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CONSULTING ENGINEERS
AND SCIENTISTS



Fundy Regional
Service Commission

Commission de Services
Régionaux de Fundy

Crane Mountain Landfill Capacity Augmentation and Life Extension Project

Agenda and Panel

- Introductions
- Crane Mountain Landfill Overview
- Summary of Project
- Benefits to the Region
- EIA Process
- Identify Potential Concerns
- Questions and Feedback



**Fundy Regional
Service Commission**
Commission de Services
Régionaux de Fundy

Role: Proponent
Operations of Landfill



GEMTEC
CONSULTING ENGINEERS
AND SCIENTISTS

Role: Consultant
Engineering & Environmental

Email Questions and Comments:

eia@gemtec.ca or
marco.sivitilli@gemtec.ca

Additional Information:

www.FundyRegion.ca

Crane Mountain Landfill Overview

- Crane Mountain Landfill opened to the public in 1997
- 9 cells to date; approximately 8 more until closure (a total of 17 cells)
- Sized for 4.8 million m³ (approximately 40 years)
- Remaining volume of 2.4 million m³
- Projected capacity until 2048
- Current top of landfill at +90 metres **geodetic elevation** (mean sea-level)
 - MSW at current highest point is approximately 20 metres thick



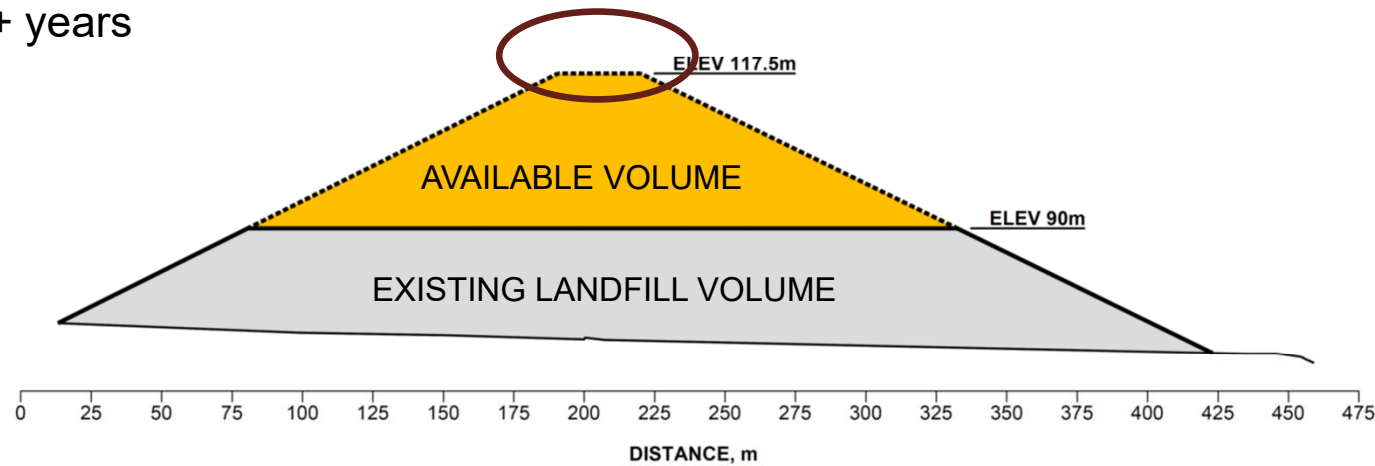
Crane Mountain Landfill Cell 9 Construction (2022)

Overall Landfill Site Plan



The Project

- Increase landfill maximum height from elevation +90 m to +117.5 m
- Based on geometry, only small area of landfill will reach new higher elevation
- Maintains current landfill footprint and exterior slopes
- Extends life of current site by 22+ years
- Utilizes existing infrastructure
- Maintains current service area



Benefits to Communities and Residents



Crane Mountain Landfill Capping (2022)



Life extended from 2048 to at least 2070, maximizing the lifespan of the current site



Additional 2.4 million m³ capacity



Utilizes existing infrastructure



Reduces construction, operation, and maintenance costs



No additional leachate by maintaining current footprint

Benefits to Communities and Residents

- Significantly Lower Capital Costs (new cells)
 - Each cell costs about \$4 million and are designed to last between 3 and 4 years
- Project will save FRSC and rate payers:
 - \$1 million per additional year
 - over \$22 million over the extended life of the landfill

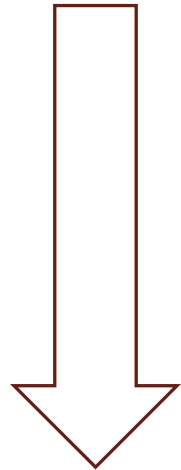


Environmental Impact Assessment

- Provincial EIA is ongoing with NBDELG
- EIA requires potential impacts to environment be **identified** and **mitigated**
- Determination (approval) subject to conditions
- Fredericton Regional Landfill & Northwest Regional Landfill approved for height increase (2020-2022)



Environmental Impact Assessment Review Process



Item	Status
Screening	Complete
Registration	Complete
Regulatory and Technical Review	Ongoing
Engagement (Public, First Nation, Stakeholder)	Ongoing
Determination (approval)	Pending

Identifying and Mitigating Potential Concerns

No Additional Environmental Impacts Expected from Increased Landfill Height

- No increase in landfill footprint
- No destruction of wildlife habitat
- No removal of forest vegetation
- No destruction to watercourses or wetlands
- Existing liner and leachate infrastructure will support additional loads from higher MSW



Crane Mountain Landfill (2023)

Identified Potential Concerns

Odourous Emissions

Mitigations:

- Continue to implement conditions of Approval to Operate issued by DELG
- Apply intermediate and final cover regularly
- Expand LFG collection system regularly
- New Landfill Gas Master Plan developed by Tetra Tech

Windblown Debris

Mitigations:

- Continue to implement conditions of Approval to Operate issued by DELG
- Maintain treed buffer
- Utilize movable fencing system
- Apply cover material as needed

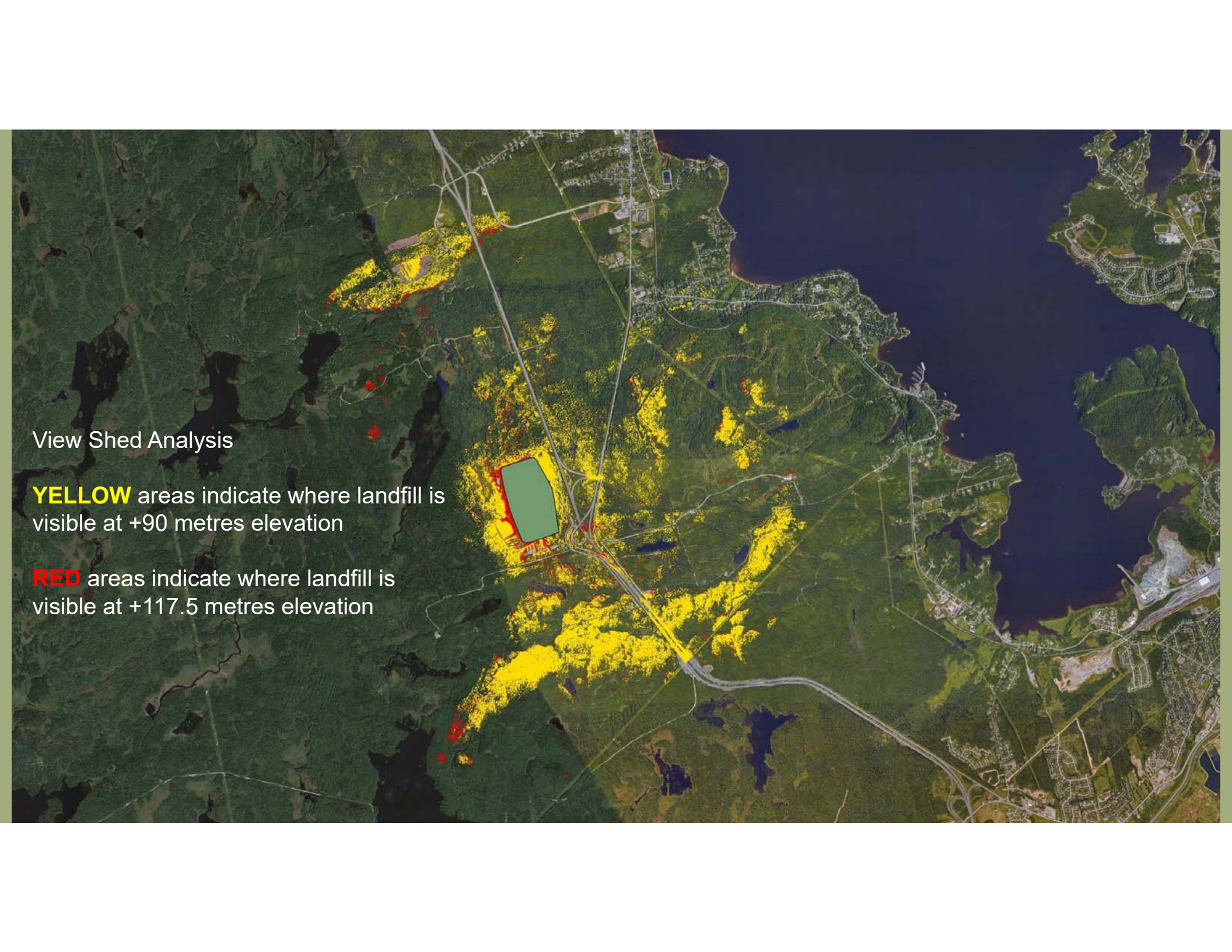
Visual Impact

Mitigations:

- Continue to implement conditions of Approval to Operate issued by DELG
- Maintain treed buffer
- Visual Impact Analysis (GEMTEC)



Crane Mountain Landfill Gas Well Expansion (2023)



View Shed Analysis

YELLOW areas indicate where landfill is visible at +90 metres elevation

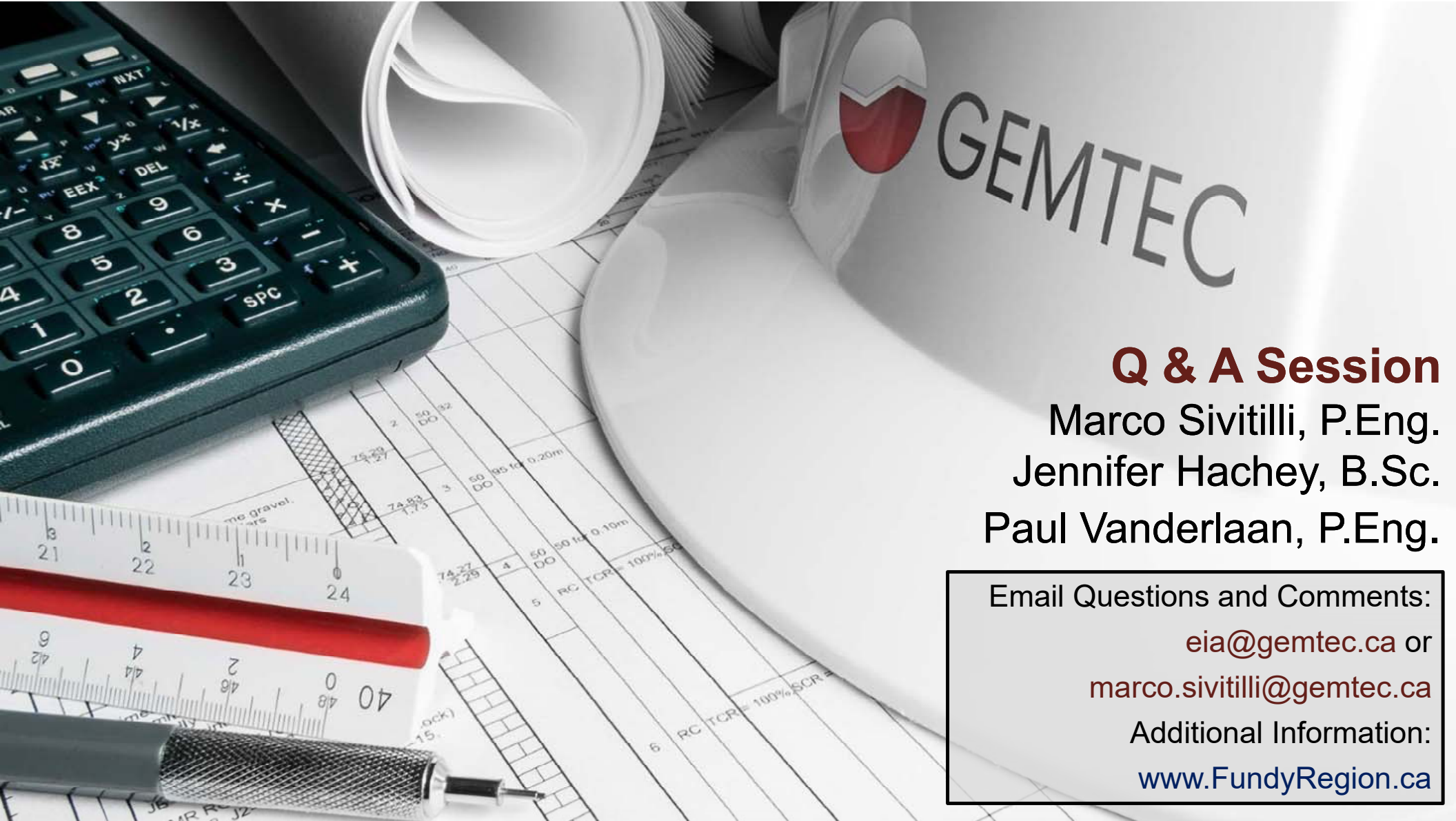
RED areas indicate where landfill is visible at +117.5 metres elevation

3D Model – Final Elevation +90 m



3D Model – Final Elevation +117.5 m





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Q & A Session

Marco Sivitilli, P.Eng.

Jennifer Hachey, B.Sc.

Paul Vanderlaan, P.Eng.

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