

City of Guelph Source Separated Organics Processing Facility

Rehabilitation and Upgrading of the
Existing City Processing Facility

Presented by:

John Haanstra – Maple Reinders Constructors Ltd.
Ben van Vree - Maple Reinders Constructors Ltd.
Theo van Wely – Aim Waste Management Inc.



Presentation Overview

- Company history
- Expansion of existing tipping floor
- Odour management
- Existing primary section
- Enlarge secondary storage and indoor screening
- Why select our proposed solution?



Company History: Maple Reinders

- Design/Build constructor
- Established in 1967, 40th Anniversary
- Offices across Canada
- Annual construction revenue over \$200 million
- Project experience in environmental waste treatment
 - over 400 water and wastewater treatment facilities
 - award-winning in-tunnel compost plants (Hamilton, Peel, Sydney, Banff)
 - energy-from-waste facilities



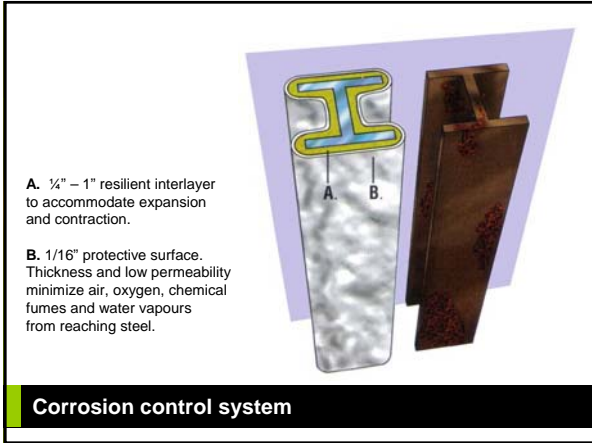
Expand Existing Tipping Floor

- Corrosion control and insulation > potential options:
 - incorporate galvanized steel into the building
 - abrasive blast, prime and paint steel with two coats of high quality paint
 - apply alternative corrosion control and insulation system (structural shell) (favourable)
- Airlock
 - enlarge existing building to the northwest
 - drive-in airlock, negative air pressure
 - drain system
 - extracted air



Receiving Hall, Hamilton CCF

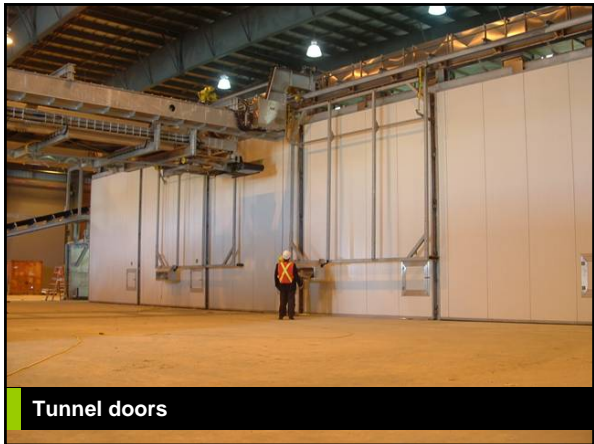
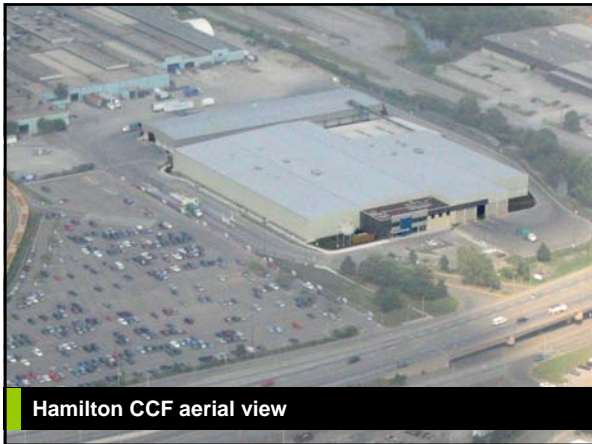




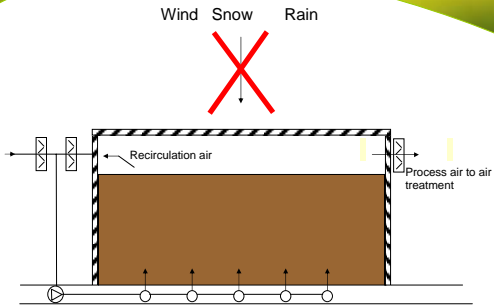
Odour Management

- Negative pressure in all odorous areas
- Totally sealed compost process
- Totally sealed air handling system
- Air quality in working areas - 6 changes per hour
- Reduce building volume as much as possible
- Separate treatment for building & compost process air
- Strict operational Protocols
- Airlock ahead of tipping floor

Maple Reinders



In-Vessel Composting Tunnel



Existing Primary Section

- Foundations can be re-used
- New pre-engineered building frame
 - either galvanized steel or premier coatings
- Fiberglass roof panels
- Corrosion-resistant wall and insulation systems



Galvanized steel roof system

Enlarge Secondary Storage – Indoor Compost Screening

- Galvanized pre-engineered structure
- Enclosed compost screening area
- Odour control
- Exterior wall & roof system



Compost Screening

Sample Projects

- | | |
|--------------------------------|------------------|
| • Hamilton Centralized Compost | 60,000 tonnes/yr |
| • Peel Compost Facility | 60,000 tonnes/yr |
| • Cape Breton Compost | 12,000 tonnes/yr |
| • Banff Bio-solids Compost | 4,000 tonnes/yr |



Why select our solution?

- Proven experience
- High end facilities
- Innovation in construction
- Corrosion solutions

} **Proven sustainable construction**

- Flexible DB approach
- Partnering approach
- Designed for expansion

} **Economic**



For additional information please contact:

Maple Reinders Constructors Ltd.

John Haanstra
jhaanstra@maple.ca

Ben van Vree
benv@maple.ca

tel: 905-821-4844

