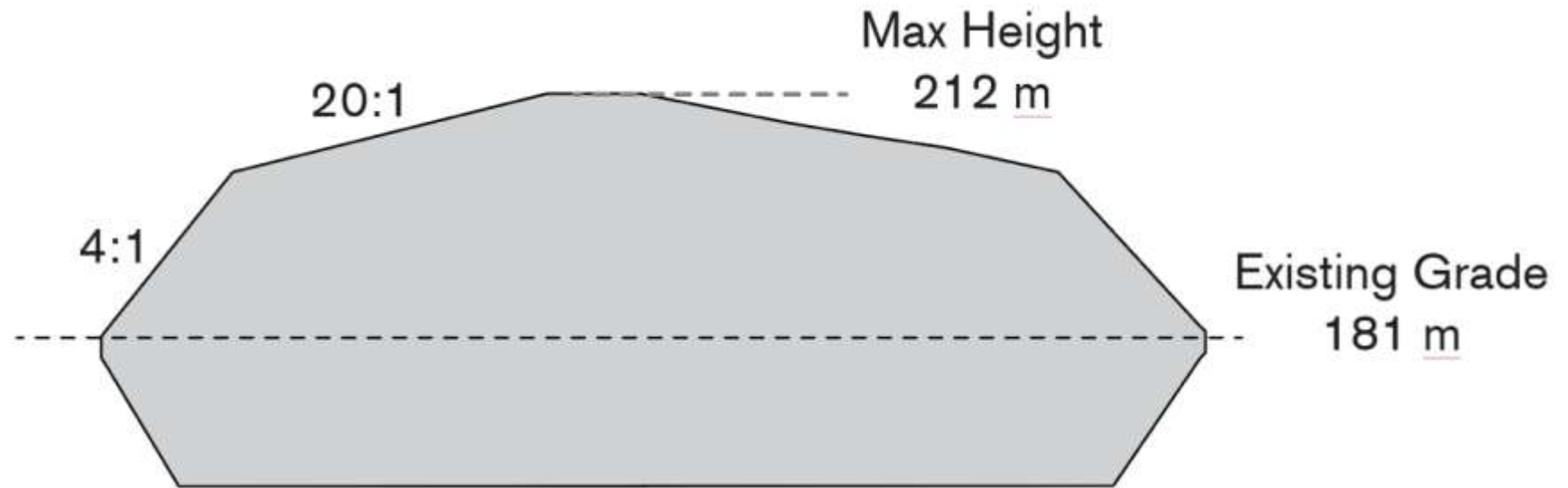
** Cultural Heritage Resources considers built heritage resources, cultural heritage landscapes and archaeological resources.

 Most Preferred
  Less Preferred
  Least Preferred

Option A



Same Height & Slopes as Current South Landfill Phase 1



Landfill Capacity: 20,205,000 m³

Agricultural End Use Area: 90.6 acres (36.7 ha)



2 Leachate Management

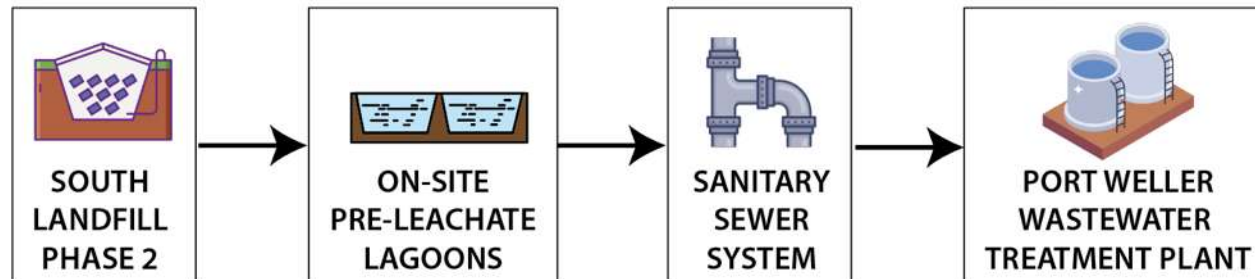
Two leachate treatment options were explored.



Option A

Continued Use of the Municipal Wastewater Treatment System

- ▶ Current form of treatment for the South Landfill Phase 1.
- ▶ Utilizes unused capacity in the municipal system.
- ▶ Sewer use fees will be a revenue source for municipalities.
- ▶ May include upgrading existing infrastructure.

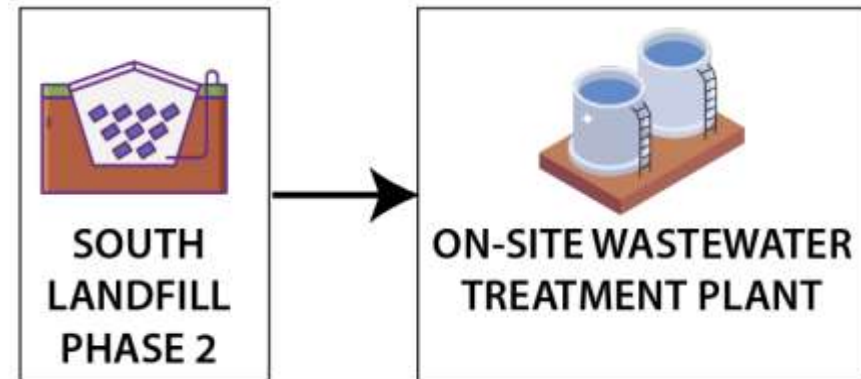


2 Leachate Management











Option B

Development of an On-Site Wastewater Treatment Plant

- ▶ Development of a treatment plant at the Walker Resource Management Campus.
- ▶ Feasibility of this option requires further analysis.



Leachate Management Comparative Analysis

Environmental Component	Option A	Option B	Rationale
Natural Environment <i>(Includes Geology & Hydrogeology, Surface Water, Atmospheric, and Terrestrial & Aquatic)</i>			Option A has lesser net effects due use of existing infrastructure (vs constructing & operating a new facility)
Built Environment* <i>(Includes Land Use, and Agriculture)</i>			Option A has lesser net effects due use of existing infrastructure (vs constructing and operating a new facility)
Social Environment <i>(Includes Transportation, and Social)</i>			No material difference between options
Economic Environment <i>(Includes Economic)</i>			No material difference between options
Cultural Environment ** <i>(Includes Cultural Heritage Resources)</i>			No material difference between options

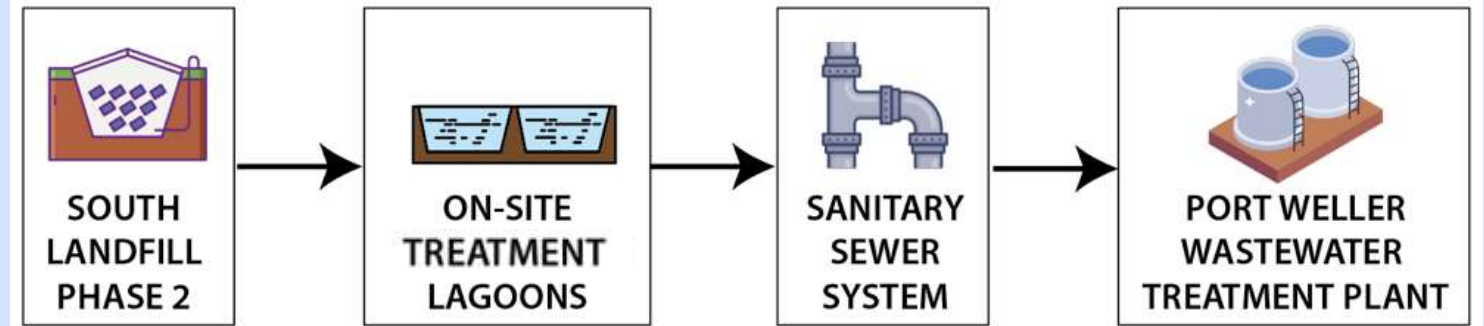
* Visual considerations are included in the Land Use component.

** Cultural Heritage Resources considers built heritage resources, cultural heritage landscapes and archaeological resources.

 Most Preferred
  Less Preferred
  Least Preferred

Preferred Leachate Management – Option A

Continued & Expanded Use of the Municipal Wastewater Treatment System



Reasons for recommendation:

- Reduced impacts from construction & operation of new infrastructure
- Capacity exists within existing municipal sewer system
- Most cost-effective option for customers

Impact Assessment & EA Report

Impact Assessment

- Facility Characteristics Report – further developing Conceptual Design based on Preferred Method.
- Confirmatory fieldwork, as required.
- Detailed Impact Assessment Reports (including assessment of cumulative impacts & climate change considerations).

Environmental Assessment Report

- Must be prepared in accordance with the approved ToR.
- **Draft EA Report** – prepared for public, Indigenous community and government review & comment.
- **Final EA Report** – formally submitted to the Minister for approval and subject to public, Indigenous community and government review & comment.
- Note: contributing reports will form appendices of the EA report.



Consultation Overview

Background

- Connected with all interested Stakeholders at Key Milestones
 - Alternative Methods (March 18, 2025)
 - Recommended Method (June 18, 2025)
 - Draft EA (Upcoming)
- Indigenous Communities participated in some fieldwork
- Formed an EA Advisory Committee

Key Themes

- Continued / Expanded use of current leachate treatment is preferred
- Maximize the use of the footprint
- Manage visual impact
- Maximize agricultural end use



Next Steps

- Completion of Detailed Impact Assessments
- Draft EA – June 25, 2026
- Consultation event July 2026
- Preparing for EPA approvals

