Waste Connections of Canada

Welcome to the Ridge Landfill Environmental Assessment Open House

July 25, 2018

About Waste Connections Canada

- Progressive Waste Solutions merged with Waste Connections Inc. in June 2016 and recently rebranded the company into the new name.
- We remain the same, dependable partner committed to being a good neighbour and a responsible corporate citizen by contributing to the community.
- We provide waste management services across the province contributing significantly to Ontario's economy.
- Waste Connections of Canada is a growing company that employs over 60 people in the Municipality of Chatham-Kent.







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Ridge Landfill Today

- Waste Connections owns 340 ha of land west of Erieau Road.
- 262 ha of this land is the existing landfill site.
- The current approved capacity is 21 million cubic metres
- The site can currently accept up to 1.3 million tonnes of waste per year
- The site can currently receive residential waste from Chatham-Kent and its four adjacent municipalities.
- The site can currently receive industrial, institutional & commercial waste from all of Ontario.
- The landfill is expected to reach its capacity in 2021.
- We have an excellent environmental record at the landfill site.

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A Partner in the Community

The Ridge Landfill contributes approximately $14 million per year directly and indirectly to the community:

- an annual royalty payment to the Municipality of Chatham-Kent;
- significant financial contributions to the Ridge Landfill Trust;
- salaries for local employees;
- construction and road maintenance and other goods and services.

Recent donations from the Ridge Landfill Community Trust have been directed to the Blenheim Seniors Centre, Talbot Trail Place, Blenheim Youth Centre, Charing Cross Ball Diamonds, Blenheim District High School, the New Animal Shelter, the Blenheim Gymnastics Club, Breakfast Programs and many more.

Waste Connections of Canada also directly sponsors numerous community events throughout Chatham-Kent.

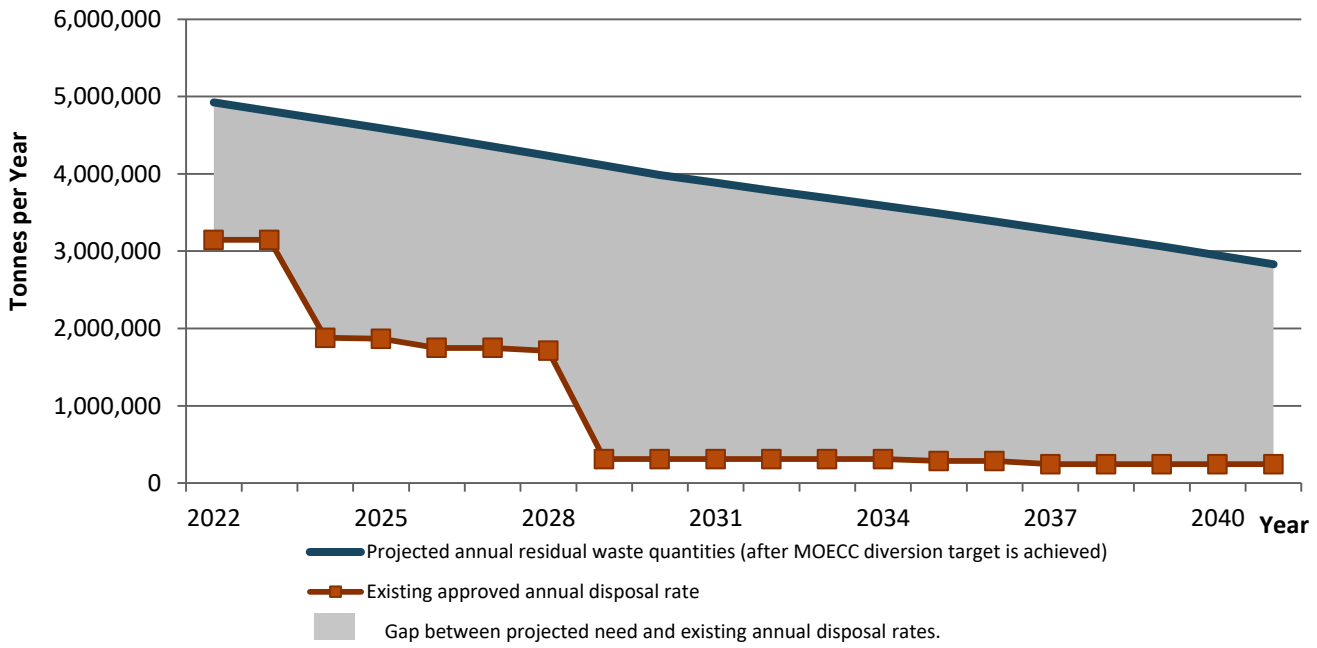
FRIENDS OF THE NEW ANIMAL SHELTER

WASTE CONNECTIONS OF CANADA

Need and Opportunity

- Despite increased waste diversion, over 9 million tonnes of Ontario residual waste is disposed of annually in Ontario and the U.S.
- The Ministry of Environment, Conservation and Parks (MOECP) has new diversion targets (80% by 2050) which have been factored into the waste projections.
- With the expected closure of existing Ontario landfill sites over the next 10 years (which would include the Ridge Landfill reaching capacity in 2021) and the new diversion targets, it is anticipated that there will be a need for additional waste disposal capacity in southern and central Ontario.
- The Strategy for a Waste-Free Ontario Building the Circular Economy (February 2017) recognizes that *"while Ontario strives for a waste-free future, there will still be a need for landfill space"* .

Projected Post-Diversion Residual Waste Disposal Need and Existing Approved Annual Disposal Rates (2022-2041)



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Key Elements of the Proposed Expansion

- The expansion will occur on the existing Ridge Landfill property on the 340 ha of land west of Erieau Road.
- The extent of the expansion area will be determined early in the EA process and is anticipated to range from about 55 to 85 ha.
- The annual volume and type of waste accepted will not change from what is currently being accepted (up to 1.3 million tonnes of solid non-hazardous waste per year). There will be no increase in truck traffic.
- The service area for industrial, commercial & institutional waste would be reduced from all of Ontario to southern and central Ontario only.
- The service area for residential waste would be reduced from Chatham-Kent and its adjacent four municipalities to Chatham-Kent only.
- The project includes a commitment to look at enhanced diversion opportunities to assist the Province in meeting its diversion goals.
- A key focus of the expansion will be design and operations measures toward continued maintenance of an excellent environmental record.
- The expansion will not exceed the maximum height restriction dictated by the proximity of the airport (i.e. 45 metres from airport reference point).




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Key EA Steps and Comprehensive Consultation Plan

Spring 2018

Notice of EA Commencement

Spring – Summer 2018

Confirmation of Alternative Methods & Evaluation Criteria

Waste Connections will evaluate alternative ways to expand the landfill.

We Are Here

Provide us your input on alternatives and evaluation criteria:

- Evaluation Criteria Workshop
- Neighbour & Stakeholder Meetings
- Open House
- Emails, letters, Newsletters
- Ridge Landfill Liaison Committee
- Agency Consultation
- Indigenous Community engagement

Summer - Fall 2018

Evaluation of Alternative Methods

Waste Connections will recommend a preferred way to expand the landfill.

Provide us your input on preliminary evaluation results:

- Neighbour & Stakeholder Meetings
- Open House
- Emails, letters, Newsletters
- Ridge Landfill Liaison Committee
- Agency Consultation
- Indigenous Community engagement

Winter - Spring 2019

Assessment of Potential Effects & Development of Mitigation Measures

Waste Connections will develop mitigation measures to reduce negative impacts from the expanded landfill.

Provide us your input on potential effects and mitigation:

- Neighbour & Stakeholder Meetings
- Open House
- Emails, letters, Newsletters
- Ridge Landfill Liaison Committee
- Agency Consultation
- Indigenous Community engagement

Spring 2019

Draft EA Document

A draft document will be released for public and agency review for a 30-day review period.

Summer 2019 – Summer 2020

Final EA Document

A final EA document will be released for a 45-day public and agency review. MOECP will make a decision based on the final submitted EA and input received.

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Proposed Criteria for the Evaluation of Alternatives

The following criteria are proposed to compare site development alternatives from a natural environment perspective.

Climate Change: Potential to reduce greenhouse gas emissions.

Groundwater: Potential impacts to groundwater quality.

Surface Water: Potential impacts to surface water quantity and quality.

Anything Else to Consider? What's Important to You?

Add your comments below

Biology: Potential for loss/disruption to terrestrial and aquatic systems.

Air Quality: Potential impacts to air quality.

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Proposed Criteria for the Evaluation of Alternatives

The following criteria are proposed to compare site development alternatives from a socio-economic perspective.

Agriculture: Potential for loss/disruption to agriculture on-site.

Socio-Economic: Potential for odour disruption as a result of landfill mining.

Socio-Economic: Potential for displacement and disruption (e.g. litter, dust, odour) to residents and businesses near the site and along the haul route.

Anything Else to Consider? What's Important to You?

Add your comments below

Land Use: Intensity of waste management use (i.e. footprint size).

Archaeology & Cultural Heritage: Potential to impact resources on-site.

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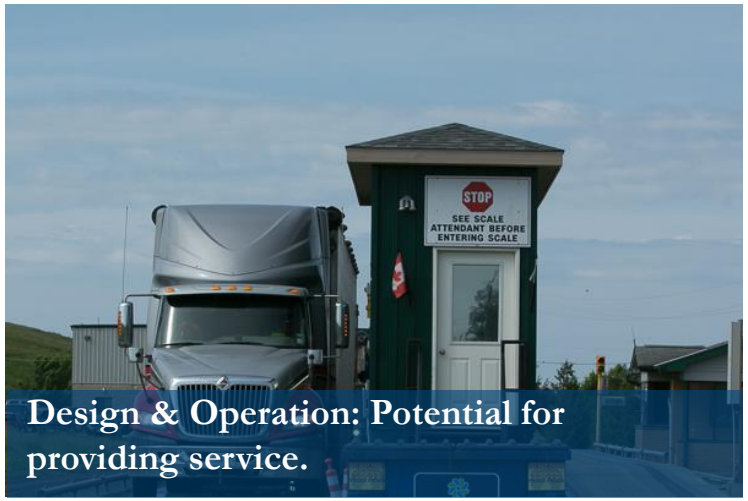
Proposed Criteria for the Evaluation of Alternatives

The following criteria are proposed to compare site development alternatives from a transportation and design & operation perspective.

Anything Else to Consider?
What's Important to You?
Add your comments below


Design & Operation: Potential for on-site safety concerns.


Design & Operation: Approximate cost of facility.



Design & Operation: Potential for providing service.


Traffic: Potential for traffic safety and operations impacts on the haul route related to soil import/export.

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What We Heard

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Ridge Landfill Environmental Assessment
Evaluation Criteria Workshop
July 11, 2018

WORKBOOK

On July 11th, Waste Connections of Canada invited its neighours from around the site and along the haul route to participate in a workshop about evaluation criteria. The following is the feedback our neighbours gave to us:

- Air quality, particularly **odour** is important to our neighbours who felt it should be a significant consideration in the evaluation.
- Neighbours expressed that nuisances from a landfill are also key and must include consideration of **blowing litter**, and **noise.**
- Neighbours stated that potential safety issues resulting from the landfill **truck traffic** are important to consider.
- Protection of **drinking water** was also identified by neighbours as another important consideration.

Neighbours at the workshop also identified some points about the current operation of the site that Waste Connections of Canada is working on addressing:

- Off-site litter/debris in ditches and on private properties
- Pot holes on Erieau Road
- Maintenance of grass on berms and other properties
- Consideration of a traffic light at Middle Line and Drury Line
- Providing private well water testing results

Tell us what you think about the evaluation criteria on the criteria panels

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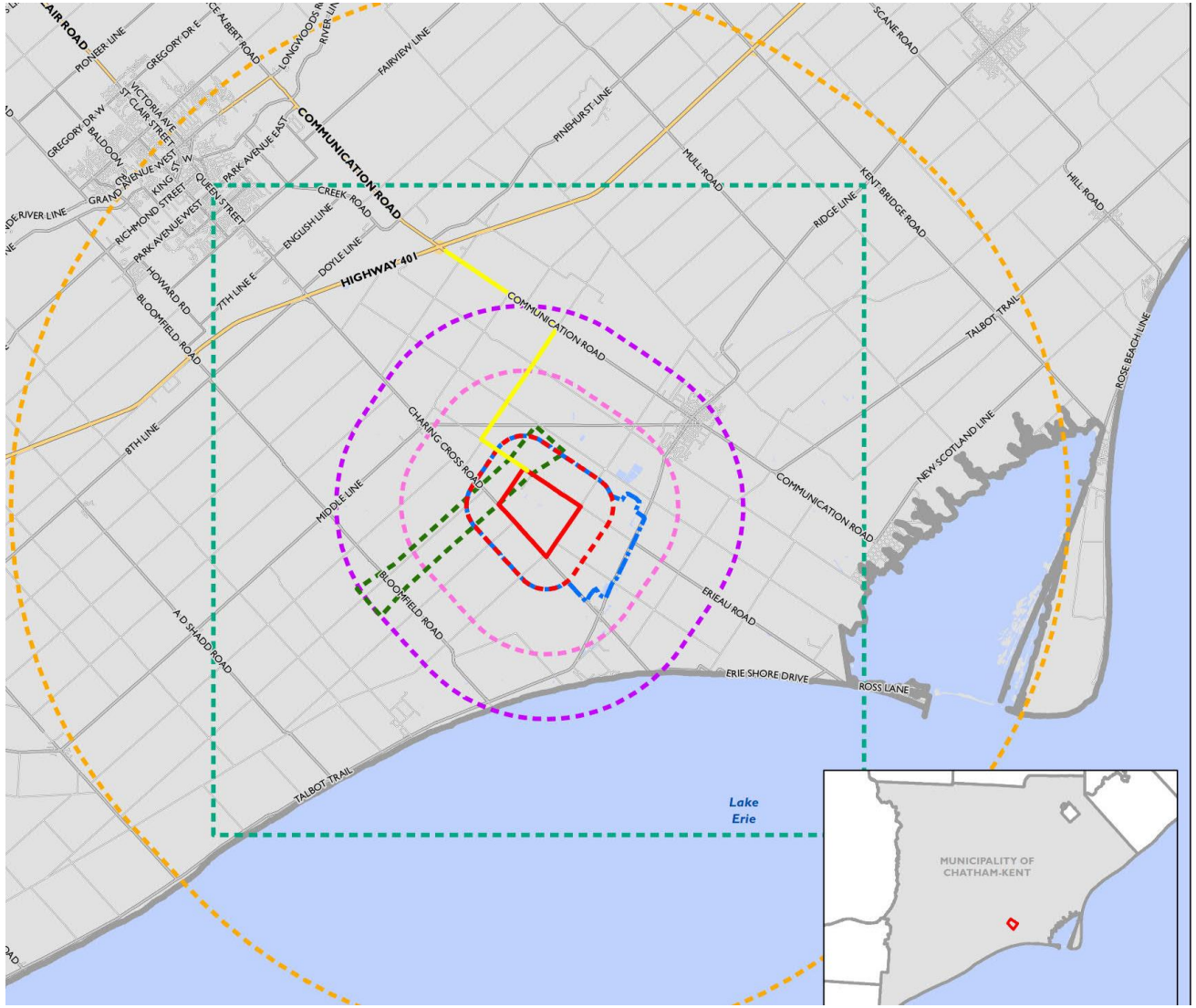
Proposed Study Areas

Study areas will be used to confirm existing conditions; evaluate Site Development Alternatives; and identify and assess potential impacts of the preferred Site Development Alternative.

What do you think about the proposed Study Areas?

Use Post-it notes to provide your comments below



RIDGE LANDFILL
STUDY AREAS FOR VARIOUS DISCIPLINES

On Site Property Boundary:
- Archaeology and Heritage
- Biology
- Climate Change
- Hydrogeology
- Atmospheric
- Bird Hazard
- Surface Water
- Design and Operations
- Landfill Mining
- Noise
- Socio-economic
- Transportation

Haul Route (Study Area includes all adjacent properties):
- Climate Change
- Atmospheric
- Agriculture
- Surface Water
- Noise
- Socio-economic
- Transportation

Off Site Study Area (On Site Boundary 1 km Setback):
- Agriculture
- Socio-economic

Off-Site Study Area (Subwatershed Boundary 1 km Setback):
- Surface Water

Off Site Study Area (Airport Property and Approaches):
- Aviation

Off-Site Study Area (On Site Boundary 3 km Setback):
- Visual

Off-Site Study Area (On Site Boundary 5 km Setback):
- Hydrogeology

Off-Site Study Area (10 km square from centre of site):
- Atmospheric

Off-Site Study Area (On Site Boundary 15 km Setback):
- Bird Hazard

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Site Development Alternatives

Three Site Development Alternatives are under consideration to expand the landfill capacity. **The following lists characteristics common to all three Site Development Alternatives:**

- Disposal capacity for an additional 20 years at current disposal rate (28.9 million metres^3)
- Includes on-site roads and storage areas, an office, scale house and drop off areas
- Removal of on-site south-west woodlot is required
- Maximum height of 45 m (about the same height as the current West Landfill which is 42 m)
- Protects the environmental, as a continued Waste Connection priority, throughout site design and operation including:
  - Leachate collection and management to protect ground water
  - Stormwater ponds and a flood control facility to protect surface
  - Collection of landfill gas and beneficial use to reduce greenhouse gas emissions
  - Daily covering of waste to mitigate odour, litter, birds
  - Screening berms to minimize noise and provide a visual barrier
  - Ongoing monitoring to ensure protection systems are working

Waste Connections will replace the trees removed from the south-east woodlot. This map show a possible location for the replacement trees.

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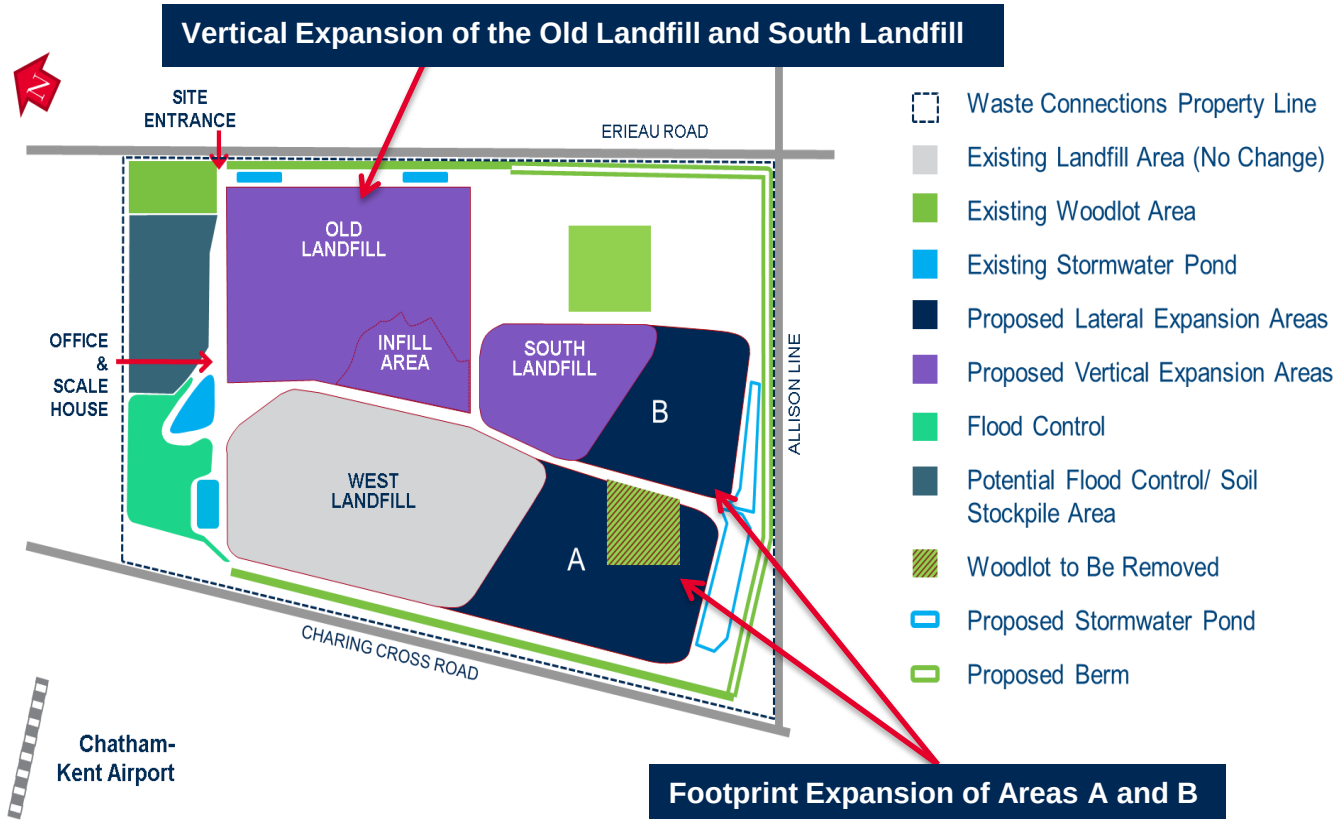
Alternative 1 (Horizontal and Vertical Expansion)

This alternative includes:

- A footprint expansion of the West Landfill (expansion area 'A'). Height to match the existing West Landfill at 42 metres.
- A footprint expansion of the South Landfill (expansion area 'B'). Vertical expansion of the existing South Landfill from it's current height of 35.5 metres to 42 metres.
- A vertical expansion of Old Landfill from its current height of 12 metres to 42 metres.



Important Characteristics Specific to Alternative 1

- Takes advantage of opportunity to add to an existing fill area reducing land required
- Maintains South-east woodlot

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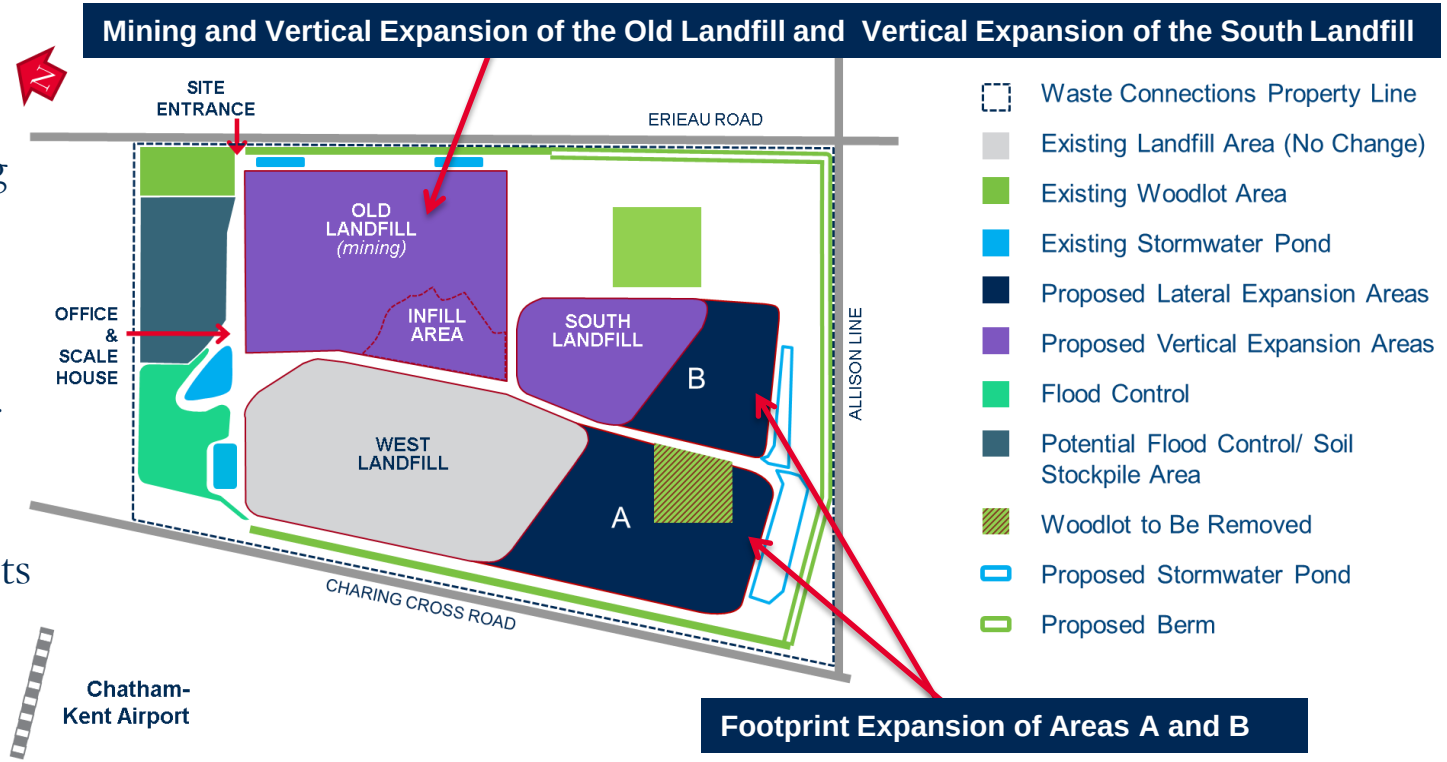
Alternative 2 (Horizontal and Vertical Expansion plus Landfill Mining)

This alternative includes:

- A footprint expansion of the West Landfill (expansion area 'A'). Height to match the existing West Landfill at 42 metres.
- A footprint expansion of the South Landfill (expansion area 'B'). Vertical expansion of the existing South Landfill from it's current height of 35.5 metres to 42 metres.
- A vertical expansion of Old Landfill to go from its current height of 12 metres to 42 metres.
- Mining of the Old Landfill



Important Characteristics Specific to Alternative 2

- Takes advantage of opportunity to add to an existing fill area reducing land required
- Slightly smaller footprint than Alternative 1
- Maintains South-east woodlot
- Involves mining the Old Landfill over a period of 5 – 10 years

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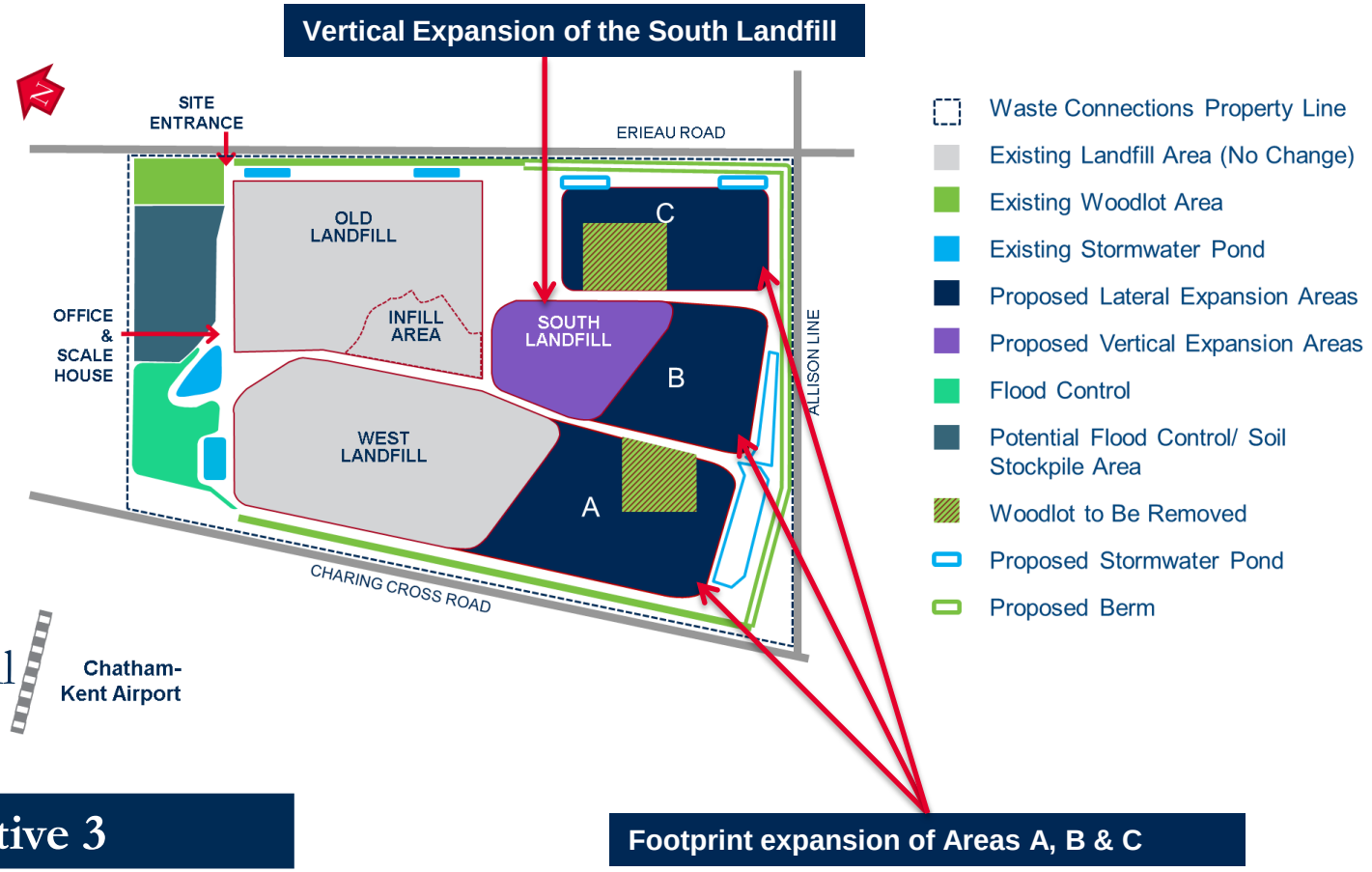
Alternative 3 (Horizontal Expansion)

This alternative includes:

- A footprint expansion of the West Landfill (expansion area 'A'). Height to match the existing West Landfill at 42 metres.
- A footprint expansion of the South Landfill (expansion area 'B'). Vertical expansion of the existing South Landfill from it's current height of 35.5 metres to 42 metres.
- A new landform (expansion area 'C') which will be developed to a height of 42 metres.



Important Characteristics Specific to Alternative 3

- Has the largest footprint
- Requires removal of the South-east woodlot
- Does not include changes to the Old Landfill

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Landfill Gas and Leachate Management Alternatives

Landfill Gas Alternatives

The following alternatives will be considered:

- Collect and flare (current practice)
- Develop a gas utilization facility. The options include conversion to:
  - Renewable natural gas (to be used directly by industrial customers or purified to go into a pipeline)
  - Electricity generation

Leachate Treatment Alternatives

The following alternatives will be considered:

- No on-site pre-treatment and treat at Blenheim Treatment Plant (current practice)
- No on-site pre-treatment and send to another facility
- On-site pre-treatment with further treatment at Blenheim Treatment Plant
- On-site pre-treatment with further treatment at another facility
- Full on-site treatment and discharge to local drain

What Do You Think About the Alternatives?

Add your comments to this panel

Is there an alternative to add capacity or manage leachate and landfill gas that we have not thought of?	Any changes that you would suggest to the alternatives?

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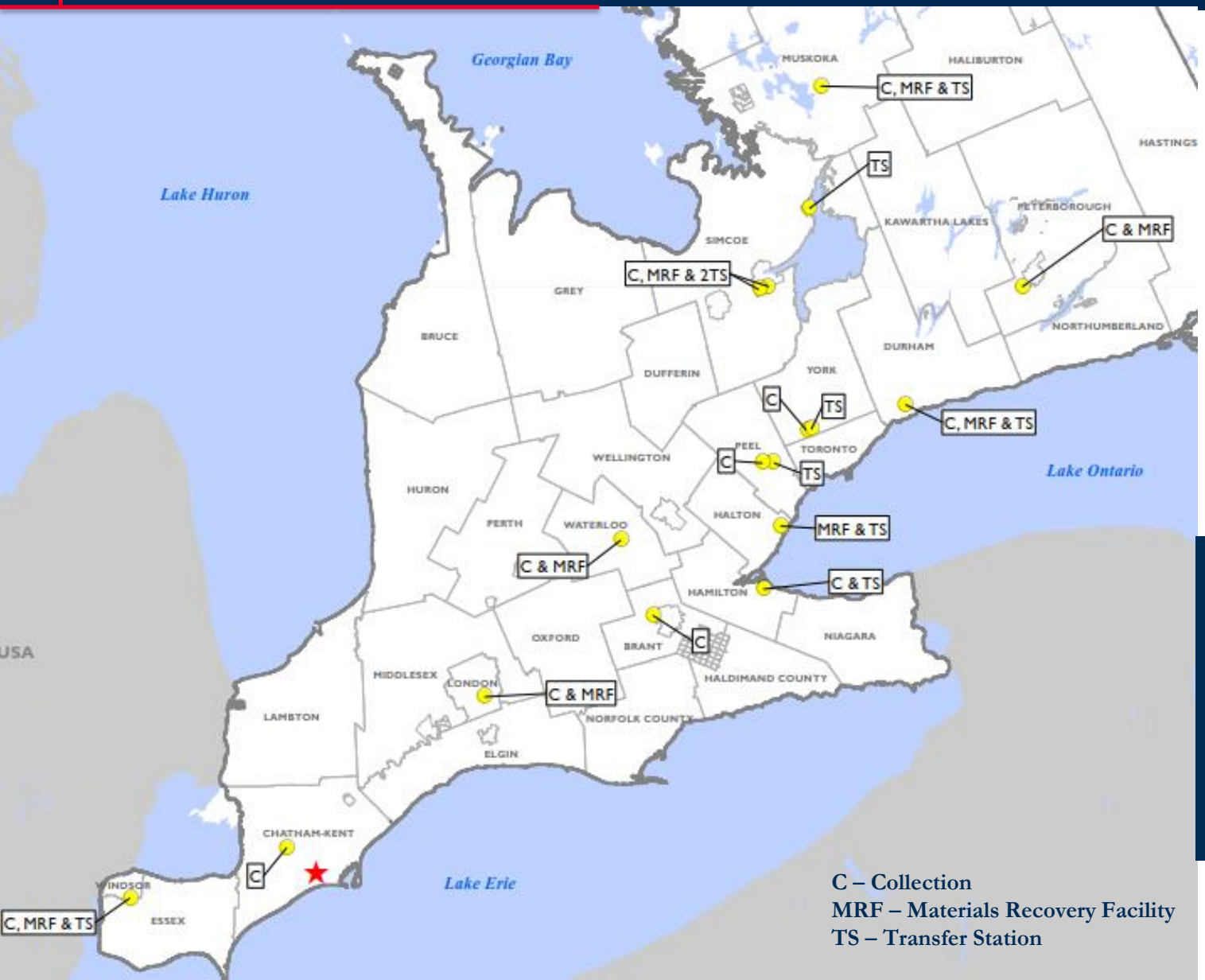
Commitment to Diversion



Waste Connections operates a network stand-alone facilities in Ontario that are responsible for local IC&I and/or residential curbside collection; the operation of recycling facilities (8) and waste transfer stations.

Waste Connections is committed to looking at enhance opportunities for waste diversion at-source, elsewhere in the system and on-site at the Ridge Landfill.

Waste Connections Participates in the Circular Economy:

- We divert IC&I organic waste to anaerobic digestion with Seacliffe Energy in Leamington
- We divert greenhouse by-product to local farms in Essex/Windsor
- We divert ash material for recycling into concrete

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Commitment to Diversion

Waste Connections is committed to being an industry leader, assisting the province in diverting waste from disposal as per the *Strategy for a Waste-Free Ontario* by:

- Continuing to work with customers to identify opportunities to reduce materials going to disposal;
- Safely removing recyclables from the waste collected at waste transfer stations; and
- Seeking opportunities to promote additional re-use and recycling.

Tell us your ideas on how Waste Connections can help the Chatham-Kent community increase diversion.

What materials do you wish you could recycle/reuse/repurpose? What do you do with them now?

What could your business/group use/reuse?

What do you like/dislike about the current diversion programs in Chatham-Kent?

What would encourage you take materials to a central location/depot?

What would improve your experience at a central location/depot? (e.g. a one-stop-shop, self serve, etc.)

Provide your comments here:

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Commitment to Diversion

As part of the Ridge Environmental Assessment, Waste Connections of Canada is required to look at **different ways to participate in diversion at Ridge**.

The following are being considered for Ridge:	***Tell us what you think***
Processing facility (e.g. mixed waste processing facility, source separated organic waste processing facility, leaf and yard waste composting, construction and demolition waste processing).	
Drop off depot that could include things like electronics, tires, bulky items, recyclable material not currently in blue box.	
Swap facility or beneficial use program that could include construction and renovation materials, housewares, furniture, paint.	
Collection of specific non-recyclable material or agricultural waste to benefit a specific business or community group (e.g. In Halton they collect eye glasses for NGOs).	

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Stay Involved

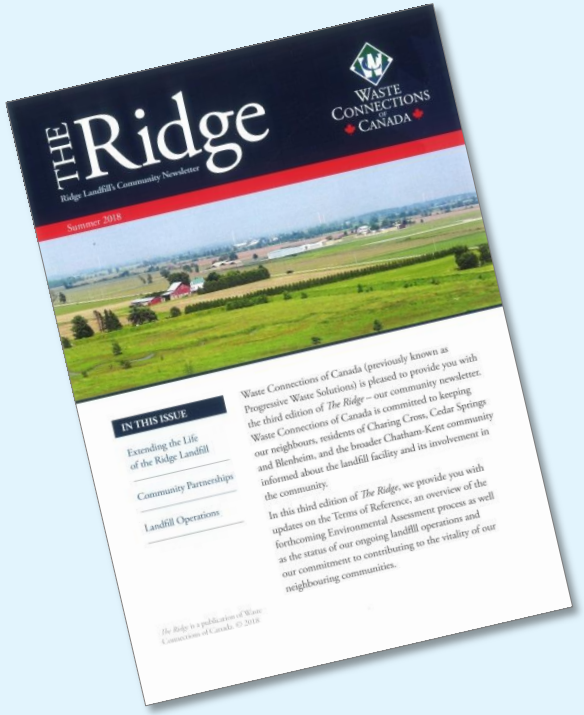
During the Environmental Assessment, consultation with the community will include:

Public Open Houses & Website

To exchange information and hear community concerns and questions in person or via www.ridgelandfill.com

Community Newsletters

To provide news and information about the site and proposed expansion project.


THE Ridge

Ridge Landfill's Community Newsletter

Waste Connections of Canada

Summer 2018

IN THIS ISSUE

Extending the Life of the Ridge Landfill

Community Partnerships

Landfill Operations

Waste Connections of Canada (previously known as Progressive Waste Solutions) is pleased to provide you with the third edition of *The Ridge* – our community newsletter. Waste Connections of Canada is committed to keeping our neighbours, residents of Charing Cross, Cedar Springs and Blenheim, and the broader Chatham-Kent community informed about the landfill facility and its involvement in the community.

In this third edition of *The Ridge*, we provide you with updates on the Terms of Reference, an overview of the forthcoming Environmental Assessment process as well as the status of our ongoing landfill operations and our commitment to contributing to the vitality of our neighbouring communities.

The Ridge is a publication of Waste Connections of Canada. © 2018

Stakeholder Meetings

To provide opportunity for one-on-one meetings with Waste Connections staff to discuss the proposed expansion project.

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Thank You

We want to hear from you!

Your issues or concerns are important to us!

- We want to know about them.
- We want to address them where possible.
- We want to demonstrate how we took your feedback into consideration.

Please leave your written questions or comments with us today, or send them to us anytime at: **ridgelandfill.com**

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