



TRAFFIC OPERATIONS ASSESSMENT

**Proposed Waste Processing Development
580 Hazelhurst Road, City of Mississauga**



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November 12, 2025

Reference Number: 26160

Davin McCully

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Dear Farrah Ward,

**RE: Transportation Operations Assessment
Proposed Waste Processing Development
580 Hazelhurst Road, City of Mississauga**

LEA Consulting Ltd. is pleased to present the findings of our Transportation Operations Assessment for the proposed waste processing development located at 580 Hazelhurst Road in the City of Mississauga. This Transportation Impact Study has been prepared for Armstrong Planning & Project Management in support of the Site Plan Approval (SPA) application for the subject site. This report concludes that the proposed development is expected to generate a minimal number of auto trips and will provide an appropriate number of vehicle, bicycle, and loading spaces based on the site's location within the City of Mississauga.

Please do not hesitate to contact the undersigned should you have any additional questions or concerns.

Yours truly,

LEA CONSULTING LTD.

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Project Manager, Transportation Engineering

Harkarandeep Bains, EIT
Project Coordinator

Encl. Transportation Operations Assessment – Proposed Waste Processing Development – 580 Hazelhurst Road, City of Mississauga (November 2025)

Disclaimer

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TABLE OF CONTENTS

1	Introduction.....	1
1.1	<i>Proposed development.....</i>	1
2	Site-Generated Traffic.....	3
2.1	<i>Proposed Inputs</i>	3
2.2	<i>Trip Generation.....</i>	3
3	Parking Review	5
3.1	<i>Vehicle Parking Zoning By-law Requirements</i>	5
3.2	<i>Accessible parking Zoning by-law requirements.....</i>	5
4	Conclusions & Recommendations	9

LIST OF TABLES

Table 1-1: Site Statistics.....	2
Table 2-1: Capacity of Vehicles Queuing at the Site.....	3
Table 2-2: Trip Generation.....	4
Table 3-1: Vehicular Parking Requirements - Precinct 4	5
Table 3-2: Accessible Parking Space Requirement.....	5

LIST OF FIGURES

Figure 1-1: Site Location	1
Figure 1-2: Proposed Site Plan	2

APPENDICES

APPENDIX A	Design and Operations Report
APPENDIX B	Terms of Reference
APPENDIX C	Functional Design Review

1 INTRODUCTION

LEA Consulting Ltd. (LEA) has been retained by Armstrong Planning & Project Management to undertake a Transportation Operations Assessment (TOA) for the proposed recyclable material and waste processing facility located at 580 Hazelhurst Road (hereinafter referred to as the “subject site”) in the City of Mississauga. The purpose of this assessment is to review the site trip generation and proposed vehicle parking supply. By way of background, a Design and Operations Report was prepared in July 2025 by York 1 Environmental Ltd which can be found in **Appendix A**. Additionally, LEA submitted a terms of reference (TOR) to the City in which they provided some additional comments to be addressed. The TOR and correspondence can be found in **Appendix B**.

The subject site is currently used for the storage of construction materials and is occupied by two small buildings located in the southeast corner of the site. The site location is illustrated in **Figure 1-1**.

Figure 1-1: Site Location



Source: Google Maps, August 2025

1.1 PROPOSED DEVELOPMENT

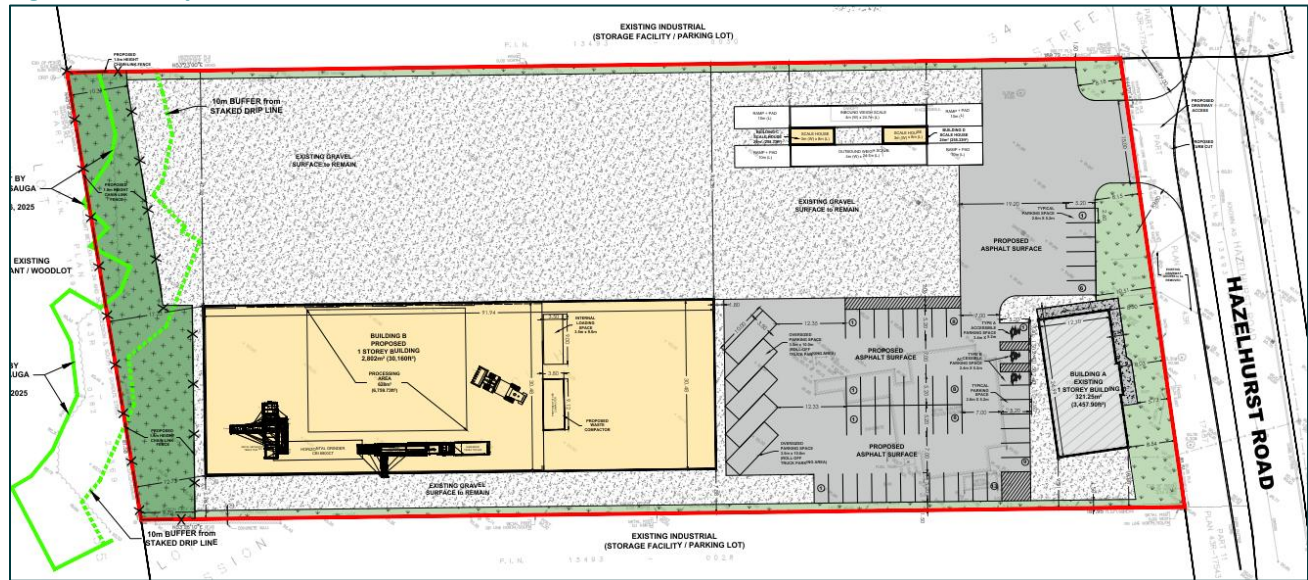
The proposed development consists of one (1) waste processing building, and an existing office building with a total GFA of 3,123.25m², as shown in **Table 1-1**.

Table 1-1: Site Statistics

Land Use	Unit Count/GFA
Existing Building A: Office	321.25m ²
Proposed Building B: Waste Processing Building	2,802m ²
Total	3,123.25m²

Vehicular access to the development is proposed via Hazelhurst Road. **Figure 1-2** illustrates the proposed site plan.

Figure 1-2: Proposed Site Plan



Source: Armstrong Planning, November 2025

2 SITE-GENERATED TRAFFIC

As mentioned above, the proposed development consists of two (2) buildings with a total GFA of 3,123.25m². Access to the development is proposed via an unsignalized full moves access onto Hazelhurst Road. A Design and Operations Report was previously completed for the site and calculated the anticipated number of truck trips. The sections below discuss the calculation, distribution, and assignment of site-generated vehicle and truck trips.

2.1 PROPOSED INPUTS

Table 2-1 summarizes daily and hourly truck trips derived from the Design and Operations Report.

Table 2-1: Capacity of Vehicles Queuing at the Site

Incoming Material	Density	Daily Rate	Average Weight carried by a vehicle (tonnes)	Number of Vehicles				
				Daily	10 min Period	20 min Period	45 min Period	Hourly
Incoming Mixed solid non-hazardous waste (C&D waste)	287	1,000	6.63	151	1			6
Incoming Excess Soil	2,000	2,000	20	100		2		6
Outgoing Excess Soil	2,000	2,000	26	56		1		3
Outgoing Residual waste	415	1,000	34	30			1	1
Outgoing recyclables/inert materials/ALCF	270	600	22	28			1	1

According to Appendix C of the report, the anticipated average arrival rate is one waste delivery every 10 minutes (approximately 6 vehicles/hour) and one soil delivery every 20 minutes (approximately 3 vehicles/hour). Outgoing residual waste, recyclables, inert materials, and alternative low carbon fuel (ALCF) will be hauled continuously (24/7). Residual waste requires one trailer on-site at a time with an average 45-minute turnaround (approximately 1–2 trips/hour), while recyclables/inert/ALCF require two trailers with a similar turnaround (approximately 2–3 trips/hour). Excess soil hauled off-site has an average 20-minute turnaround (approximately 3 vehicles/hour). Based on these rates, the maximum number of vehicles on-site at any time is six (6), although the site can accommodate up to ten (10) commercial vehicles across scales, tarping, loading/unloading, and queuing areas.

2.2 TRIP GENERATION

During the weekday AM peak hour, site-generated trips are estimated to consist of approximately 12 inbound truck trips and 12 outbound truck trips. In addition, it is understood that there will typically be 10 inbound employee trips travelling to the on-site office building. A summary of site vehicle trip generation is provided in **Table 2-2** below.

Table 2-2: Site Trip Generation

Land Use	Description	Weekday AM Peak Hour			Weekday PM Peak Hour		
		In	Out	Total	In	Out	Total
Proposed Recycling Facility	Construction & Demolition Waste	6	-	6	6	-	6
	Incoming Soil	6	-	6	6	-	6
	Excess Soil	-	3	3	-	3	3
	Residual Waste	-	1	1	-	1	1
	Recyclable/inert/ALCF	-	1	1	-	1	1
	Empty Trucks	-	7	7	-	7	12
	Total Truck Trips	12	12	24	12	12	24
	Total Employee Trips	10	0	10	0	10	10
	Total Trips	22	12	34	12	22	34

During the weekday AM peak hour, site-generated trips are estimated to consist of approximately 34 vehicle trips (22 inbound and 12 outbound). Similarly, during the weekday PM peak hour, site-generated trips are estimated to consist of approximately 34 trips (12 inbound, 22 outbound). Overall, site operations are projected to generate balanced AM and PM peak hour volumes, with inbound movements dominating in the morning and outbound movements increasing in the evening due to employee departures.

Note: It is assumed that incoming waste and soil trucks will not remain on-site but will exit promptly. Additionally, the analysis accounts for the fact that some trucks will leave empty.

3 PARKING REVIEW

This section reviews the vehicular parking standards based on the applicable requirements for the subject site.

3.1 VEHICLE PARKING ZONING BY-LAW REQUIREMENTS

The City of Mississauga By-law 0225-2007 has been reviewed to determine if the proposed vehicular parking supply aligns with the City's latest parking policy direction. The parking requirements for Precinct 4 and proposed supply are summarized in **Table 3-1**.

Table 3-1: Vehicular Parking Requirements - Precinct 4

ZBL 0225-2007				
Land Use	GFA (m ²)	Precinct 4		Proposed Supply
		Minimum Parking Rate	Parking Required	
Waste Processing Station	2,802	1.60 sp./100m ²	45	52
Office	321.25	3.0 sp./100m ²	10	
Site Total			55	52

In accordance with Precinct 4 rates, the proposed development is required to provide 55 vehicle parking spaces. The proposed development will supply 52 vehicle parking spaces, which fall short of the by-law requirements.

3.2 PARKING JUSTIFICATION

The proposed development is providing a deficiency of two (2) vehicle parking spaces compared to the required spaces calculated from the City of Mississauga Zoning By-law. It was noted in **Section 2.2** that only 10 trips will be made in the AM and PM peak periods from employees at the development. As this amount of trips is less than the parking supply provided, the supply should be efficient to accommodate employee trips and any visitor trips made to the site.

3.3 ACCESSIBLE PARKING ZONING BY-LAW REQUIREMENTS

The City of Mississauga Zoning By-law 0225-2007 provides accessible parking requirements to calculate the required accessible parking supply. For non-residential uses, the accessible parking supply is calculated using the required parking supply. The by-law requirements and proposed supply are illustrated below in **Table 3-2**.

Table 3-2: Accessible Parking Space Requirement

Land Use	Required Parking Spaces		Minimum Accessible Parking Rate	Minimum Accessible Parking Spaces
Non-residential	50	Spaces	4% of the total	3
Total Required				3
Total Proposed				3

The proposed development is required to provide a minimum of two (2) accessible parking spaces. The bylaw requirements will be satisfied as the proposed development will provide two (2) accessible parking spaces.

4 LOADING REVIEW

The City of Mississauga Zoning By-law 0225-2007 was reviewed to determine the loading requirements for the proposed development. As one of the uses of the proposed development is a waste processing facility, the City of Mississauga does not require any loading for it. The loading requirements for the proposed supply are summarized in **Table 4-1**.

Table 4-1: Loading Requirements

Land Use	GFA		City of Mississauga ZBL 0225-2007
			Loading Spaces Required
Office	321.25	m ²	None Required
Non-Residential (Waste Processing and Transfer Station)	2802	m ²	None Required
Loading Required			None
Proposed Loading			1

According to the City's By-law, no loading spaces are required for the proposed development. One (1) loading space is proposed for the subject site therefore exceeding the By-law requirement.

Swept paths for the fire route, loading vehicles and passenger vehicles are provided in **Appendix C**.

5 TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) typically consists of a number of strategies to achieve a more efficient transportation network by influencing travel behaviour. Effective TDM measures can reduce vehicle usage and encourage people to engage in more sustainable methods of travel. There are several opportunities to incorporate TDM measures that support alternative modes of transportation.

5.1 PEDESTRIAN-BASED STRATEGIES

Pedestrian connectivity in site design.

There is currently no sidewalk on the frontage of the site along Hazelhurst Road therefore the development will include a cash in lieu for the future. The future sidewalk would connect pedestrians to the proposed office buildings on-site and provide safe pedestrians routes.

5.2 PARKING-BASED STRATEGIES

Provision of carpool parking spaces.

The provision of dedicated, priority carpool spaces on the site will encourage employees to share their commute and reduce the SOV trips generated by the site. Carpool spaces should be clearly signed for employees and should be located near the main entrances to provide more incentive for carpooling. The proposed development will provide two carpool spaces which are located in the middle aisle of parking on the site plan

5.3 TRANSIT-BASED STRATEGIES

Information packages.

For workers to take advantage of the transit services surrounding the subject site, it is recommended that owners provide information packages and communications to increase transit awareness and multimodal transport by encouraging active transportation and different travel demand managements programs. The information packages should contain public transit information such as route maps and scheduled timetables.

5.4 IMPACT OF TDM MEASURES

The proposed TDM measures are expected to further support the site's proposed parking strategy by increasing the conveniences and attractiveness of taking transit or walking to/from the subject site. As the project goes through submission, more details regarding the TDM strategies will be updated. **Table 5-1** summarizes the proposed strategies and the expected auto trip reductions.

Table 5-1: Summary of TDM Strategies and Estimated Impacts

Recommended TDM Measures	Benefits	Estimated Cost
Pedestrian-Based Strategies		
Construct sidewalk and connect to proposed buildings on-site	+ Encourages walking and improves pedestrian realm +Provides convenient linkages for pedestrians etc.	Cash in Lieu
Parking-Based Strategies		
Carpool Parking	+ Encourage Employees to share the commute and reduce SOV trips generated by the site.	Included in Site Plan
Transit-Based Strategies		
Communication strategy and information packages	+Spreads awareness to residents about available transit services in area and encourage usage	TBD

6 CONCLUSIONS & RECOMMENDATIONS

- ▶ The proposed development consists of a new waste processing and transfer buildings with an existing office on-site consisting of a total GFA of total of 3,123.25m². Access to the development is proposed via an unsignalized full moves access onto Hazelhurst Road.
- ▶ The proposed development is expected to generate a total of 34 (22 inbound, 12 outbound) two-way auto trips during the AM peak hour and 34 (12 inbound, 22 outbound) two-way trips during the PM peak hour.
- ▶ The proposed development is required to provide a total of 55 parking spaces under Zoning By-law 0225-2007. A total of 52 parking spaces are proposed, which will be sufficient as they will be able to accommodate the 10 employee trips as well as account for any visitor trips. In addition, the proposed accessible parking supply of three (3) spaces complies with the by-law requirements.
- ▶ The proposed development is not required to provide any loading spaces under Zoning By-law 0225-2007. One (1) loading space is proposed for the site which exceeds the by-law requirements.
- ▶ Several TDM measures were provided to encourage the use of other modes of transportation such as walking and transit to the proposed development.



APPENDIX A

York 1 Environmental Ltd. Design and Operations Report



YORK1 HAZELHURST RECYCLING LTD.

EXPERIENCE • EXPERTISE • EXCELLENCE

DESIGN AND OPERATIONS REPORT

WASTE RECYCLING SITE (PROCESSING AND TRANSFER)
580 HAZELHURST ROAD, MISSISSAUGA, ONTARIO

JULY 21, 2025

VERSION 1.1

PREPARED BY: YORK1 Environmental Ltd.

Viktor Kopetskyy, P.Eng.

Senior Remediation Engineer

Todd Parry

Director, Environmental & Sustainability

George Kirchmair, P.Eng.

Vice President, Environmental Services

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Design and Operations (D&O) Report Checklist for Waste Processing Facility Environmental Compliance Approval (ECA) Applications

Company Information	
Company Name (Legal And Operating Names):	YORK1 Hazelhurst Recycling Ltd.
Location of Facility:	580 Hazelhurst Road, Mississauga, Ontario

The attached Design and Operations Report was prepared in accordance with the Ministry of the Environment, Conservation and Parks (MECP) guidance document “Design and Operations Report Template for Waste Transfer and Processing Applications” and “Guideline for Applying for an Environmental Compliance Approval”, and the completed minimum required information identified in the Design and Operations Report checklist.

This report is prepared for *YORK1 Hazelhurst Recycling Ltd. (YORK1)*, an operating authority of the proposed processing/transfer facility, to support the application of *YORK1 Environmental Waste Solutions Ltd. for Environmental Compliance Approval (ECA)* for a waste recycling site for the processing of solid non-hazardous waste generated in residential, industrial, institutional, and commercial sectors into alternative low-carbon fuels (ALCF) and for the transfer of inert materials (brick, block, asphalt, etc.), recyclables, and excess soil/rock for beneficial reuse, and is not intended to be used for other purposes or by third parties. Any uses that a third party makes of this report, and/or any reliance on decisions to be made based on it, are the responsibility of such Third Parties. *YORK1 Environmental Ltd.* accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.

Company Contact	
Name:	George Kirchmair
Title:	Vice President, Environmental Services
Phone Number:	416-726-8455
Email:	gkirchmair@york1.com
Signature:	<i>George Kirchmair</i>
Date:	July 21, 2025

Technical Contact	
Name:	George Kirchmair
Representing:	Vice President, Environmental Services
Phone Number:	416-726-8455
Email:	gkirchmair@york1.com
Signature:	<i>George Kirchmair</i>
Date:	July 21, 2025


Section of Report	Required Information	Submitted	Explanation/Reference
	Checklist	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Executive Summary	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Table of Contents	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Introduction/Overview, including site summary table	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Waste Management Description	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Truck Traffic Description	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Incoming Waste Inspection Processes	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Table: Process and Equipment Summary	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Table: Daily and Yearly Amounts and types of Incoming and Outgoing Waste and their destinations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Table: Process and Monitoring Summary	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Description of all Storage Areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Outlines of Operational Procedures, including nuisance prevention, staff training, maintenance, inspections, and record keeping	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Outline of any applicable process monitoring	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Outline of any applicable sampling and testing	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Dust Management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Odour Management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Wastewater Management	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Spill Management and Containment	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Management of Complaints	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Figure: Site Location	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Figure: Zoning Map and Surrounding Land Use	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

Section of Report	Required Information	Submitted	Explanation/Reference
	Figure: Site Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Figure: Building Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Figure: Site Drainage and Stormwater Management Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Appendix: Zoning bylaw and other land use information	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Appendix: Sample Calculations for Waste and Soil Storage	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Appendix: Equipment and Other Engineering Documents	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Appendix: Process Flow and Mass Balance Diagrams	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Appendix: Emergency Response Plan	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
	Appendix: Copy of Fire Safety Plan and Fire Emergency Procedures as Required under O. Reg. 213/07: Ontario Fire Code	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<i>Part of the Emergency Response and Contingency Plan</i>
	Change Log	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	

YORK1 Environmental Ltd.

July 21, 2025

Prepared By:



Senior Remediation Engineer
Viktor Kopetsky, P.Eng.



Reviewed By:



Director, Environmental & Sustainability
Todd Parry

Approved By:

George Kirchmair

EVP, Strategic Development
George Kirchmair, P.Eng.

EXECUTIVE SUMMARY

The purpose of the report is to provide the necessary technical documentation and written operational, safety, and contingency procedures for the operation of recyclable materials processing and waste transfer facility (Site) for the processing of solid non-hazardous waste generated from residential, industrial, commercial, and institutional (ICI) sources in Ontario into alternative low-carbon fuel (ALCF) and for transfer segregated compacted recyclable materials. The waste will include mixed solid non-hazardous waste, including construction and demolition waste, metals, paper, cardboard waste, plastics, drywall, asphalt products, wood waste, blue box recyclable materials, tires, and excess soil and rock for beneficial reuse. In addition, wood waste and construction and demolition waste (C&D) will be processed at the proposed waste recycling facility into ALCF. This report has been prepared by YORK1 Environmental Ltd. for YORK1 Hazelhurst Recycling Ltd. (YORK1), which will operate the Site.

The Site is located at 580 Hazelhurst Road in Mississauga and encompasses a total area of 1.529 hectares. Currently, the Site is used as a storage yard for materials and equipment by YORK1 Shoring and Foundations Ltd. (formerly Rumble Foundations Contractors Ltd.).

The Site is located in an industrial area and is zoned as Industrial E3-12. The nearest residentially zoned area is located approximately 460 metres to the southwest of the Site.

A legal description of the property is *Part Lot 34, Concession 3, SDS Toronto, as in RO872394, Except Part 12, 43R17487, T/W RO930120; Mississauga.*

Two buildings are currently located at the Site. A proposed waste processing/transfer building with a footprint area of 1,858 m², a *Britespan* building structure for soil processing with a footprint area of 930 m², and inbound and outbound scales with scale houses are planned to be constructed at the Site. The waste processing/transfer facility will be used for processing and temporary storage of solid non-hazardous waste, including construction and demolition waste, and blue box recyclable materials. The building will also be used for processing C&D waste and wood waste, and temporary storage of processed ALCF. The ALCF processing equipment will be installed within the building limits. The buildings will be constructed and equipped in compliance with the Ontario Building Code and Ontario Fire Code (O. Reg 213/07). In addition to the building, a leachate collection system consisting of drainage channels and a concrete underground storage tank (UST) will be constructed in the processing/transfer building to address potential impacts on the environment. The proposed waste acceptance and processing hours are 24 hours per day, 7 days a week. The Site will be servicing the Province of Ontario.

The following material will be accepted at the Site:

- Solid non-hazardous waste, including construction and demolition waste generated from residential, institutional, commercial, and industrial (ICI) sources, including but not limited to:
 - Metal waste
 - Cardboard/paper waste
 - Drywall waste
 - Asphalt shingles
 - Tires
 - Wood waste
- Blue box recyclable materials
- Excess soil and rock for beneficial reuse
- Inert waste, including concrete, block, and asphalt.

No liquid industrial waste or hazardous waste will be accepted at the Site. If incidental hazardous waste is encountered within the incoming solid non-hazardous waste, these amounts will be separated and removed from the Site within 48 hours of discovery.

The proposed maximum incoming rate of solid non-hazardous waste is 1,000 tonnes per day and will consist of the waste types listed above, such as C&D waste, metals, asphalt shingles, drywall, paper/cardboard waste, blue box recyclable materials, tires, wood waste, and 2,000 tonnes per day with any combination of inert materials, including concrete, asphalt, brick/block and excess soil/rock for beneficial reuse.

The following maximum storage capacities are proposed:

- Storage of unprocessed solid non-hazardous waste, segregated recyclables, and processed ALCF in the proposed processing/transfer building is 1,000 tonnes
- Storage of excess soil/rock for beneficial reuse and inert materials in the proposed *Britespan* building structure is 3,000 tonnes.

No waste will be stored outdoors.

The proposed maximum rate of residual waste for final disposal is 1,000 tonnes/day.

Incoming solid non-hazardous waste will be inspected by a trained Site representative, unloaded on the tipping floor within the processing/transfer building, and sorted/segregated and processed into ALCF.

Wood waste and construction and demolition waste will be processed using shredding/grinding equipment to recover recyclable metals and produce ALCF.

The Site will be continuously monitored and inspected for potential spills, dust, odour, and vermin issues, and, if an environmental concern arises, mitigation activities will be implemented as per the approved environmental emergency response and contingency plan.

A training plan will be developed for the Site, and all Site staff will be trained according to the plan prior to commencing their employment. The operating areas of the Site, equipment, and facilities will be inspected and maintained on a regular basis. The results of the inspection will be documented, and the corresponding documentation will be kept on-site for a period of 5 years.

By March 31 of each year, the annual report summarizing the Site activities for the previous year will be prepared and submitted to the Ministry of the Environment, Conservation and Parks (MECP).

This report will be revised and/or updated if any changes or modifications to the Site occur, including building modifications, process or equipment modifications, or revisions to the operating procedures. The report revisions/updates will be reflected in the Change Log provided in this report.

Change Log

Version	Date	Revision Description	Prepared By:	Reviewed By:
1.0	December 7, 2023	Original Document	YORK1 Environmental Ltd.	Todd Parry
1.1	July 18, 2025	Revision	YORK1 Environmental Ltd.	Todd Parry

Contents

1.0	INTRODUCTION/OVERVIEW	1
2.0	SITE DESCRIPTION AND DESIGN	3
2.1	Function of the Site	3
2.2	Site Location and Land Use.....	3
2.3	Site Plan	4
2.4	Proposed Buildings Layout and Design	5
2.5	Equipment at Site	5
2.6	Wastewater Management (including Treatment)	6
2.7	Stormwater Management	6
2.8	Vehicle Traffic	7
2.9	Fencing and Security	7
3.0	SITE OPERATIONS.....	8
3.1	Hours and Days of Operation	8
3.2	Service Area	8
3.3	Waste Types Accepted at Site.....	8
3.4	Waste Receipt Rates	9
3.5	Description of On-Site Operations.....	9
3.6	Incoming Waste Inspection Procedure	10
3.7	Acceptance Procedure for Incoming Soil.....	10
3.8	Waste Storage Facility	12
3.9	Material Balance.....	14
3.10	Operating Equipment	14
3.11	Processed Waste, Excess Soil and Residual Waste Testing.....	15
3.12	Waste Receiving Sites	16
4.0	PROCEDURES	18
4.1	Preventive Maintenance.....	18
4.2	Site Inspections.....	18
4.3	Nuisance Impacts.....	19
4.4	Emissions to the Atmosphere	19
4.5	Odour Prevention and Control	19
4.6	Dust Prevention and Control	20
4.7	Litter Prevention and Control	21
4.8	Pest Control	21
4.9	Noise Control	21
4.10	Complaint Management	21
4.11	Staff Training.....	22
4.12	Annual Reporting and Record Keeping.....	22
4.13	Disruption of Shipment.....	23
4.14	Environmental Emergency Response and Contingency Plan	23
4.15	Spills.....	24
4.16	Fires	24
5.0	SITE CLOSURE PLAN	25
6.0	FINANCIAL ASSURANCE	25
7.0	PUBLIC NOTIFICATION	25

FIGURES	26
Figure 1- Site Location Map	26
Figure 2 – Zoning Map	27
Figure 3 – Conceptual Site Plan.....	28
Figure 4 – Proposed Processing/Sorting Building: Tipping Floor Plan	29
Figure 5 – Drainage and Stormwater Management Plan	30
Figure 6 – Traffic Flow Plan	31
Figure 7 – Schematic Waste Flow	32
 APPENDICES	 33
APPENDIX A – CITY OF MISSISSAUGA ZONING BY-LAW 0225-2007	33
APPENDIX B – MANUFACTURER’S SPECIFICATIONS OF ALCF PROCESSING EQUIPMENT	34
APPENDIX C – CALCULATION OF CAPACITY OF VEHICLES QUEUING AT THE SITE.....	35
APPENDIX D – DAILY OPERATIONS REPORT	36
APPENDIX E – SOIL PROFILE	37
APPENDIX F – SOIL SAMPLING AND TESTING METHODS AND SAMPLING FREQUENCIES.....	38
APPENDIX G – VOLUME-TO-WEIGHT CONVERSION FACTORS	39
APPENDIX H – WASTE AND SOIL STORAGE CAPACITIES CALCULATIONS	40
APPENDIX I – DAILY INSPECTION REPORT	41
APPENDIX J – PROPERTY MAINTENANCE LOG	42
APPENDIX K – ODOUR BEST MANAGEMENT PRACTICES PROTOCOL.....	43
APPENDIX L – DUST BEST MANAGEMENT PRACTICES PROTOCOL.....	44
APPENDIX M – TYPICAL ODOUR CONTROL SYSTEM DETAILS.....	45
APPENDIX N – LITTER BEST MANAGEMENT PRACTICES PLAN	46
APPENDIX O – COMPLAINT FORM	47
APPENDIX P – TRAINING MANUAL AND FORMS.....	48
APPENDIX Q – ENVIRONMENTAL EMERGENCY RESPONSE AND CONTINGENCY PLAN.....	49
APPENDIX R – FINANCIAL ASSURANCE ESTIMATE	50
APPENDIX S – PUBLIC NOTIFICATION.....	51

ACRONYMS

ALCF – Alternative Low Carbon Fuel
AST – Aboveground Storage Tank
BTEX – Benzene, Toluene, Ethylbenzene, Xylenes
D&O - Design and Operations
ECA - Environmental Compliance Approval
EPA - Ontario Environmental Protection Act
HVAC - Heating, Ventilation, and Air Conditioning
LCS – Leachate Collection System
LOF – Limited Operational Flexibility
MECP - Ministry of the Environment, Conservation and Parks
OCP – Organochlorinated Pesticides
PAH – Polycyclic Aromatic Hydrocarbons
PCB – Polychlorinated Biphenyls
PHC – Petroleum Hydrocarbons
SDS – Safety Data Sheets
SVOC – Semi-volatile Organic Compounds
VOC – Volatile Organic Compounds
UST – Underground Storage Tank
QP – Qualified Person as per O. Reg. 153/04
YORK1 – YORK1 Hazelhurst Recycling Ltd.

1.0 INTRODUCTION/OVERVIEW

The following Design and Operations Report (D&O Report) has been prepared by *YORK1 Environmental Ltd.* for the proposed recycling/processing and transfer facility intended for the processing and transfer of solid non-hazardous waste generated from residential, industrial, commercial, and institutional (ICI) sources in Ontario including construction and demolition (C&D) waste, blue box recyclable materials, wood waste, metals, cardboard/papers, etc. at 580 Hazelhurst Road in Mississauga, Ontario (the Site), as shown on **Figure 1**. In addition, excess soil and rock for beneficial reuse and inert materials will be received at the Site, processed, and hauled to final receivers.

YORK1 Environmental Waste Solutions Ltd. is applying for an ECA for the operation of the proposed recycling/ processing and transfer facility. The proposed hours of waste and soil acceptance and processing hours are 24 hours per day, 7 days a week. The Site will be servicing the Province of Ontario.

The total proposed amount of incoming waste is 1,000 tonnes per day in any combination of solid non-hazardous waste, wood, metal, drywall, cardboard/paper waste, blue box materials, and tires, and 2,000 tonnes per day with any combination of inert materials including brick, block, concrete, asphalt, and excess soil and rock for beneficial reuse.

The proposed maximum daily rate of residual waste for final disposal is 1,000 tonnes.

No liquid industrial waste or hazardous waste will be accepted at the Site. If incidental amounts of hazardous waste are received at the Site, they will be removed within 72 hours of discovery.

In addition, the following is proposed for the waste recycling/processing and transfer facility:

- ◆ Construct a new processing/transfer building and install a compactor associated with the processing building.
- ◆ Install the following equipment for waste processing (alternative low-carbon fuels equipment) in the processing/transfer building: shredder, grinder, trommel, eddy current separator, conveyors, and other auxiliary equipment.
- ◆ Construct a *Britespan* building structure for excess soil processing.
- ◆ Construct inbound and outbound scales with the associated scale house(s).
- ◆ Construct a leachate collection system at the Site consisting of drainage channels and an underground storage tank.
- ◆ Construct a drainage and stormwater management system at the Site consisting of catch basins, an oil/water stormceptor, and stormwater sewers connected to the existing municipal stormwater sewer along Hazelhurst Road.

Characteristics of the proposed waste processing/transfer facility at the Site are summarized in the table below.

Table 1: Site Summary Table

Parameter	Units	Value/Description
Annual Total Days of Operation	Days	365
Days and Hours of Operation	Hours, Days	24 hours, 365 days
Seasonal Fluctuations	Yes/No	No
Average Daily Amount of Waste Received	Tonnes	1,000
Maximum Daily Amount of Waste Received	Tonnes	1,000
Maximum Annual Amount of Waste Received	Tonnes	365,000
Maximum Waste Storage Quantity	Tonnes	4,000
Annual Average Amount of Waste Destined for Final Disposal	Tonnes	365,000
Daily Maximum Amount of Waste Destined for Final Disposal	Tonnes	1,000
Daily Average on an Annual Basis: Amount of Waste for Final Disposal	Tonnes	1,000
Maximum Daily Amount of Excess Soil/Rock and Inert Materials Received	Tonnes	2,000
Maximum Annual Amount of Excess Soil/Rock and Inert Materials Received	Tonnes	730,000
Environmental Assessment Act Requirements Fulfilled	Yes/No/NA	NA
Waste types		
Unprocessed Solid Non-Hazardous Waste	Type	For further processing
Wood Waste	Type	For further processing
Metal Waste	Type	For further processing or reuse
Cardboard/Paper Waste	Type	For further processing or reuse
Drywall Waste	Type	For further processing or reuse
Asphalt Shingles	Type	For further processing or reuse
Blue Box Recyclable Materials	Type	For further processing or reuse
Tires	Type	Shipped for further processing to specialty recyclers
Density		
Unprocessed Solid Non-Hazardous Waste	Kg/m ³	287
Wood Waste	Kg/m ³	100
Metal Waste	Kg/m ³	134
Cardboard/Paper Waste	Kg/m ³	362 - 448
Drywall Waste	Kg/m ³	277
Concrete/Asphalt Waste	Kg/m ³	459 - 510
Blue Box Recyclable Materials	Kg/m ³	225 - 594
Excess Soil for Beneficial Reuse	Kg/m ³	2,000
Request for Operational Flexibility	Yes/No	No

2.0 SITE DESCRIPTION AND DESIGN

2.1 Function of the Site

The Site will operate as a waste recycling/processing/transfer facility where the incoming wastes will be segregated, sorted, and processed into ALCF, and shipped to the final destinations such as recycling facilities (segregated recyclable materials and metal), receiving facilities for ALCF, and others. In addition, excess soil/rock for beneficial reuse and inert materials will be received, processed, and hauled to final receivers.

The following material will be accepted at the Site:

- Solid non-hazardous waste generated from residential and ICI sources, including construction and demolition waste, including but not limited to:
 - Metal waste
 - Cardboard/paper waste
 - Drywall waste
 - Asphalt shingles
 - Tires
 - Wood waste
- Blue box recyclable materials
- Excess soil/rock for beneficial reuse
- Inert waste, including concrete, block, and asphalt.

The wastes and recyclables are generated from residential, commercial, industrial, and institutional sectors in the Province of Ontario.

2.2 Site Location and Land Use

The subject property is located in the southwest part of the City of Mississauga and is situated on the west side of Hazelhurst Road. The municipal address is 580 Hazelhurst Road, Mississauga, L5J 2Z7. A legal description of the property is *Part Lot 34, Concession 3, SDS Toronto, as in RO872394, Except Part 12, 43R17487, T/W RO930120; Mississauga*.

The Site is located in an industrial area and is zoned as Industrial Employment Zone E3-12. The surrounding properties are zoned as Industrial Employment E3-12, E3-1, and Development Lands with existing use D. Part 8 (Employment Zones) from the Mississauga Zoning By-Law 0225-2007 is provided in **Appendix A**.

The nearest residentially zoned area is located approximately 460 metres to the southwest of the Site. The nearest watercourse is the Clearview Creek, located approximately 230 metres to the southwest. The nearest water body, Lake Ontario, is located approximately 1,080 metres to the south.

The industrial/commercial occupants of the surrounding properties include:

- U-Need Storage/Elite Containers Terminal Inc., *Container storage*.
- Starline Production Rentals Inc., *Trailer sales & leasing*.

Figure 2 shows the current zoning and land use designation for the Site and surrounding properties.

The Site is relatively flat. The surface geology of the Site is comprised of coarse-textured glaciolacustrine deposits (sand, gravel, minor silt, and clay). Bedrock at the Site is comprised of shale, limestone, dolostone, and siltstone of the Georgian Bay Formation. The prevailing wind direction is to the southeast towards Lake Ontario.

2.3 Site Plan

The Site is comprised of 1.529 hectares (3.78 acres) of land with a perimeter of approximately 540 metres and is rectangular in shape. The Site is owned by *580 Hazelhurst Road GP Inc.* Currently, the property for the proposed waste processing and transfer facility is used as a storage yard for materials and equipment by *YORK1 Shoring and Foundations Ltd.* (formerly *Rumble Foundations Contractors Ltd.*).

The Site will process solid non-hazardous waste, including construction and demolition waste generated in the Province of Ontario, particularly from infrastructure projects, commercial, institutional, and residential sources. The proposed maximum daily rate of incoming solid non-hazardous waste at the Site is 1,000 tonnes, including construction/demolition waste, metal, plastics, drywall, paper/cardboard waste, wood waste for the following processing into ALCF, and blue box recyclable materials. In addition, up to 2,000 tonnes of excess soil/rock for beneficial reuse and inert materials, including concrete, gravel, asphalt, brick, and blocks in any combination, will be received daily for further processing and hauling to final receivers and recyclable facilities.

The proposed maximum storage capacity is 4,000 tonnes, consisting of 1,000 tonnes of non-processed solid non-hazardous waste, including segregated recyclables, up to 600 tonnes of processed ALCF, 3,000 tonnes of excess soil/rock for beneficial reuse, and inert materials, including concrete, gravel, brick/block, and asphalt. The unprocessed solid non-hazardous waste, including blue box recyclable materials, and processed ALCF, excess soil/rock, and inert materials, will be stored indoors only.

If an odour issue related to blue box recyclable materials arises, an odour suppression system within the processing building limits will be installed. Inspections of the Site, pertaining to the dust and odour control issues and the technical condition of the Site equipment, will be conducted daily. **Figure 3** shows the proposed location of indoor waste storage areas at the Site.

The facility will have the capacity to operate 24 hours a day, 7 days a week, as many of the infrastructure projects in Ontario require off-hour soil transfer services.

Inbound and outbound scales are proposed to be installed in the northeastern portion of the Site in the proximity of the Site entrance.

It is proposed that a Processing/Transfer Building be constructed in the southwestern portion of the Site. The building will serve as a waste transfer and processing/sorting building.

The building will be equipped with a leachate collection/drainage system (LCS) connected to a concrete underground leachate collection tank (UST). The UST will be emptied on a regular basis by a third-party contractor, and the leachate will be removed for off-site disposal.

A *Britespan* building structure for excess soil/rock processing and storage will be constructed in the south-central portion of the Site.

A permanent chain-link fence is proposed along the northern and southern property boundaries. The height of the fence will be approximately 6 feet. A large steel gate will be installed at the entrance to the property on the eastern property boundary. The gate will stay open during operating hours and will be closed thereafter. Perimeter areas to the west (vacant land for future development) are wooded.

The entrance road and on-site routes will be either paved or graveled to mitigate potential dust/mud generation.

2.4 Proposed Buildings Layout and Design

The following buildings are proposed to be constructed at the Site: two scale houses with inbound and outbound scales, the Processing/Transfer Building for solid non-hazardous waste processing, sorting, and storage, the *Britespan* building structure for excess soil processing and storage.

The Processing/Transfer Building with the area of approximately 1,858 m² and a perimeter of 183 metres will be constructed in the southwestern portion of the Site. The *Britespan* building structure with a footprint of 930 m² will be constructed in the south-central portion of the Site. A construction timeline for the new buildings is five years from the date of the issuance of the proposed ECA.

A conceptual site plan showing the location of the proposed buildings and scales is provided as **Figure 3**.

The height of the non-hazardous solid waste stored inside the Processing/Transfer Building will be approximately 6.1 metres. The unloading/loading activities will be conducted at the open areas in the north and east sides of the Processing/Transfer Building with dump trucks backing up through bay doors. The processed ALCF will be loaded onto trailers in the western portion of the Processing/Transfer Building. Maximum dimensions of the tipping floor in the Processing/Transfer Building are 37.0 metres x 21.6 metres, which results in an area of 799.2 m². A floor plan of the Processing/Transfer Building is shown in **Figure 4**.

An odour control system may be installed (if required) to mitigate potential odours and dust that may emanate from the tipping floor during the processing of solid non-hazardous waste and from the ALCF processing area. All waste processing activities will be conducted inside the Processing/ Transfer Building.

The existing office building and storage structure for inert materials/recyclables are located in the southeastern portion of the Site.

2.5 Equipment at the Site

The following section provides an overview of the site operations and associated processing and handling equipment. Operations at the Site include the following:

- ◆ Transfer
- ◆ Stockpiling
- ◆ Conveying
- ◆ Sorting/segregation
- ◆ Bulking
- ◆ Compaction
- ◆ Removal of debris (brick, concrete, rock)
- ◆ C&D waste and wood waste processing for ALCF production.

A list of Site equipment is provided in Table 2.

Table 2. Process and Equipment by Project Phase

Process ID	Process Description	Equipment or Component	Phase and Number of pieces/components	Equipment Capacity	Contaminants
1	Receiving/Exiting	Weigh Scales	Phase 1 – 2 scales	100 tonnes each	Dust
2	Unloading and Visual Inspection	Trucks	Phase 1 - 5 trucks	NA	Noise, Dust, Odour
3	Loading into Tractor Trailers/Trucks	Rubber-Tired Loaders	Phase 1 – 2 loaders	3.4 cubic metres	Dust, Odour
		Excavator	Phase 1 – 1 excavator	4.6 cubic metres	Dust, Odour
		Tractor Trailers	Phase 1 – 3 Tractor Trailer	40 tonnes	Dust, Odour
4	C&D & Wood Waste/ ALCF Processing (indoor)	Shredder (electrical)	Phase 1 – 1 shredder	40 tonnes /hour	Dust
		Trommel Screen (electrical)	Phase 1 – 1 trommel screen	40 tonnes/hour	Dust
		Horizontal Grinder (electrical)	Phase 1 – 1 grinder	40 tonnes per hour	Dust
		Eddy Current Separator (electrical)	Phase 1 – 1 Eddy current separator	40 tonnes per hour	Dust
5	Dust Control	Sweeper	Phase 1 – 1 sweeper	NA	Dust
SSA-1	Fire Control	Fire extinguishers and Alarms	Phase 1 – 10 fire extinguishers and 1 alarm system	NA	Dust, Smoke
SW-1	Site Services	Oil/grit separator	Phase 1 – 1 separator	3,400 litres	Odour

Manufacturer's specifications of examples of the above ALCF processing equipment are provided in **Appendix B**. Units may be switched out for comparable equipment based on availability.

2.6 Wastewater Management (including Treatment)

The Processing/Transfer Building, the *Britespan* building structure for processing and storage of excess soil/rock and weigh scales with the scale houses are proposed to be constructed at the Site. The design of the new Processing/Transfer building and the *Britespan* building structure will incorporate a floor drainage and collection system with the UST for leachate collection. The UST will be emptied on a regular basis, and the accumulated leachate will be transported to a licensed disposal facility. The estimated maximum frequency of the emptying of the leachate storage tank is once per month.

All waste and excess soil processing activities will be conducted inside the Processing/Transfer Building and the *Britespan* building structure, respectively.

2.7 Stormwater Management

The Site is comprised of approximately 1.529 hectares and is used as a storage yard for materials and equipment by YORK1 Shoring and Foundations Ltd. (formerly Rumble Foundations Contractors Ltd.). Two buildings are located at the Site, an office building and a storage structure. Runoff from the Site will be conveyed to a municipal storm sewer located on Hazelhurst Road.

A stormwater management facility designed to provide quality control of stormwater flows and discharging to the municipal storm sewer will consist of the following works:

- Oil/grit separator
- On-site catch basins
- On-site stormwater sewers.

Because the storage of waste and excess soil/rock will be in the enclosed Processing/Transfer Building and the covered *Britespan* building structure, respectively, the impact on stormwater is expected to be minimal. The details of the Site Drainage Plan and stormwater flow directions across the Site are provided in a separate *Stormwater Management Report* and in **Figure 5** (Drainage and Stormwater Management Plan).

The Facility Operator will conduct inspections, cleaning, and maintenance of the stormwater works at least one (1) time a year to prevent the excessive build-up of sediments and/or vegetation. The inspection results will be recorded in a logbook and the following information will be provided: the name of the stormwater works, the date and results of each inspection, maintenance, and cleaning, including an estimate of the quantity of any materials removed, and the date of each spill within the catchment area, including follow-up actions/remedial measure undertaken.

The nearest watercourse is Clearview Creek, which runs into Lake Ontario and is located approximately 230 metres to the southwest of the Site.

The Site is located within the Credit Valley source water intake protection area (IPZ-2). The nearest wellhead protection area in Milton is located approximately 23 kilometres to the west.

Surface water runoff at the Site will be managed following the *Stormwater Management Plan*, as detailed in the report titled *Stormwater Management Report, 580 Hazelhurst Road, Mississauga, Ontario*, which is prepared by XCG, A Division of Trace Inc., and dated June 5, 2024.

2.8 Vehicle Traffic

Two truck scales will be installed at the Site, an inbound scale for trucks entering the site and an outbound scale for trucks leaving. This efficient one-directional traffic flow will allow for trucks to easily enter and exit the site without impeding traffic on Hazelhurst Road. The incoming traffic will enter the Site from Hazelhurst Road on the east side of the Site.

Truck tarps will be removed at the Site after weighing in. When in full operation and at its maximum operating limit, the transfer station will be able to manage a total of 10 large commercial vehicles that can be in queue on-site at any given time. A calculation supporting this on-site vehicle capacity is provided in **Appendix C**. A traffic flow diagram at the Site is shown in **Figure 6**.

2.9 Fencing and Security

The Site will be secured with a controlled entry gate from Hazelhurst Road and fencing with a chain-link fence along the perimeter of the Site.

The gate at the entrance/exit located at the east side of the Site will be closed and secured at all times except for the operational periods when waste is being accepted or shipped at the Site. Corresponding warnings of no unauthorized entrance to the Site and information, including the name of the operator and the owner of the Site, the Environmental Compliance Approval number, normal hours of operation, allowable and prohibited waste types, and telephones to be reached in case of emergency, will be posted at the fence.

For security, the entire property will be equipped with a 24-hour surveillance system, which will prevent any unwanted or after-hours offloading. A chain link security fence bounding the Site and all the building doors will be closed and locked outside normal working hours. The transport vehicles are weighed prior to entering the Site on the entrance/exit weigh scales, before proceeding inside the Processing/Transfer Building and/or *Britespan* building structure.

All visitors to the Site will be required to present themselves to the Administrative Office to be signed in prior to being able to enter the building. Visitors will be accompanied by YORK1 personnel while they are at the Site.

During operating hours, experienced and trained staff will be present to provide proper supervision of activities and adequate Site security.

3.0 SITE OPERATIONS

3.1 Hours and Days of Operation

The Site receiving and processing hours will be 24 hours per day, 7 days a week.

The property is located outside residential and quiet areas of the City of Mississauga, for which it is prohibited to emit or cause or permit the emission of sound resulting from loading, unloading, delivering, or otherwise handling any containers, products, materials, or refuse.

3.2 Service Area

The service area of the proposed waste and soil recycling facility for solid non-hazardous waste and excess soil/rock for beneficial reuse is the Province of Ontario.

3.3 Waste Types Accepted at the Site

The facility will principally receive and process solid non-hazardous waste, including municipal, industrial, institutional, commercial, construction, and demolition waste. It includes wood waste, metals, drywall waste, asphalt shingles, tires, blue box recyclable materials, etc. The incoming solid non-hazardous waste will be unloaded, processed, and loaded indoors at all times. In addition, excess soil/rock for beneficial reuse will be received, processed, and hauled to final destinations.

Various recyclable materials such as wood, metals, tires, plastic and paper fibers received in the waste stream may be processed and separated for recycling purposes. The accepted types of waste are summarized in the following table.

Table 3. Summary of Waste Types and Amounts

Waste Type	Origin	Phase	Maximum Daily Amount (tonnes)	Maximum Annual Amount (tonnes)
Non-Hazardous Waste, including Wood, Metal, Cardboard/Paper, Drywall, Asphalt products, Plastics, etc.	Residential/ICI	1	1,000*	365,000*
Blue Box Recyclable Materials	Residential/ICI	1	100*	36,500*
Tires	Residential/ICI	1	10 tires*	3,650 tires*
Excess soil/rock for beneficial reuse and inert materials	Residential/ICI	1	2,000	730,000

*Maximum combined daily total of 1,000 tonnes, and annual total of 365,000 tonnes

A list of waste not accepted at the Site is summarized in the table below.

Table 4. List of Waste Not Accepted at the Site

Waste Type	Restriction Description
Hazardous Waste (as defined in O. Reg. 347)	Zoning restrictions do not allow for hazardous waste management at the Site
Liquid Industrial Waste or Hauled Sewage	Modifications to accept these waste types are not permitted under the proposal
PCB Waste	Modifications to accept these waste types are not permitted under the proposal
Biomedical Waste	Modifications to accept these waste types are not permitted under the proposal
Asbestos waste	Modifications to accept these waste types are not permitted under the proposal

3.4 Waste Receipt Rates

Waste receiving rates at the Site are summarized in the table below.

Table 5. Daily and Annual Waste Volumes by Type

Waste Type	Average Daily Amount	Maximum Daily Amount	Average Annual Amount	Maximum Annual Amount	Daily Amount for Final Disposal	Seasonal Amount	Emergency Amount
	Tonnes						
Non-Hazardous Waste, including Wood, Metal, Cardboard/Paper, Drywall, Asphalt products, etc.	1,000*	1,000*	365,000*	365,000*	1,000*	-	1,000*
Blue Box Recyclable Materials	100*	100*	36,500*	36,500*	100*	-	100*
Tires	10 tires	10 tires	3,650 tires*	3,650 tires*	10 tires*	-	10 tires*
Excess Soil for Beneficial Reuse and Inert Materials	2,000	2,000	730,000	730,000	2,000	-	2,000

*Maximum combined daily total of 1,000 tonnes/day, and annual total of 365,000 tonnes/year.

3.5 Description of On-Site Operations

The following section provides an overview of the site operations. Proposed operations at the Site include the following:

- ◆ Loading/Unloading/Transfer
- ◆ Stockpiling
- ◆ Conveying
- ◆ Sorting
- ◆ Segregation
- ◆ Bulking/Compacting
- ◆ Processing into ALCF

Wastes will be delivered to the Site in closed vehicles and covered containers designed for the hauling of solid waste. Excess soil/rock will be delivered in truck trailers and/or dump trucks. All inbound waste vehicles will proceed to the entrance weigh scale located at the eastern portion of the Site, as depicted in **Figure 3**.

Once given the go-ahead, truck traffic will proceed over to the specific designated offloading area. All non-hazardous waste will be offloaded within the Processing/Transfer Building. Excess soil/rock will be offloaded within the *Britespan* building structure.

Once waste has been offloaded, it will be inspected to determine if the incoming waste is acceptable at the Site. A tipping floor plan located within the Processing/Transfer Building, which will be used for non-hazardous waste unloading, processing, loading, and storage, is depicted in **Figure 4**.

Once a truck has been unloaded, it will proceed to the outbound scale where the net weight is obtained, and a weight-scale ticket is generated. This ticket includes all necessary information regarding what material was disposed of and by whom. All tickets will be stored in the software database and can be recovered, reprinted, or have reports compiled with specific information by many different means. A summary of the operational activities is documented in the *Daily Operations Report*. The corresponding form of the report is provided in **Appendix D**.

When sending material (compacted recyclables and processed ALCF) outbound to final destinations, vehicles first pass over the inbound truck scale, where the net weight is measured. Vehicles are then loaded with the specific material to be disposed of. Vehicles will then proceed to the outbound truck scale for gross weight measurements, and a ticket is generated, and all necessary paperwork for final disposal is created.

3.6 Incoming Waste Inspection Procedure

Incoming waste loads for each project will be screened upon receipt to determine if there is evidence of abnormal odour, vapours, content, etc. Loads that exhibit abnormal odours, vapours, or content are set aside in the waste inspection area. If unacceptable materials are discovered after a load has been dumped, the material will be removed and stored at a designated storage area until it can be properly disposed of at an appropriate hazardous waste depot. This material will be stored on top of a pallet and kept from contact with the ground.

During operating hours, experienced and trained staff will be present to provide proper supervision of activities and adequate Site security.

3.7 Acceptance Procedure for Incoming Soil

The Site will accept excess soil generated at construction sites and other development projects from residential, commercial, industrial, or institutional sectors. The Site will accept a maximum volume of 2,000 tonnes of excess soil or rock for beneficial reuse under O. Reg. 406/19, or as an alternative raw material feedstock.

Incoming soils will be inspected by a Facility *Qualified Person* (QP) prior to being received at the Site to ensure that the Site is approved to accept these types of materials. The following documentation provided by the soil generator is required for the soil acceptance at the Site for each source of incoming material:

- ◆ The generator's name and/or company name, address, and contact information
- ◆ Excess soil source site location
- ◆ Current excess soil source site activities and land use
- ◆ Past excess source site activities and land use, if known
- ◆ Estimated quantity of the excess soil to be received at the Site
- ◆ The results of any Phase 1 or Phase 2 site assessments undertaken for the source site, provided that samples were collected in accordance with the Ministry's requirements under O. Reg. 153/04.

If the Phase 2 assessment report is unavailable, a sampling protocol, including the number of samples taken and their locations, the sampling methods used, and the handling of the samples and analytical data, should be provided by the client for YORK1's review.

The analytical data are reviewed, and the maximum concentrations will be tabulated. The use of an approved hauler will be verified. The soil profile sheet, included in **Appendix E**, will be reviewed and approved.

The following laboratory analyses are required for the initial soil screening process:

- ◆ Analytical results for Regulation 347 Schedule 9 slump test if the incoming soil has a high moisture content, and
- ◆ Bulk analysis for heavy metals, petroleum hydrocarbon (PHC) fractions F1 to F4, benzene, toluene, ethylbenzene, xylenes (BTEX) and other parameters determined by the QP per Regulation 153/04 [typically inorganic parameters, VOCs, PAHs, PCBs, OCPs and/or organo-chlorinated herbicides], based on the current and past source site activities and land use. If the

incoming soil is destined for the final disposal at a non-hazardous waste landfill site, any other information required to demonstrate compliance with the landfill site's waste receipt restrictions in addition to the information above, including leachate analysis per O. Reg. 558 [metals and inorganics, semi-volatile organic compounds (SVOCs) including polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs) and polychlorinated biphenyls (PCBs)] demonstrating that the contaminated soil is not hazardous waste, is required.

The required sampling and testing methods and sampling frequencies for the incoming soil for acceptance to the Site are defined in **Appendix F**. Soil samples should be tested at an accredited laboratory (*Canadian Association for Laboratory Accreditation, CALA* or equivalent).

Provided that the excess soil is shown to be beneficial reuse soil, YORK1 may accept the excess soil for which the documentation is deficient or unavailable, if the excess soil remains segregated from all other soil and materials until the missing analytical results or source site concentrations are promptly provided by the generator and have been reviewed and deemed acceptable by trained YORK1 personnel, or until sufficient samples of the soil are collected at the Facility in accordance with the ex-situ protocol, as per **Appendix F**, and samples are submitted to the accredited laboratory for the required analysis to correct the deficiencies in the required characterization documentation or carry out the required excess soil characterization within:

- Seventy-two (72) hours from the receipt of the first load from the source site, or twenty-four (24) hours from the receipt of the final load from the source site (or on the next business day, whichever comes first) for source site where the amount of excess soil being received does not exceed 500 tonnes, or
- Twenty-four (24) hours from receipt (or on the next business day, whichever comes first for all other loads.

Acceptance of the material will be confirmed to the client by email within two (2) business days. All incoming loads will be weighed at the scale house, and an internal soil acceptance approval number will be used for tracking. The following information will be recorded in the electronic database generated by the scale software:

- | | |
|----------------|--|
| ◆ Gross weight | ◆ Generator Site Name/address |
| ◆ Tare weight | ◆ Vehicle Type |
| ◆ Net weight | ◆ Truck ID |
| ◆ Date | ◆ Ticket Number; and |
| ◆ Time | ◆ Purchase Order. |
| ◆ Customer ID | ◆ Number / Reference Number / Bill of Lading |

On a daily basis, the Facility Manager will track incoming and outgoing soil volumes by completing a *Daily Operations Report (Appendix D)*.

3.8 Waste Storage Facility

The proposed maximum amount of unprocessed waste and segregated recyclables to be stored on Site is limited to 1,000 tonnes indoors, including up to 600 tonnes of processed ALCF. The proposed amount of excess soil/rock and inert materials to be stored on the Site is 3,000 tonnes. This maximum Site storage limit is based on types and volumes of materials received, material placement, and reasonable average densities.

Mixed incoming non-hazardous waste, including wood waste, blue box recyclable materials, and segregated recyclables, will be stored indoors in accordance with the *Ontario Fire Code*, which stipulates the requirements for indoor general storage of combustible or non-combustible solids. These wastes will be processed within the limits of the proposed Processing/Transfer Building located in *Area A*.

Excess soil/rock for beneficial reuse and inert materials will be received and stored within the *Britespan* building structure (*Area B*).

After sorting, recyclable materials (separated drywall, wood, metals, and asphalt shingles) will be stored separately prior to hauling off-site. The storage areas are indicated in **Figure 3**. The dimensions of the storage areas were defined as per the *Ontario Fire Code* (O. Reg. 213/07) and *Spill Prevention and Contingency Plans* (O. Reg. 224/07). **Tables 6** and **7** indicate the dimensions of the storage areas and the maximum storage capacity for each of the segregated materials. **Appendix G** presents the volume-to-weight conversion factors that were used for the calculations of the storage capacities of the Site. The calculations of the storage area capacities are provided in **Appendix H**.

Intermittent temporary storage of unprocessed waste or segregated recyclables and processed ALCF Scheduled for off-site hauling to customers will be conducted until sufficient quantities are accumulated for efficient transportation and disposal/reuse. Additional storage may also be required due to unforeseen conditions (e.g., equipment breakdown and extreme weather conditions) or other unusual conditions.

Normally, wastes are removed within 24 hours of receipt, although storage of waste for 72 hours may be necessary to allow for sufficient accumulation of waste volumes, in the event of equipment failure, receiving Site restrictions, or statutory holidays. Recovered dry recyclable materials are removed as soon as practical after full bins of material are accumulated, with storage of this material intended to be a maximum of 90 days.

The storage area capacities are described as follows:

Table 6. Waste Storage Summary

Maximum On-Site Storage	Amount (tonnes)	Density (kg/m ³)	Reference for density	Maximum Storage Time (Typical/Emergency) (days)
Non-Hazardous Waste, including:	1,000*	415	Volume-to-Weight Conversion Factors (US EPA, April 2016)	90/120
Wood Waste		100		90/120
Sorted Blue Box Recyclable Materials		225 - 594		90/120
Segregated recyclables:		-		-
Metal Waste		134		90/120
Cardboard/Paper Waste		362 - 448		90/120
Drywall Waste		277		90/120
Asphalt Shingles		459 - 510		90/120
Tires		219**		90/120
Processed ALCF	600*	415		90/120
Excess Soil or Rock for Beneficial Reuse or Use as an Alternative Raw Material and Inert Materials	3,000	2,000 – 2,675		90/120

Note: * - Total combined amount of storage is 1,000 tonnes

** - bulk density was calculated based on the average weight of one tire (Volume-to-Weight Conversion Factors (US EPA, April 2016)

Table 7. Waste Transfer/Processing Facility Storage Area Capacities

Area Identifier	Area (m ²)	Max. Height of Storage (m)	Max. Volume of Storage (m ³)	Material Storage Theoretical Max. Capacity (tonnes)	Planned Maximum Storage (tonnes)	Material to be Stored
A	799.2	6.1	3,576.64	1,027	1,000	Non-Hazardous Waste, Blue Box Materials, Segregated recyclables, and ALCF
B	900	6.1	1,922.5	3,845	3,000	Excess Soil or Rock for Beneficial Reuse or Use as an Alternative Raw Material and Inert Materials
Total				4,872	4,000	

Note: Storage area dimensions for Solid Non-Hazardous Waste and processed ALCF are taken from the Conceptual Site Plan, Figure 3, and Proposed Processing/Transfer Building: Tipping Floor Plan, Figure 4, respectively.

The proposed maximum storage capacity for stored waste, segregated recyclables, inert materials, and excess soil or rock for beneficial reuse or use as an alternative raw material at the Site is 4,000 tonnes. Approximately up to 1,000 tonnes of solid non-hazardous waste, blue box recyclable materials, segregated recyclables, including 600 tonnes of processed ALCF, will be stored inside the Processing/Transfer Building. Unprocessed and processed excess soil for beneficial reuse and inert materials in the amount of up to 3,000 tonnes will be stored within the proposed *Britespan* building structure.

Fire extinguishers and eye-wash stations are also stored and maintained at the Site.

3.9 Material Balance

The Site will receive solid non-hazardous waste from residential, commercial, institutional, and industrial sources, including wood waste, metal, asphalt shingles, drywall, plastics, cardboard and paper waste, tires, construction and demolition waste, and blue box recyclable materials. In addition, excess soil/rock for beneficial reuse and inert materials, including rock, concrete, brick/block, gravel, and asphalt, will be received, stored, and hauled off-site to final destinations. Liquid industrial and hazardous wastes and asbestos-containing waste will not be received at the Site and will be returned to the off-site source.

YORK1 will ensure that only waste haulers approved by the MECP are used to transport waste to and from the Site. Schematic waste and materials flow balance at the Site is shown in **Figure 6**.

3.10 Operating Equipment

The list of operating equipment for the waste processing and excess soil receipt, re-sampling as required, and shipment off-site is provided in Table 2 above, and a summary of process and operation monitoring is provided in Table 8 below.

Table 8. Process and Operation Monitoring Summary

Process and Location	What	How	Frequency	Phase
Weigh Scale – W01	Weight	Automated log	Each truck	1
Waste Processing – Building - Compactor - WP01	Weight	Daily Operation Report	Daily	1
Waste Loading/Unloading – Building - Loader – WL01	Weight	Daily Operation Report	Daily	1
Waste Loading/Unloading – Building -Excavator – WL02	Weight	Daily Operation Report	Daily	1
Waste Loading/Unloading – Building - Dozer – WL03	Weight	Daily Operation Report	Daily	1
Excess Soil Loading/Unloading – Britespan structure - Loader – SLO - 01	Weight	Daily Operation Report	Daily	1
Excess Soil Handling – Britespan structure – Excavator – SP-01	Weight	Daily Operation Report	Daily	1
ALCF Processing Area - Shredder – WOP-01	Weight	Daily Operation Report	Daily	1
ALCF Processing Area -Trommel – WOP-02	Weight	Daily Operation Report	Daily	1
ALCF Processing Area -Grinder – WOP-03	Weight	Daily Operation Report	Daily	1
ALCF Processing Area -Separator – WOP-04	Weight	Daily Operation Report	Daily	1
Dust Control – All areas - Sweeper – DC-01	Dust	Inspection Report	Daily	1
Dust Control – Building - Stack – DC-02	Dust	Inspection Report	Daily	1
Spill Control – Building - Drainage – SC-01	Spill/Leak	Inspection Report	Daily	1
Fire Control – Building - Sprinkler – FC-01	Operation	Inspection Report	Annually	1
Stormwater Control – Oil/grit separator - SWC-01	Effluent sampling/testing	Inspection Report	Quarterly	1

3.11 Processed Waste, Excess Soil, and Residual Waste Testing

Processed waste and residual waste scheduled for off-site disposal will be hauled to a licensed landfill facility within 60 days from the time of their generation. Until the residual waste is removed, it is stored in a designated area of the Site inside the Processing/Transfer Building with an impermeable surface and a collection sump and segregated from the other wastes. Management and removal of the residual waste are conducted in accordance with O. Reg. 347 and the EPA.

Excess soil will be accepted and re-sampled as required. Based on either sampling provided by the shipping site or re-sampling performed on-site, soil will be classified as follows:

- ◆ O. Reg. 153/04 Table 2 and O. Reg. 406/19 Table 2.1 compliant for beneficial reuse
- ◆ O. Reg. 153/04 Table 3 and O. Reg. 406/19 Table 3.1 compliant for beneficial reuse
- ◆ O. Reg. 153/04 Table 4 and O. Reg. 406/19 Table 4.1 compliant for beneficial reuse
- ◆ O. Reg. 153/04 Table 5 and O. Reg. 406/19 Table 5.1 compliant for beneficial reuse
- ◆ Soil and/or rock to be used as an Alternative Raw Material.

Soil that meets the requirements of an approved site for beneficial reuse may be taken to a beneficial reuse site if the site is approved by the QP.

Any material removed from the Site for final disposal will be tracked by a bill of lading/PO reference ticket. Each truck driver will provide a copy of the bill of lading/PO reference ticket to the receiving facility. The receiving facility will be asked to reference the bill of lading/PO number on their weight scale ticket. Each truck driver will obtain a copy of the receiving facility weight ticket and will return the weight ticket to the YORK1 Hazelhurst Recycling Facility, to the attention of the Site Manager. Any intended change to the destination must be approved in writing by the YORK1 Site Manager.

Beneficial reuse soil leaving the Site shall:

- ◆ Be used as daily, interim, or final cover at a landfill site, subject to the written authorization of the waste disposal site
- ◆ Be used as approved fill at a property in accordance with a fill permit issued by the Municipality or the Conservation Authority, or a Provincial Ministry such as the Ministry of Transportation
- ◆ Be used as approved fill at a pit or quarry in accordance with a permit under the Aggregate Resources Act
- ◆ Be used as approved fill at a property that is a mine or mine rehabilitation site under the Mining Act
- ◆ Be used as approved fill at a property that has been risk assessed under O. Reg. 153/04, provided the soil meets the risk assessment soil standards
- ◆ Be used at a location as clean backfill, provided it meets O. Reg. 153/04 Table 2 or O. Reg. 406/19 Table 2.1
- ◆ Be beneficially reused at approved sites in accordance with O. Reg. 153/04 and O. Reg. 406/19
- ◆ Excess soil and/or rock may be wholly used as an alternative raw material in a manufacturing process to make products.

The maximum storage duration of the soil destined to transfer to a waste disposal site does not exceed ninety (90) days from its receipt.

The outgoing soil will be sampled and tested prior to the final off-site disposal. The sampling and testing methods, as well as sampling frequencies, as per O. Reg. 406/19, are outlined in **Appendix F**.

The YORK1 Hazelhurst Recycling Facility Manager will request from the receiving facility a spreadsheet to be provided within 72 hours outlining the loads received by the receiving facility, including the following info:

- | | |
|---------|--|
| ◆ Gross | ◆ Vehicle Type; |
| ◆ Tare | ◆ Truck ID; |
| ◆ Net | ◆ Weigh Ticket Number; and |
| ◆ Date | ◆ PO Number/Reference Number/Bill of Lading. |
| ◆ Time | |

The spreadsheet from the receiving facility will be emailed to the YORK1 Hazelhurst Recycling Facility Manager. The Manager will vet the outgoing waste tracking spreadsheet for accuracy.

In addition, the receiving site's owner will provide a written confirmation certified by the QP that:

- ◆ The received soil quality and quantity are appropriate for the receiving site and comply with the requirements of the applicable regulations

- ◆ The deposition of the received soil at the receiving site does not involve deposition in a water body if the receiving site is a mine or mine rehabilitation site
- ◆ The receiving site's owner agrees to accept the soil, and
- ◆ The deposition of the received soil at the receiving site will not cause an adverse effect on human health or the environment.

The QP of the receiving site will include a statement that the confirmations have been based on engineering and scientific opinions made in accordance with generally accepted principles and practices as recognized by the members of the environmental engineering or science profession or discipline practicing at the same time and at the same or similar location.

YORK1 will issue a *Waste Tracking Report* to customers on a project basis, as verification of the waste received by YORK1 from the customer, and the final disposal of the material at the approved destination.

3.12 Waste Receiving Sites

The proposed reasonable maximum quantity of incidental mixed or residual waste that is destined for disposal from the Site is up to an annualized average of 1,000 tonnes per day or an annual maximum of 365,000 tonnes per year. The residual waste removed from the Site is managed or disposed of in accordance with the applicable Ontario regulations, including O. Reg. 347 (as amended).

YORK1 will use permitted recycling facilities for ultimate material disposition or treatment/disposal facilities as necessary to provide adequate capacity to manage materials. YORK1 contracts directly with the recycling/disposal facilities, and the waste transporters are routed directly to the recycling/disposal facilities.

Waste residuals segregated from the materials received at the Site are transported in covered transfer trailers and dump trailers designed and licensed for the hauling of waste materials and disposed of at permitted disposal facilities.

The outgoing materials from the Site will be managed using weigh bills indicating the truck name and number, date, material description, and net weight (using the automated Site weigh scale). The quantity and receipt of each shipment are documented on the shipping waybill and returned to the Site for record-keeping. These records will be kept on-site to facilitate the preparation of annual or periodic reports for quantities of materials received at/shipped from the Site.

Multiple landfills have been contacted regarding the final disposal of any residual waste and have been listed below.

Table 9. Residual Waste Disposal Destinations

Facility Name	Location	Waste Type
Twin Creeks Landfill	5768 Nauvoo Road, Watford, Ontario N0M 2S0	Non-hazardous Solid Waste
The Ridge Landfill	20262 Erieau Rd, Blenheim, ON N0P 1A0	Non-hazardous Solid Waste
Republic Services Pine Avenue Landfill	5600 Niagara Falls Blvd, Niagara Falls, NY 14304, United States	Non-hazardous Solid Waste
Waste Management of Michigan, Inc.	48797 Alpha Drive, MI 48393, United States	Non-hazardous Solid Waste
Carleton Farms Landfill	28800 Clark Rd, New Boston, MI 48164, United States	Non-hazardous Solid Waste
Pine Tree Acres Landfill	29 Mile Road, Lenox, MI 48048, United States	Non-hazardous Solid Waste

All waste processing and recovery is completed via manual labour with the assistance of heavy equipment when needed. This prevents any further environmental impact from machinery. The table below lists the materials anticipated to be recovered from the non-hazardous waste stream and their final destination:

Table 10. Recyclable Materials Destinations

Classification	Final Destination Location
Ferrous Metals	Inland Iron & Metal, Gerdau Metals Recycling, YORK1 Scrap Metal
Non-Ferrous Metals	Inland Iron & Metal, Gerdau Metals Recycling, YORK1 Scrap Metal
ALCF	Ash Grove, St. Mary's, Lafarge

All materials will be recorded via the software database and follow the waste flow diagram.

4.0 PROCEDURES

The facility will principally receive and process solid non-hazardous waste generated from residential, industrial, institutional, and commercial sources, including construction and demolition waste, blue box recyclable materials, metal, paper/cardboard waste, plastics, asphalt shingles, drywall, and tires. In addition, the facility will receive excess soil and rock for beneficial reuse and inert materials, including concrete, brick/block, gravel, and asphalt. Solid non-hazardous solid waste and excess soil/rock will be unloaded, processed, and loaded indoors at all times, as well as processed ALCF. Segregated recyclables scheduled for hauling off-site will be temporarily stored within the limits of the proposed Processing/Transfer Building. Inert materials will be stored within the limits of the proposed *Britespan* building structure.

This section contains a description of procedures required to keep the facility in compliance with all applicable regulations and address the requirements of safety and environmental sustainability.

4.1 Preventive Maintenance

Site personnel are responsible for maintaining environmental controls, including building ventilation, water misting, dust, litter, and odour control measures regularly.

The waste handling equipment operators are qualified to safely operate the equipment. A preventative maintenance program is in place for each piece of equipment based on the manufacturer's recommendations. Additional loaders may be brought in for use as needed, or for replacement in case of equipment breakdown. Routine scheduled and unscheduled equipment maintenance, other than minor repairs and servicing, will be conducted at off-site facilities.

Process equipment, including general construction machinery and equipment for specific treatment processes, is maintained according to its manufacturing instructions regularly. Records containing the dates and content of the regular maintenance are kept on-site in the maintenance log.

4.2 Site Inspections

YORK1 will conduct, on each operating day, a visual inspection of the following areas to ensure that the Site is secure and that no impacts such as vermin, vectors, odour, dust, litter, noise, fuel spills, etc. result from the operation of the Site:

- ◆ Loading/unloading area(s)
- ◆ Transfer/processing area(s)
- ◆ Storage area(s); and
- ◆ Security fence or barriers and property line.

Daily site inspections and regular equipment inspections (not necessarily daily) are undertaken to ensure that the Site is operating in a manner such that there is no negative impact on the natural environment. Any deficiencies identified during the daily inspection or at any other time shall result in immediate corrective action and notification of the MECP, which includes, but is not limited to, the following information:

- ◆ Name, signature, and position title of a person conducting the inspection
- ◆ Date and time of the inspection
- ◆ A list of what areas were inspected
- ◆ A brief description of the operating conditions (e.g., “good working order” or “needs maintenance”) of all equipment, including storage tanks inspected during the regular equipment inspections; and

- ◆ Complete details of all corrective actions taken to remedy a deficiency in the Site condition, and a brief description of corrective actions to remedy an equipment deficiency (e.g., performed maintenance).

A daily inspection report is completed for each inspection; the corresponding form is included as **Appendix I**. Following the property management activities, a property maintenance log is completed as per the attached **Appendix J** template. Written records will be maintained at the Site for a minimum of five (5) years.

4.3 Nuisance Impacts

The facility at the Site will function as an integral part of the industrial community in the Mississauga area; therefore, all necessary precautions will be taken to mitigate any nuisance issues from the site that may potentially affect the neighbors. These are odors, noise pollution, littering, visual impact, etc. For example, a two-door vestibule system at the Processing/Transfer Building, using covered leak-proof transfer vehicles, may help control foul odors. Enclosed tipping area and sound-proof wall/ceiling surfaces may address noise pollution issues if any should arise. Daily inspections and proper fence installation are designed to eliminate litter from blowing around the site. These nuisance impacts and their mitigation methods are discussed further below.

4.4 Emissions to the Atmosphere

The following processes at the Site may discharge contaminants into the atmosphere:

Table 11. Processes Potentially Discharging Contaminants to the Atmosphere

Process	Location	Contaminant
Loading/Unloading	Processing Building	Dust, odour
Sorting	Processing Building	Odour
Indoor Wood/C&D Waste Processing	Processing Building	Dust

An Emission Summary and Dispersion Modelling Report will be prepared for the Site in support of an application to the Air & Noise ECA. A *Best Management Practices Protocol for Odour Control* and a *Best Management Practices Protocol for Dust Control* have been developed for the Site and provided in **Appendices K** and **L**, respectively.

4.5 Odour Prevention and Control

A *Best Management Practices Protocol (BMPP) for odour Control* was developed to control potential odorous emissions from the Site facility and is provided in **Appendix K**. This protocol was prepared following the *Best Management Practices for Industrial Sources of Odour (January 2017)* guidance published by the MECP.

The waste received at the site consists of mainly construction and demolition waste generated by residential, commercial, industrial, and institutional sources, including asphalt shingles, wood waste, metal, plastics, cardboard/paper waste, blue box recyclable materials, excess soil and rock for beneficial reuse, and tires, etc. The C&D waste received at the Site may contain a small fraction of material that may release odorous emissions (estimated at a maximum of 1% by weight).

Therefore, it is important to implement odour mitigation techniques and procedures pertaining to the Processing/Transfer Building if an odour issue arises. It may include such measures as utilizing covered and leak-proof transfer vehicles, keeping doors closed during unloading and processing operations, etc.

If odours are determined to be an issue due to the receipt of incidental volumes of odorous waste, an odour control system may be installed within the area of the transfer building where these wastes are stored.

Appendix M explains in detail a typical *Ecolo* odour control system that may be installed at the Site should the odour become an issue.

4.6 Dust Prevention and Control

The solid non-hazardous waste processing system will be operating at the Site in a manner that ensures the health and safety of all persons and the protection of the environment through active prevention of any possible environmental adverse effects, including but not limited to odours, dust, litter, noise, and surface water run-off. These environmental concerns will be related mainly to the dust mitigation generated by waste transportation vehicles and related to the incoming waste streams.

Best management practices for dust mitigation at the Site include the following:

- ◆ Dust on roadways:
 - Roadways will be continuously inspected for mud and dust tracking.
 - As a further contingency, YORK1 will have subcontractor agreements for on-call sweeper trucks to sweep the roadways leading to and from the Site on an hourly basis or as required to mitigate mud tracking and water trucks to attend to the Site and spray water on the roadways to and from the Site.
- ◆ Dust on facility entrances:
 - Retained sweeper trucks will sweep the paved entrance leading to and from the facility on an hourly basis or as required to mitigate the mud tracking.
 - YORK1 equipment will scrape excess soil, dust, and mud from non-paved portions of the entrance.
 - As a further contingency, if dust is coming from the YORK1 facility entrance, YORK1 will retain a water truck available on call to attend to the facility, and water will be applied as needed to mitigate dust in the area; and
 - As an alternative to spraying water, YORK1 will review applicable dust suppressant alternatives.
- ◆ Dust within the operating facility:
 - Truck routes within the facility will be maintained and scraped routinely to mitigate mud tracking by trucks and dust generation.
 - As a further contingency, if dust is coming from internal truck routes, YORK1 will retain a water truck available on call to attend to the facility, and water will be applied as needed to mitigate dust in these areas; and
 - As an alternative to spraying water, YORK1 will review applicable dust suppressant alternatives.

A *Best Management Practices Protocol for Dust Control* is provided in **Appendix L**.

4.7 Litter Prevention and Control

Site staff will undertake daily Site inspections and clean up litter resulting from Site operations. A chain link fence will be installed along the perimeter of the site to prevent litter from blowing off-site. The area of the Site will be inspected daily to control potential litter blowing by wind from the waste processing/transfer facility and incoming trucks. A *Litter Best Management Practices Plan (BMPP)* is provided in **Appendix N**.

4.8 Pest Control

As a main defense against vermin, a pest control specialist will be contracted to manage and maintain traps throughout the property. These traps will be cleaned and maintained on a regular schedule by this pest control specialist.

Vermin control is not anticipated to be required at this time; however, the necessity for vermin control will be assessed routinely and implemented if required.

4.9 Noise Control

The subject property is located in an industrial zone (E3) of the City of Mississauga, which includes low-sensitivity operations such as local manufacturers and storage facilities, and vacant lands. Nevertheless, all non-hazardous waste unloading, processing, and loading will be carried out within the Processing/Transfer Building. On-site equipment will be greased regularly and maintained to keep all noise to a minimum. All doors in the processing building will be closed, except during the periods when transfer vehicles are coming in or leaving the building. Such measures as the soundproofing of walls and ceiling of the Processing/Transfer Building, etc., will be utilized if required. The Site is located outside residential and quiet zones of the City of Mississauga, for which the restrictions on noise generation are stipulated by the City of Mississauga noise By-law 360-79; therefore, the proposed hours of operation of the Site are 24 hours per day and 7 days per week.

4.10 Complaint Management

A designated representative of the Facility Operator will be available to receive public complaints caused by the operations at the Site twenty-four (24) hours per day, seven (7) days per week.

If at any time, YORK1 receives a complaint regarding the operation of the Site, YORK1 will respond to these complaints according to the following procedure:

- ◆ Record each complaint on a formal complaint form entered in a sequentially numbered logbook. The information recorded shall include the nature of the complaint, the name, address, and telephone number of the complainant, the employee's name receiving the complaint, weather conditions and wind direction at the time of the complaint, and the time and date of the complaint (the form is attached in **Appendix O**)
- ◆ Upon notification of the complaint, YORK1 will initiate appropriate steps to address the complaint, proceed to take the necessary actions to resolve the complaint, and forward a formal reply to the complainant; and
- ◆ Submit a written report to the MECP District Manager within one (1) week of the complaint date, listing the actions taken to resolve the complaint and any recommendations for remedial measures and managerial or operational changes to reasonably avoid the recurrence of similar incidents. A copy of this report will be maintained on-site.

4.11 Staff Training

YORK1 staff will be adequately trained in the operation and maintenance procedures of the specific equipment they operate at the Site and in emergency procedures. Documentation of staff training in the following areas will be retained:

- ◆ Onboarding, Orientation, and Emergency Response Training
- ◆ Operation and management of the Facility
- ◆ Any environmental concerns pertaining to the waste to be processed and the equipment
- ◆ Environmental emergency and contingency planning

- ◆ Occupational health and safety concerns pertaining to the waste to be processed
- ◆ Relevant waste management legislation, and regulations, including but not limited to the *Environmental Protection Act*, O. Reg. 347, and O. Reg. 406/19; and
- ◆ Equipment operation and maintenance training
- ◆ Waste processing monitoring, sampling, and testing protocols
- ◆ Complaint management procedures training and record keeping.

The above procedures are detailed in the *Training Manual* and *Training Forms*, provided in **Appendix P**.

4.12 Annual Reporting and Record Keeping

Annual Report

By March 31, on an annual basis, YORK1 will prepare an annual report for the previous calendar year. The report will be kept for a minimum of five (5) years. Each report will include, as a minimum, the following information:

- ◆ A monthly summary of the quantity of all incoming and outgoing waste and materials
- ◆ Any environmental and operational problems encountered during the operation of the Site and the Site inspections that could negatively impact the environment, and any mitigation actions required
- ◆ A statement as to compliance with the ECA and with the inspection and reporting requirements of the ECA
- ◆ Any recommendations to minimize environmental impacts from the operation of the Site and to improve Site operation monitoring programs in this regard
- ◆ A summary of incidents that required the Contingency Plan to be invoked and the steps taken to reasonably avoid the re-occurrence of similar incidents; and
- ◆ A summary of the incidents that required the Complaint Response Plan to be invoked and the steps taken to reasonably avoid the re-occurrence of similar incidents.

Record Keeping

Records (either electronic or hardcopy) will be kept of all incoming and outgoing material at the Facility, including:

- ◆ Itemized record of any rejected waste
- ◆ Type, date, time of arrival, source, and quantity of waste received
- ◆ The company name of the hauler delivering the waste
- ◆ Environmental Compliance Approval (ECA) number of haulers
- ◆ Daily Inspection Reports and Complaint Reports
- ◆ Emergency Situation Response
- ◆ Calculation of the quantity of waste remaining on the Site at any time
- ◆ Type, date, time, destination, and quantity of material shipped
- ◆ Results of any monitoring and/or testing at the Site.

The Facility records will be maintained at the Site, and annual and other reports will be submitted to the MECP as required by ECA and upon request.

4.13 Disruption of Shipment

In the event of disruption of shipments or transfer of products, restrictions can be placed to eliminate specific materials from arriving on-site and prevent further accumulation. In the worst case, the incoming waste stream to the Site will be ceased until the disruption to shipment or transfers has been resolved.

4.14 Environmental Emergency and Contingency Plan

A YORK1 Facility manager has been appointed to deal with all emergency situations that may arise, and all emergency contacts will be displayed throughout the Site, including the location of all fire extinguishers and fire escape routes. This manager will document any incidents and contact emergency services if required.

Foreseeable emergency situations and their specific measures taken are described below. *Environmental Emergency Response and Contingency Plan* (Plan), including fire prevention measures, is provided in **Appendix Q**.

The *Emergency Response and Contingency Plan* for the Site will be developed, maintained with up-to-date information, and kept at the Site at a location available to all Site personnel. The *Plan*, as a minimum, will include the following:

- Emergency response procedures to be undertaken in the event of a spill, process upset, power failure, fire, labour disruption, extreme weather events, pandemics, or any other emergency, including specific clean-up methods for wastes expected to be generated from the emergency situation
- A list of equipment and clean-up materials available for dealing with emergency situations and their location on the Site Plan.

Notification protocol with names and telephone numbers of persons to be contacted, including persons responsible for the Site, the MECP District Office and Spills Action Centre, the local Fire Department, the local Municipality, the local Medical Officer of Health, and the Ministry of Labour, and the names and telephone numbers of waste management companies available for emergency response.

It is the Facility Manager's responsibility that all necessary measures, as set out in the Emergency Response Plan, are immediately taken to handle the emergency situations occurring at the Site, all equipment and materials for the emergency response are immediately available at the Site, maintained in a good state of repair and fully operational; the Site's employees are fully trained in the use of the equipment and materials.

Explosions:

This waste transfer station will not be receiving or accepting any explosive materials. However, this does not guarantee that it will never occur. Trained equipment operators and laborers will always be on the lookout for any possible threat of explosive materials and either refuse the unloading of such material or isolate the material for proper disposal.

Power Outages, Extreme Weather Conditions, Outbreaks:

In the event of a power outage, extreme weather conditions or outbreaks, equipment operators and laborers, along with management will decide whether it will be safe to continue operations or if the facility will need to shut down until such power outage is corrected.

Procedures for spills and fire are discussed below.

Contingency Plan

The following outlines contingency procedures for Site operations. The Contingency Plan for the Site is kept at the Site and:

- a) Addresses, at a minimum, the operational procedures related to the receipt and processing of waste received at the Site and potential leachate generated from the stockpiled waste but not approved under the ECA, and disruptions of the removal of residual waste from the Site.
- b) Addresses, as a minimum, the transfer or waste disposal facilities if conditions described in (c) and (d) occur.
- c) If incoming waste is not able to be processed or transferred, YORK1 ceases to accept incoming material when the Site reaches its maximum allowable quantities.
- d) If the written agreement(s) is revoked by a third party, and outgoing materials are not able to be transferred and disposed of, YORK1 shall cease to accept incoming material; and
- e) Within ten (10) days of an event whereby (a) and (b) have been invoked, YORK1 will provide written notification to the MECP Regional Director outlining the details of the event(s).

4.15 Spills

Equipment at the Site may be powered by gasoline or diesel fuel; therefore, small spills may occur related to equipment fuelling. Fuel in a liquid form is received at the Site and stored in fuel storage containers/tanks equipped with secondary containment. The integrity of the containers/tanks and secondary containments is to be inspected daily. The results of the inspections are documented in a property maintenance log (**Appendix J**).

YORK1 staff are trained in emergency spill response measures as part of their “Heavy Equipment” training module. Spill response equipment and materials are always kept on hand in case of an emergency and are adequately maintained and kept in good repair. YORK1 will promptly take all necessary steps to contain and clean up any fuel spills that result from the operation of the Site. All spills and upsets will be immediately reported to the MECP’s Spills Action Centre and will be recorded in the YORK1 Annual Report, as to the nature of the spill or upset, and action taken for clean-up, correction, and prevention of future occurrences.

4.16 Fires

The buildings at the Site will be serviced by fire extinguishers placed at every door exit. These fire extinguishers will be inspected monthly and recharged annually if needed, as required by the Ontario Fire Code (O. Reg. 213/07). The proposed locations of fire extinguishers are shown in **Figure 4**.

The areas of the waste outdoor storage are configured, and stockpiles along with the separation distances between stockpiles, are designed in accordance with the *Ontario Fire Code*.

A Site emergency evacuation and notification plan is included in the *Environmental Emergency Response and Contingency Plan (Appendix Q)*, if a fire in the on-site building(s) cannot be easily extinguished with available fire extinguishers, and evacuation/ notification is warranted.

5.0 SITE CLOSURE PLAN

The Site is constructed, operated, and maintained in an environmentally safe manner, which ensures the health and safety of all persons and minimizes visual impacts, surface water ponding, leachate breakouts, vectors and vermin, dust, litter, odours, vibration, and noise.

Should the Site be no longer needed for waste transfer, it will be decommissioned and closed prior to a change in use or sale of the Site. If it is determined that the Facility will close, a Site Assessment will take place, and a Closure Plan will be completed 6 months prior to the Site closure.

The decommissioning and closure will include the following procedures:

- ◆ All waste material storage areas will be emptied, and the waste sent for disposal
- ◆ All on-site equipment will be removed from the Site and either sold or reused elsewhere
- ◆ All floors will be swept and, if necessary, power-washed, and any wastewater will be collected and disposed of in accordance with the City of Mississauga by-laws and Ontario Regulations
- ◆ The exterior portions of the Site will be cleaned of any debris or litter.

6.0 FINANCIAL ASSURANCE

Financial assurance in the amount of \$ **169,925.00** will be posted as a surety bond and acknowledged by the MECP upon ECA approval. The purpose of the financial assurance is to provide sufficient funds for the analysis and transportation of all permitted waste, Site clean-up, and the long-term monitoring and maintenance of the Site.

Commencing on March 31, 2027, and at intervals of every three (3) years thereafter, YORK1 will provide the MECP Director a re-evaluation of the amount of the financial assurance. The financial assurance will be submitted to the MECP Director within twenty (20) days of written acceptance of the re-evaluation by the MECP Director.

No waste will be accepted, processed, or transferred at the Site unless the MECP has received the appropriate amount of financial assurance.

The amount of financial assurance is subject to review at any time by the MECP Director and may be amended at their discretion. If any financial assurance is scheduled to expire or notice is received indicating financial assurance will not be renewed, and satisfactory methods have not been made to replace the financial assurance at least sixty (60) days before the financial assurance terminates, YORK1 will forthwith replace the financial assurance with cash.

The financial assurance calculation is included in **Appendix R**.

7.0 PUBLIC NOTIFICATION

As required for this Application for Environmental Compliance Approval, upon submission of the application, all properties adjacent to the site property have been notified. Owners have been further notified that all tenants should be informed of this process. Copies of the notification letters and a list of recipients are contained in **Appendix S**.

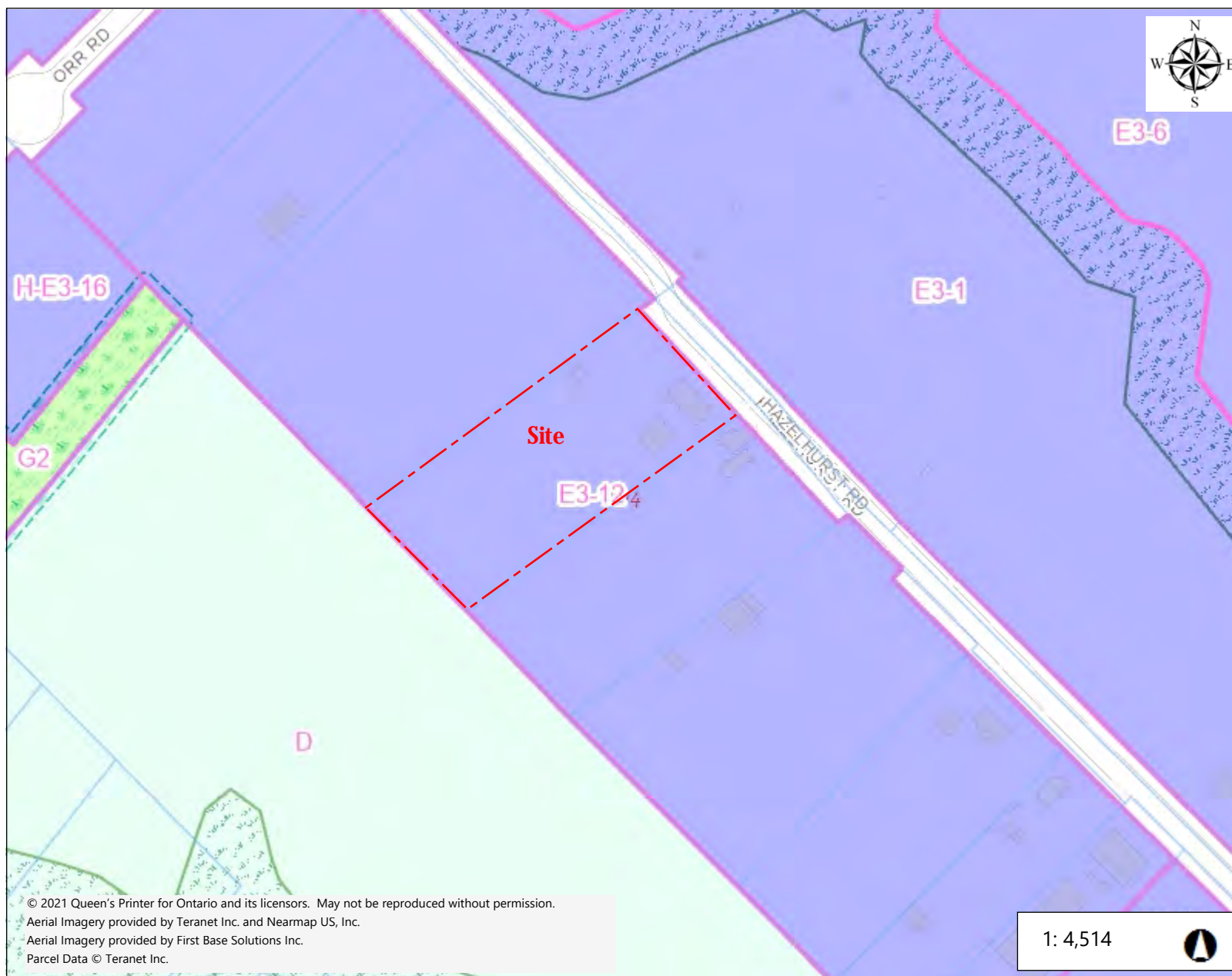
FIGURES

Figure 1- Site Location Map





Figure 2 – Zoning Map



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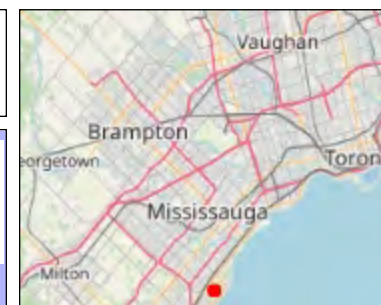
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


229.3 0 114.66 229.3 Meters

WGS_1984_Web_Mercator_Auxiliary_Sphere
 © 2021 The City of Mississauga 7-17-2023

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.
THIS IS NOT A PLAN OF SURVEY



Legend

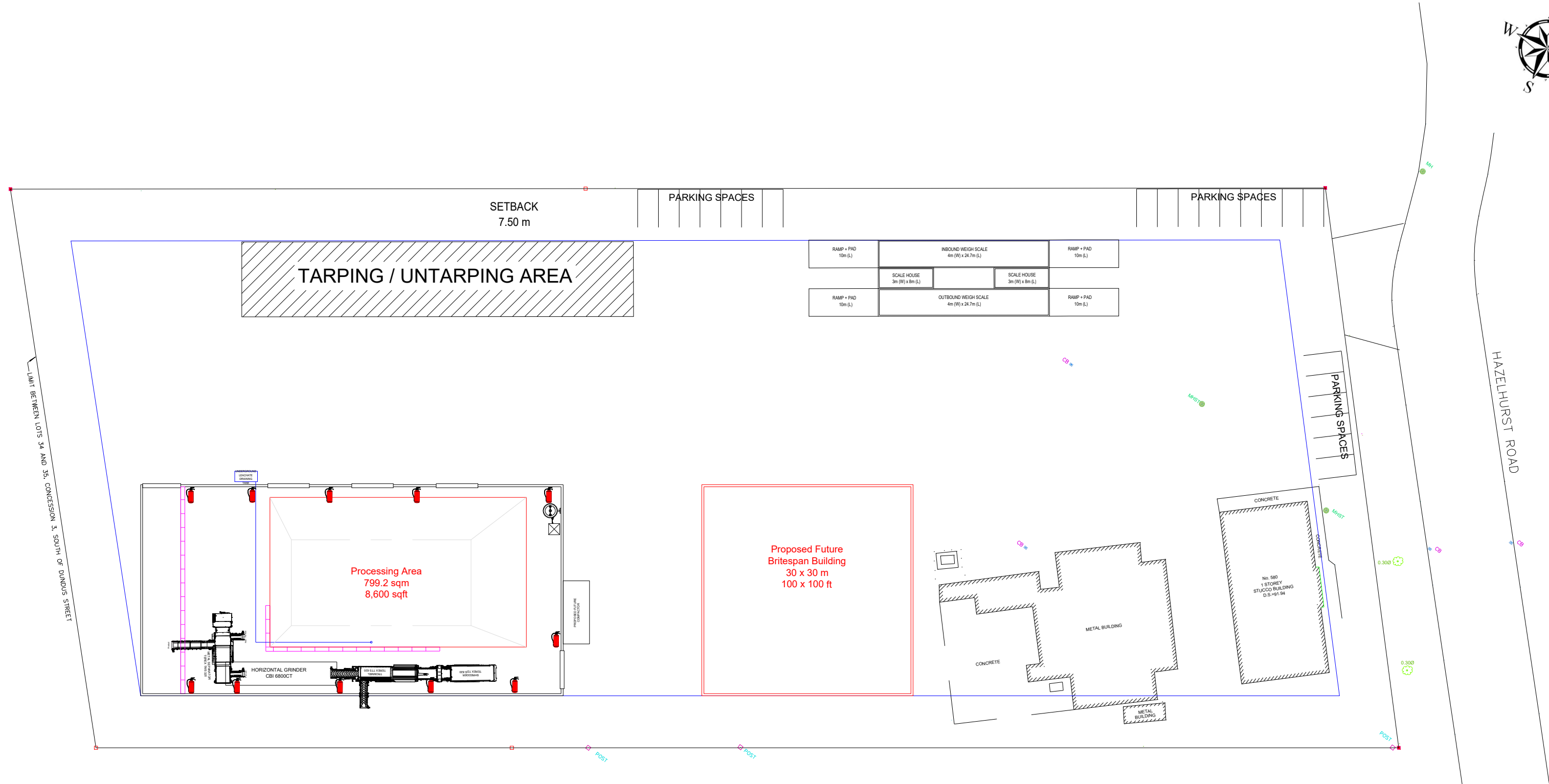
-  Parcel
-  Zoning Labels
- Zoning Shapes**
 -  A Agricultural (By-law 5500)
 -  AP Lester B. Pearson International
 -  B Buffer, Berm, Fence
 -  C1 Convenience Commercial
 -  C2 Neighbourhood Commercial
 -  C3 General Commercial
 -  C4 Mainstreet Commercial
 -  C5 Motor Vehicle Commercial
 -  CC1 Core Commercial
 -  CC2, CC4 Mixed Use
 -  CC3 Mixed Use - Transition Area
 -  CCO Office
 -  CCOS Open Space
 -  D Existing Use
 -  E1 Employment in Nodes
 -  E2 Employment
 -  E3 Industrial
 -  G1 Natural Hazards
 -  G2 Natural Features
 -  I Hospital and University / College
 -  O Office
 -  OS1 Community Park
 -  OS2 City Park

Notes

580 Hazelhurst Rd., Mississauga, L5J 2Z7

Figure 2 - Zoning Map

Figure 3 – Conceptual Site Plan



Scale

50.00 m



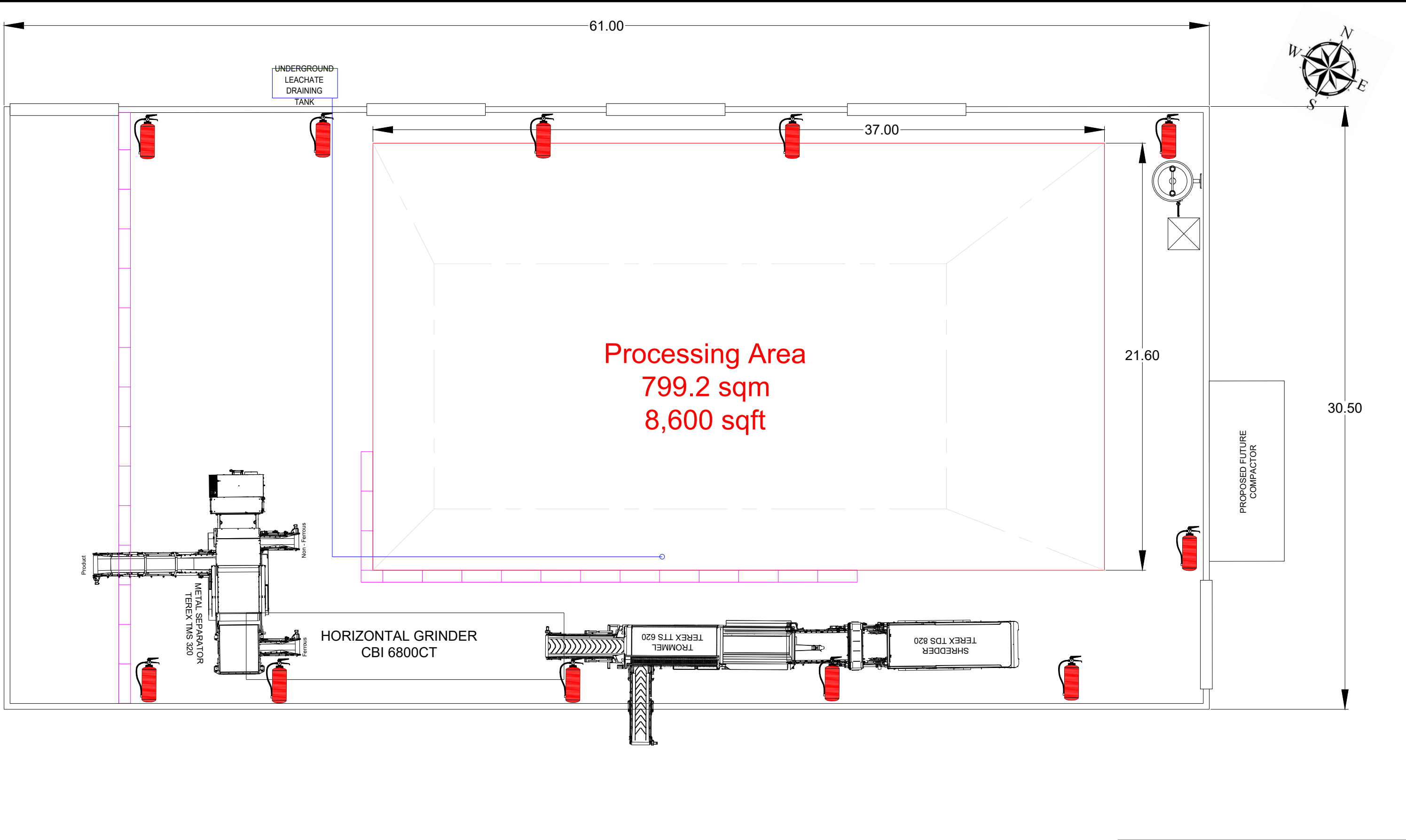
York1 Hazelhurst Recycling Ltd.

580 Hazelhurst Road, Mississauga, Ontario

Figure 3

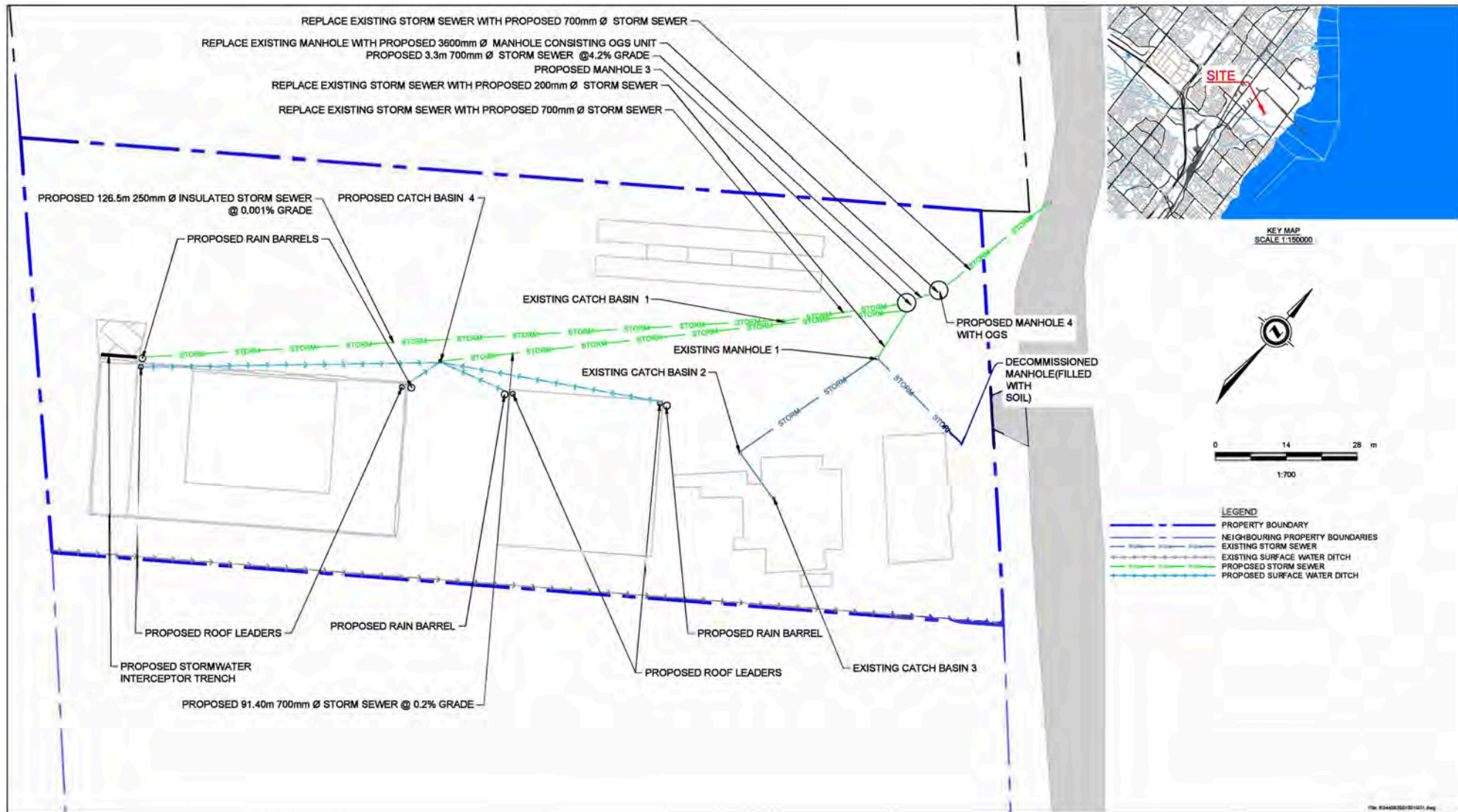
Conceptual Site Plan

Figure 4 – Proposed Processing/Transfer Building: Tipping Floor Plan



<p>Scale</p> <p>15.00 m</p>	<p>Legend</p> <ul style="list-style-type: none">- Eye Wash Station- Fire Extinguisher- Spill Kit	<p>YORK1 Hazelhurst Recycling Ltd.</p> <p>580 Hazelhurst Road, Mississauga, Ontario</p>	<p>Figure 4</p> <p>Tipping Floor Plan</p>
------------------------------------	---	--	--

Figure 5 – Drainage and Stormwater Management Plan



YORK1 Hazelhurst Recycling Ltd.
580 Hazelhurst Road,
Mississauga, Ontario

Figure 5
Drainage and
Stormwater Management
Plan

Figure 6 – Traffic Flow Plan

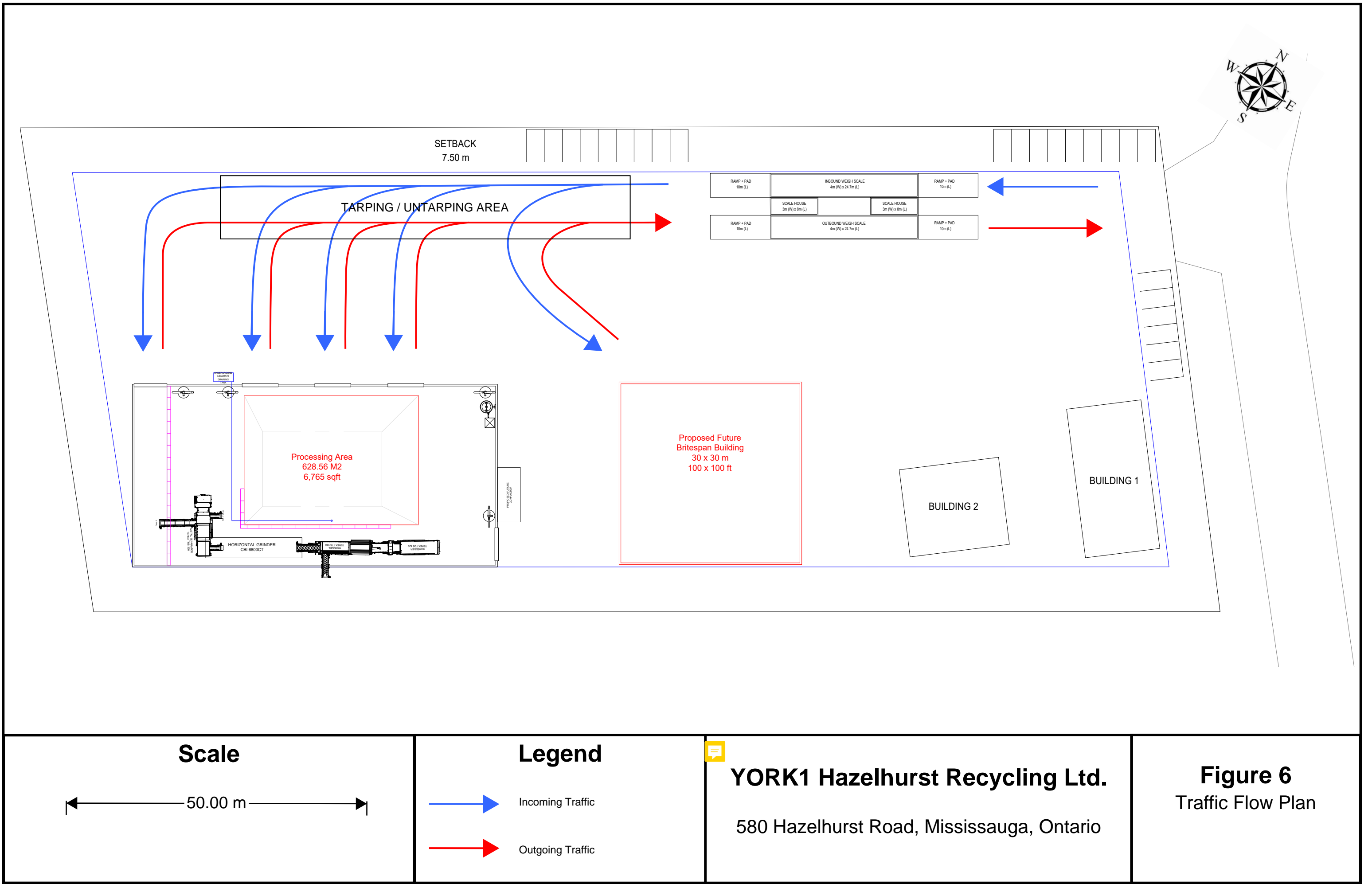


Figure 7 – Schematic of Waste Flow

Incoming Materials and Non-Hazardous Waste

Construction & Demolition Waste

Wood Waste, Drywall, Plastics, Glass

Separated Organics, Putrescible Waste

Asphalt Shingles, Drywall, Tires

Ferrous & Non-Ferrous Scrap Metals

Blue Box Recyclable Materials

Excess Soil for Reuse

Waste Transfer & Processing Facility

Outgoing Materials and Residual Waste

Alternative Low Carbon Fuels (ALCF)

Concrete to Concrete Recyclers (100%)

Asphalt to Asphalt Recyclers (100%)

Soil and Gravel for Beneficial Reuse

Residual Waste for Final Disposal

Recycled Materials (Metals, Plastic,
Tires, Glass, Wood, Drywall, etc.)



YORK1 Hazelhurst Recycling Ltd.
580 Hazelhurst Road,
Mississauga, Ontario

Figure 7
Schematic Waste Flow



APPENDICES

APPENDIX A – CITY OF MISSISSAUGA ZONING BY-LAW 0225-2007

TABLE OF CONTENTS
Part 8: Employment Zones

PURPOSE 8.1 ~ 1

8.1 GENERAL PROVISIONS FOR EMPLOYMENT ZONES 8.1 ~ 1 to 4

8.1.1 Uses to be Located within a Building..... 8.1 ~ 1

8.1.2 Accessory Uses in Employment Zones 8.1 ~ 1

8.1.3 Accessory Retail Sales and/or Accessory Retail Display in Employment Zones 8.1 ~ 1

8.1.4 Accessory Dwelling Unit in E2 and E3 Zones 8.1 ~ 2

8.1.5 Outdoor Storage in an E2 Zone..... 8.1 ~ 2

8.1.6 Outdoor Display in an E2 Zone..... 8.1 ~ 2

8.1.7 Outdoor Storage and Outdoor Display in E3 Zones..... 8.1 ~ 2

8.1.8 Drive-Through..... 8.1 ~ 2

8.1.9 *deleted by 0018-2015* 8.1 ~ 3

8.1.10 Regulations for Motor Vehicle Service Uses in an Employment Zone..... 8.1 ~ 3

8.2 E1 TO E3 ZONES 8.2.1 ~ 1 to 8.2.4 ~ 8

8.2.1 E1 to E3 Permitted Uses and Zone Regulations..... 8.2.1 ~ 1

8.2.2 E1 Exception Zones..... 8.2.2 ~ 1

8.2.3 E2 Exception Zones..... 8.2.3 ~ 1

8.2.4 E3 Exception Zones..... 8.2.4 ~ 1

PURPOSE

The purpose of this Part is to provide a number of Employment Zones, that allow for a variety of business operations, including various industrial operations, in appropriate locations throughout the City.¹

8.1 GENERAL PROVISIONS FOR EMPLOYMENT ZONES

In addition to the zone provisions contained in Parts 1 to 3 of this By-law, the following General Provisions for Employment Zones shall also apply:

8.1.1 Uses to be Located within a Building

Unless otherwise permitted, all **uses** in an E1 or an E2 zone shall be located wholly within a **building, structure** or part thereof.

8.1.1.1 All **uses** pertaining to medical marihuana production shall be located wholly within a **building, structure**, or part thereof. (0055-2015)

8.1.2 Accessory Uses in Employment Zones
(0325-2008), (0379-2009), (LPAT Order 2020 December 14), (0111-2019/LPAT Order 2021 March 09)

8.1.2.1 An **accessory use** shall only be permitted accessory to an **office building** or **medical office building** and shall be contained wholly within the **office building** or **medical office building**.

8.1.2.1.1 Permitted **accessory uses** shall include laboratories and associated facilities for medical diagnostic and dental purposes, medical supply and equipment store, pharmacy, **motor vehicle rental facility, retail store** less than 600 m² and a **service establishment**. In an E1 zone, permitted **accessory uses** shall also include a **restaurant** and **take-out restaurant**. In an E1 and E2 zone, permitted **accessory uses** shall also include a **day care**.

8.1.2.1.2 A maximum of 20% of the total **gross floor area - non-residential** of an **office building** or **medical office building** may be used for **accessory uses**.

8.1.2.1.3 An accessory **day care** shall only be permitted in an E1 and E2 zone, subject to the provisions contained in Subsection 2.1.23 of this By-law.

8.1.3 Accessory Retail Sales and/or Accessory Retail Display in Employment Zones

8.1.3.1 In an E1 to E3 zone, a maximum of 20% of the total **gross floor area - non-residential** of a Business Activity **use** contained in Table 8.2.1 of this By-law, may be used for accessory retail sales, leasing and/or rental, accessory retail display and/or installation of products, other than **motor vehicles**, provided: (0297-2013)

- (1) the accessory retail sales, leasing and/or rental, accessory retail display and/or installation are only those products which are manufactured within a **manufacturing facility**, repaired within a **repair establishment**, wholesaled within a **wholesaling facility**, or distributed from a **warehouse/distribution facility**; (0297-2013)
- (2) such area is wholly within an enclosed **building, structure** or part thereof; and, (0297-2013)
- (3) such area is located within the same unit as the principal permitted **use**. (0379-2009), (0297-2013)

8.1.3.1.1 The area within any **building, structure** or part thereof used for accessory retail sales and/or accessory retail display of products shall be separated from the remainder of the facility by a permanent, solid, floor-to-ceiling and wall-to-wall partition and closed doors.

¹ The purpose statement is for clarification purposes and does not form part of this By-law.

8.1.4 Accessory Dwelling Unit in E2 and E3 Zones

8.1.4.1 One (1) **dwelling unit** for caretaking and/or security staff shall be permitted accessory to a Business Activity **use** contained in Table 8.2.1 of this By-law.

8.1.4.2 An accessory **dwelling unit** shall have a maximum **gross floor area - residential** of 70 m².

8.1.5 Outdoor Storage in an E2 Zone

8.1.5.1 **Outdoor storage** in an E2 zone is permitted accessory to a Business Activity **use** contained in Table 8.2.1 of this By-law, subject to the following:

8.1.5.1.1 **Outdoor storage** shall not exceed 5% of the **lot area**, or 10% of the **gross floor area - non-residential** of the **building, structure** or part thereof, whichever is the lesser and shall be located on the same **lot**;

8.1.5.1.2 **Outdoor storage** shall not be located closer to any **street line** than any portion of a **building, structure** or part thereof;

8.1.5.1.3 The area to be used for **outdoor storage** shall not be located within the **front yard** or **exterior side yard**;

8.1.5.1.4 A fence, having a minimum **height** of 2.4 m shall be required for screening around the perimeter of the area to be used for **outdoor storage**.

8.1.6 Outdoor Display in an E2 Zone

8.1.6.1 The provisions of Subsection 8.1.5 of this Section shall not prevent the outdoor display of new products produced or distributed on a **lot**, by a Business Activity **use** contained in Table 8.2.1 of this By-law, subject to the following:

8.1.6.1.1 The total area used for outdoor display shall not exceed 5% of the **lot area**;

8.1.6.1.2 Outdoor display shall not be located closer to any **street line** than any portion of a **building, structure** or part thereof.

8.1.7 Outdoor Storage and Outdoor Display E3 Zones

8.1.7.1 The **outdoor storage** and/or outdoor display of goods shall not be situated closer to any **street line** than any portion of a **building, structure** or part thereof.

8.1.7.2 The area to be used for **outdoor storage** shall not be located within the **front yard** or **exterior side yard**.

8.1.7.3 A fence, having a minimum **height** of 2.4 m shall be required around the perimeter of the area to be used for **outdoor storage**.

8.1.7.4 Where there are no **buildings**, or **structures** on a **lot** and the **lot** is used for **outdoor storage**, the minimum required **yards** of the E3 zone regulations shall apply. (0379-2009)

8.1.8 Drive-Through (0018-2015)

8.1.8.1 A drive-through is permitted accessory to a **financial institution** in an E2 and E3 zone. (0018-2015)

8.1.8.2 *deleted by 0018-2015*

8.1.9

deleted by 0018-2015

8.1.10

Regulations for Motor Vehicle Service Uses in an Employment Zone

8.1.10.1

A **building, structure** or part thereof, used for a **gas bar, motor vehicle service station, motor vehicle wash facility - restricted, or motor vehicle wash facility - commercial motor vehicle**, shall comply with the regulations contained in Table 8.1.10.1 - Regulations for Motor Vehicle Service Uses in an Employment Zone. (0325-2008), (0379-2009)

Table 8.1.10.1 - Regulations for Motor Vehicle Service Uses in an Employment Zone
(0379-2009), (0018-2021)

Column A		B
Line	REGULATIONS	
1.0	MINIMUM LOT FRONTAGE:	
1.1	Interior lot	36.0 m
1.2	Interior lot used for a motor vehicle wash facility - restricted or motor vehicle wash facility - commercial motor vehicle	45.0 m
1.3	Interior lot used for a motor vehicle wash facility - restricted or motor vehicle wash facility - commercial motor vehicle in combination with any other permitted use	60.0 m
1.4	Corner lot	48.0 m
1.5	Corner lot used for a motor vehicle wash facility - restricted or motor vehicle wash facility - commercial motor vehicle	60.0 m
1.6	Corner lot used for a motor vehicle wash facility - restricted or motor vehicle wash facility - commercial motor vehicle in combination with any other permitted use	70.0 m
2.0	MINIMUM SETBACKS:	
2.1	From a lot line to a fuel pump	6.0 m
2.2	Minimum yard/setback to a fuel dispensing island weather canopy shall be measured to the face of the canopy	✓

8.2	E1 TO E3 ZONES (EMPLOYMENT)
-----	--------------------------------

8.2.1 E1 to E3 Permitted Uses and Zone Regulations

All **buildings** and **structures** shall comply with the provisions contained in Parts 1 to 3 and Section 8.1 of this By-law, and the **uses** and zone regulations specified within the applicable zone column contained in Table 8.2.1 - E1 to E3 Permitted Uses and Zone Regulations.

Table 8.2.1 - E1 to E3 Permitted Uses and Zone Regulations
(0358-2007), (0325-2008), (0191-2009/OMB Order 2010 May 05), (0379-2009), (0297-2013), (0050-2013/LPAT Order 2020 June 08) (0190-2014), (0018-2015), (0055-2015), (0018-2021), (0111-2019/LPAT Order 2021 March 09), (0121-2020/LPAT Order 2021 March 11)

Column A		B	C	D
Line 1.0	ZONES	E1 Employment in Nodes	E2 Employment	E3 Industrial
PERMITTED USES				
2.0	EMPLOYMENT			
2.1	OFFICE			
2.1.1	Medical Office	✓	✓	✓
2.1.2	Office	✓	✓	✓
2.2	BUSINESS ACTIVITIES			
2.2.1	Broadcasting/Communication Facility		✓	✓
2.2.2	Manufacturing Facility	✓	✓	✓
2.2.3	Science and Technology Facility	✓	✓	✓
2.2.4	Transportation Facility		deleted by 0190-2014	✓
2.2.5	Truck Terminal		✓	✓
2.2.6	Warehouse/Distribution Facility	✓	✓	✓
2.2.7	Wholesaling Facility		✓	✓
2.2.8	Waste Processing Station		✓ (1)	✓ (1)
2.2.9	Waste Transfer Station		✓ (1)	✓ (1)
2.2.10	Composting Facility		✓ (1)	✓ (1)
2.2.11	Power Generating Facility			✓
2.2.12	Outdoor Storage/Outdoor Display			✓
2.2.13	Self Storage Facility		✓	✓
2.2.14	Contractor Service Shop		✓	✓
2.2.15	Contractor's Yard			✓
2.2.16	Vehicle Pound Facility			✓
2.2.17	Medicinal Product Manufacturing Facility	✓ (14)	✓ (14)	✓ (14)
2.2.18	Medicinal Product Manufacturing Facility - Restricted	✓	✓	✓
2.3	COMMERCIAL			
2.3.1	Restaurant		✓ (1)	✓ (1)
2.3.2	Convenience Restaurant		✓ (1)(13)	✓ (1)
2.3.3	Take-out Restaurant		✓ (1)	✓ (1)
2.3.4	Commercial School	✓	✓	✓

Table 8.2.1 continued on next page

Column A		B	C	D
Line 1.0	ZONES	E1 Employment in Nodes	E2 Employment	E3 Industrial
Table 8.2.1 continued from previous page				
2.3.5	Financial Institution	✓ (12)	✓ (13)	✓ (13)
2.3.6	Veterinary Clinic	✓	✓	✓
2.3.7	Animal Care Establishment		✓	✓
2.4	MOTOR VEHICLE SERVICE			
2.4.1	Motor Vehicle Body Repair Facility			✓
2.4.2	Motor Vehicle Body Repair Facility - Commercial Motor Vehicle			✓
2.4.3	Motor Vehicle Repair Facility - Commercial Motor Vehicle		deleted by 0379-2009	✓
2.4.4	Motor Vehicle Repair Facility - Restricted		✓	✓
2.4.5	Motor Vehicle Rental Facility		✓	✓
2.4.6	Motor Vehicle Wash Facility - Commercial Motor Vehicle		deleted by 0379-2009	✓
2.4.7	Motor Vehicle Wash Facility - Restricted		✓	✓
2.4.8	Gas Bar		✓ (1)(2)(13)	✓ (1)(2)(13)
2.4.9	Motor Vehicle Service Station		✓ (13)	✓
2.4.10	Motor Vehicle Sales, Leasing and/or Rental Facility - Commercial Motor Vehicles		✓ (1)	✓ (1)
2.5	HOSPITALITY			
2.5.1	Banquet Hall/Conference Centre/ Convention Centre	✓	✓	✓
2.5.2	Night Club		✓ (1)(3)	✓ (1)(3)
2.5.3	Overnight Accommodation	✓	✓	✓
2.6	OTHER			
2.6.1	Adult Video Store		✓ (1)	✓ (1)
2.6.2	Adult Entertainment Establishment		✓ (1)	✓ (1)
2.6.3	Animal Boarding Establishment		✓ (1)	✓ (1)
2.6.4	Active Recreational Use	✓	✓	✓
2.6.5	Body-Rub Establishment		✓ (1)	✓ (1)
2.6.6	deleted by 0111-2019/LPAT Order 2021 March 09			
2.6.7	Truck Fuel Dispensing Facility		✓	✓
2.6.8	Entertainment Establishment	✓	✓	✓
2.6.9	Recreational Establishment	✓	✓	✓
2.6.10	Funeral Establishment		✓ (4)	✓ (4)
2.6.11	Private Club		✓	✓
2.6.12	Repair Establishment		✓	✓
2.6.13	Parking Lot		✓	✓
2.6.14	University/College	✓	✓	✓
2.6.15	Courier/Messenger Service	✓	✓	✓
ZONE REGULATIONS				
3.0	MINIMUM LOT FRONTAGE	30.0 m	30.0 m ⁽⁹⁾	30.0 m ⁽⁹⁾
4.0	MAXIMUM FLOOR SPACE INDEX - NON-RESIDENTIAL - OFFICES AND/OR MEDICAL OFFICES	n/a	1.0	0.5

Table 8.2.1 continued on next page

Column A		B	C	D
Line 1.0	ZONES	E1 Employment in Nodes	E2 Employment	E3 Industrial
Table 8.2.1 continued from previous page				
5.0	MINIMUM FRONT YARD	4.5 m ⁽⁵⁾	7.5 m ⁽⁵⁾⁽¹⁰⁾	7.5 m ⁽⁵⁾⁽¹⁰⁾
5.1	Where the opposite side of the street on which the lot fronts is a Residential Zone	n/a	30.0 m ⁽¹⁰⁾	30.0 m ⁽¹⁰⁾
6.0	MAXIMUM SETBACK			
6.1	<i>deleted by 0121-2020/LPAT Order 2021 March 11</i>			
6.2	<i>deleted by 0121-2020/LPAT Order 2021 March 11</i>			
6.3	<i>deleted by 0121-2020/LPAT Order 2021 March 11</i>			
7.0	MINIMUM EXTERIOR SIDE YARD	4.5 m ⁽⁵⁾	7.5 m ⁽⁵⁾⁽¹⁰⁾	7.5 m ⁽⁵⁾⁽¹⁰⁾
7.1	Where the opposite side of the street on which the lot fronts is a Residential Zone	n/a	15.0 m ⁽¹⁰⁾	15.0 m ⁽¹⁰⁾
8.0	<i>deleted by 0191-2009/OMB Order 2010 May 05</i>			
9.0	MINIMUM INTERIOR SIDE YARD			
9.1	Lot with a lot frontage less than or equal to 75.0 m	4.5 m ⁽⁵⁾	the greater of 10% of the frontage of lot , or 4.5 m ⁽⁵⁾⁽⁷⁾⁽¹⁰⁾	the greater of 10% of the frontage of lot , or 4.5 m ⁽⁵⁾⁽⁷⁾⁽¹⁰⁾
9.2	Lot with a lot frontage greater than 75.0 m	4.5 m ⁽⁵⁾	7.5 m ⁽⁵⁾⁽⁷⁾⁽¹⁰⁾	7.5 m ⁽⁵⁾⁽⁷⁾⁽¹⁰⁾
9.3	Yard abutting a Residential Zone	4.5 m ⁽⁵⁾	15.0 m ⁽¹⁰⁾	15.0 m ⁽¹⁰⁾
10.0	MINIMUM REAR YARD	4.5 m ⁽⁵⁾	7.5 m ⁽⁵⁾⁽⁸⁾⁽¹⁰⁾	7.5 m ⁽⁵⁾⁽⁸⁾⁽¹⁰⁾
10.1	Yard abutting a Residential Zone	4.5 m ⁽⁵⁾	15.0 m ⁽¹⁰⁾	15.0 m ⁽¹⁰⁾
11.0	MINIMUM HEIGHT	n/a	n/a	n/a
12.0	MINIMUM LANDSCAPED BUFFER			
12.1	Minimum depth of a landscaped buffer measured from a lot line that abuts a Residential Zone	7.0 m ⁽¹¹⁾	7.0 m ⁽¹¹⁾	7.0 m ⁽¹¹⁾
12.2	Minimum depth of a landscaped buffer measured from a lot line that is a street line	4.5 m ⁽¹¹⁾	4.5 m ⁽¹¹⁾	4.5 m ⁽¹¹⁾
12.3	Minimum depth of a landscaped buffer measured from a lot line where the lot line abuts an Institutional, Office, Commercial, Downtown Core, Parkway Belt, or Buffer Zone, or any combination of zones thereof	3.0 m ⁽¹¹⁾	3.0 m ⁽¹¹⁾	3.0 m ⁽¹¹⁾
12.4	Minimum depth of a landscaped buffer measured from a lot line that abuts an Employment, Utility or Airport Zone, or any combination of zones thereof	0.0 m ⁽¹¹⁾	0.0 m ⁽¹¹⁾	0.0 m ⁽¹¹⁾
12.5	Minimum depth of a landscaped buffer measured from any other lot line	4.5 m ⁽¹¹⁾	4.5 m ⁽¹¹⁾	4.5 m ⁽¹¹⁾

Table 8.2.1 continued on next page

Column A		B	C	D
Line 1.0	ZONES	E1 Employment in Nodes	E2 Employment	E3 Industrial
Table 8.2.1 continued from previous page				
13.0	deleted by 0121-2020/LPAT Order 2021 March 11			
14.0	deleted by 0121-2020/LPAT Order 2021 March 11			

- NOTES:
- (1) See also Article 2.1.2.1 of this By-law.

(2) See also Table 2.1.2.2.3 of this By-law.

(3) See also Table 2.1.2.2.1 of this By-law.

(4) See also Table 2.1.2.2.2 of this By-law.

(5) See also Subsection 2.1.17 of this By-law.

(6) deleted by 0121-2020/LPAT Order 2021 March 11

(7) See Article 8.2.1.1 of this By-law.

(8) See Article 8.2.1.2 of this By-law.

(9) See also Subsection 8.1.10 of this By-law

(10) See Table 8.1.10.1 of this By-law.

(11) See also Subsection 2.1.25.

(12) See Article 8.2.1.3 of this By-law.

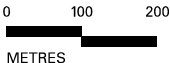
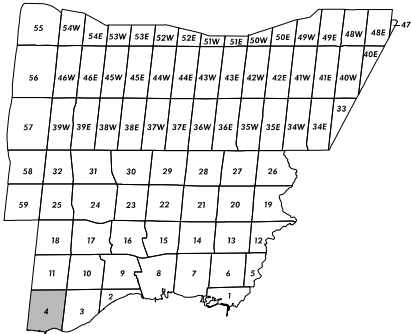
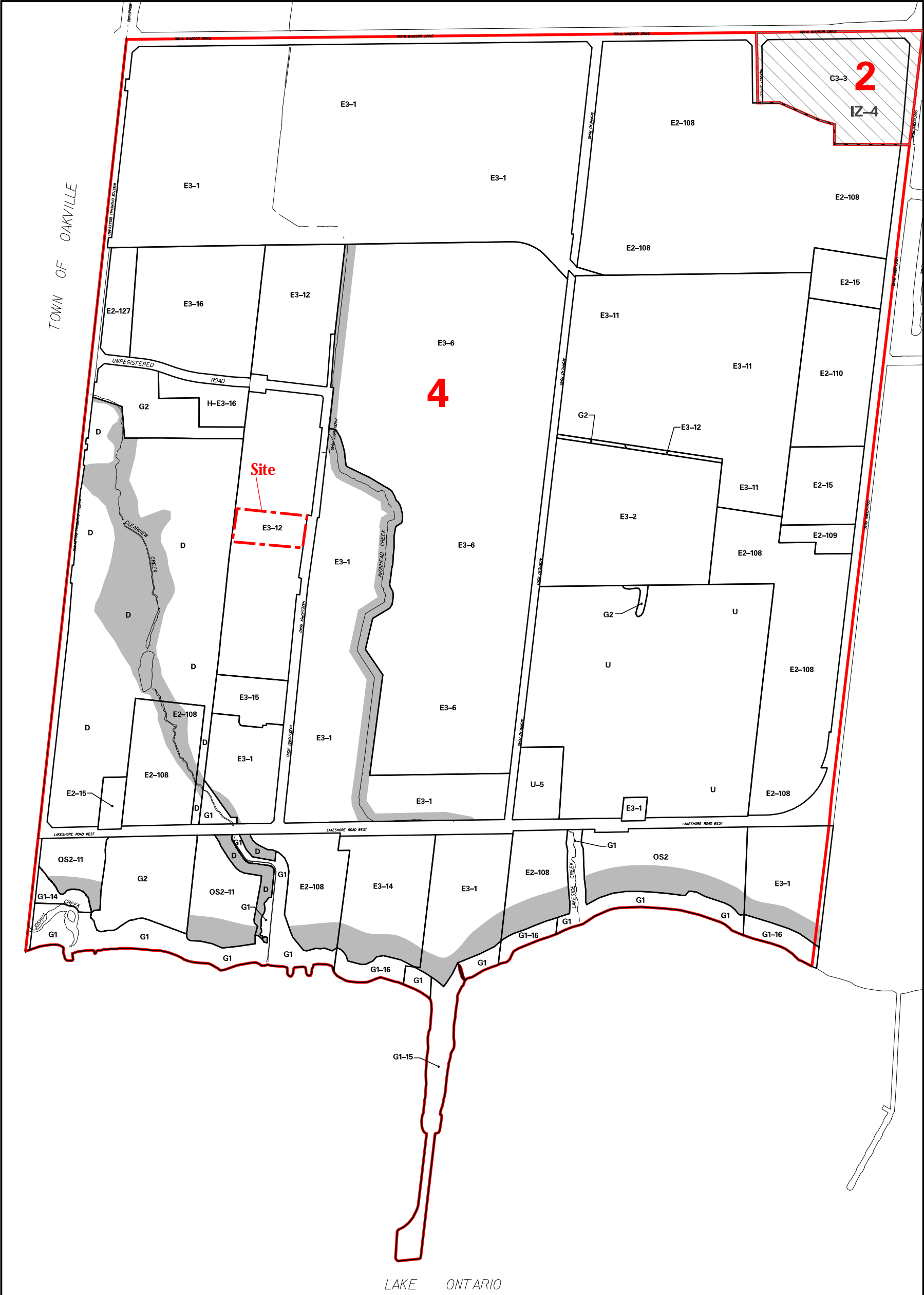
(13) See also Subsection 2.1.29 of this By-law.

(14) See also Article 8.1.1.1 of this By-law.
- 8.2.1.1

For properties zoned E2 or E3, an **interior side yard** is not required where an **interior side lot line** abuts a railway right-of-way that includes a spur line. (0018-2021)
- 8.2.1.2

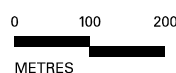
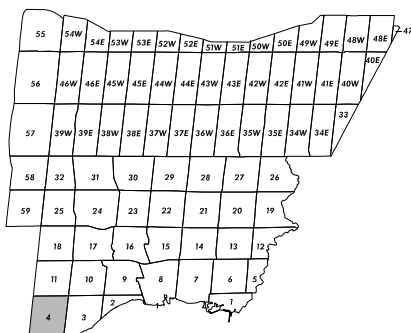
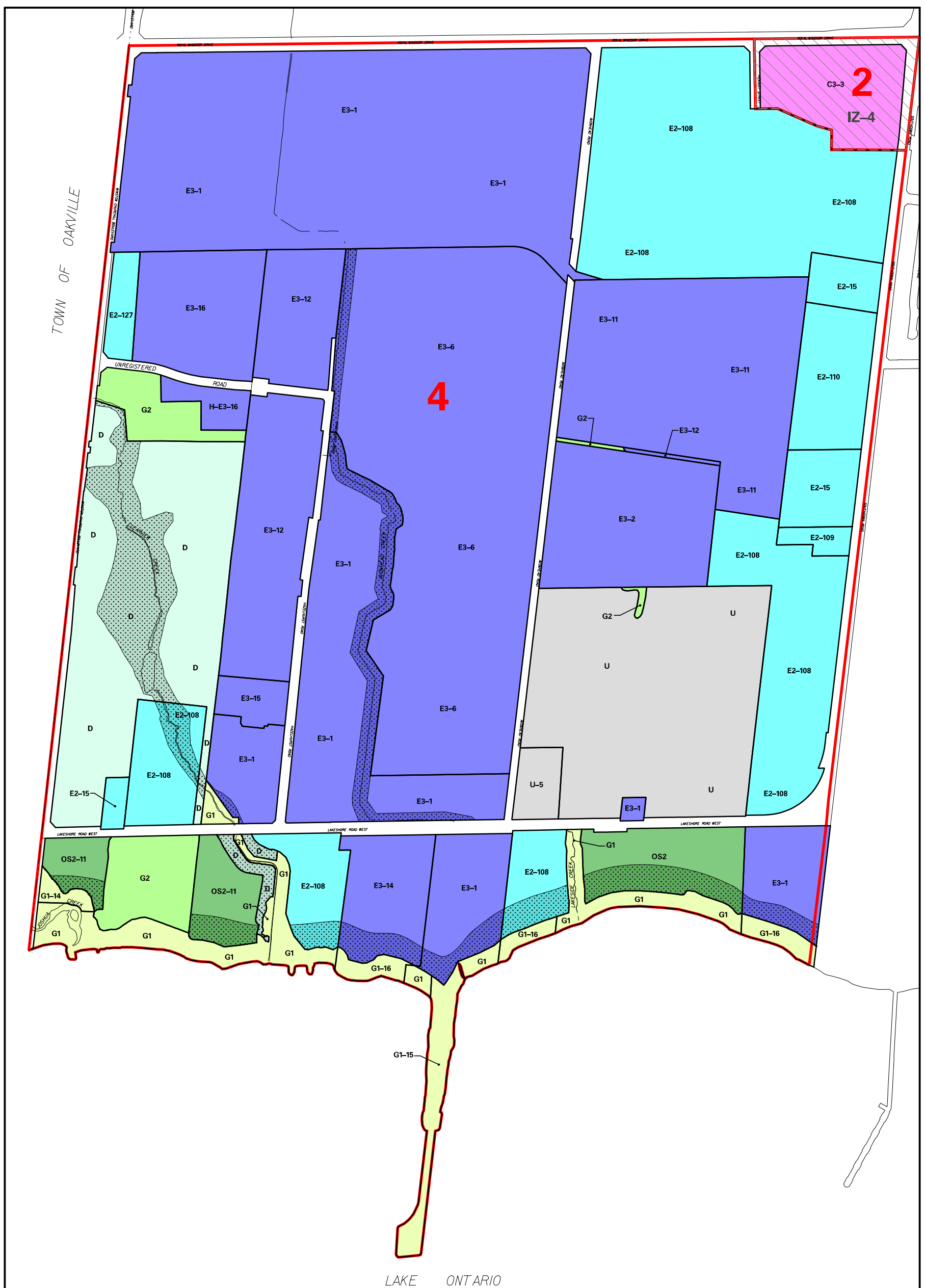
For properties zoned E2 or E3, a **rear yard** is not required where a **rear lot line** abuts a railway right-of-way that includes a spur line. (0018-2021)
- 8.2.1.3




For properties zoned E1, a one **storey** free-standing **building** or **structure** used for a **financial institution** shall not be permitted within 100.0 m of Hurontario Street. (0191-2009/OMB Order 2010 May 05), (0018-2021)



- Inclusionary Zoning Overlay
 - Parking Precinct
 - Greenlands Overlay
- Zoning Notation Example:
R4-12 = R4-Exception 12

Zoning Map 04
Schedule "B" To
By-law No. 0225-2007
Revised: 2023 January 31



-  Inclusionary Zoning Overlay
-  Parking Precinct
-  Greenlands Overlay

Zoning Notation Example:
R4-12 = R4-Exception 12

Zoning Map 04

Schedule "B" To
By-law No. 0225-2007

Revised: 2023 January 31

ZONING BY-LAW 0225-2007

ZONING CATEGORIES

ZONES

Residential



R1 - R16

Detached Dwellings



RM1, RM2, RM3

Semi-Detached



RM7

Detached, Semi-Detached, Duplex and Triplex



RM4, RM5, RM6

Townhouse



RM8 - RM12

Back to Back, Stacked Townhouses



RA1 - RA5

Apartment, Long-Term Care, Retirement Buildings

Office



O1

Minor Office



O2

Major Office



O3

General Office

Commercial



C1

Convenience Commercial



C2

Neighbourhood Commercial



C3

General Commercial



C4

Mainstreet Commercial



C5

Motor Vehicle Commercial

Downtown Core



CC1

Core Commercial



CC2, CC4

Mixed Use



CC3

Mixed Use - Transition Area



CCO

Office



CCOS

Open Space

Employment



E1

Employment in Nodes



E2

Employment



E3

Industrial

Open Space



OS1

Community Park



OS2

City Park



OS3

Cemetery

Greenlands



G1

Natural Hazards



G2

Natural Features



Greenlands Overlay

Parkway Belt



PB1, PB2

Parkway Belt

Utility



U

Utility

Institutional



I

Hospital and University / College

Development



D

Existing Use

Buffer



B

Buffer, Berm, Fence

Airport



AP

Lester B. Pearson International Airport



MISSISSAUGA



APPENDIX B – MANUFACTURER’S SPECIFICATIONS OF ALCF PROCESSING EQUIPMENT

**PRODUCT
SPECIFICATION**



TDS 820

SLOW SPEED SHREDDER



AGGRESSIVE SLOW SPEED SHREDDER

The TDS 820 is an aggressive slow speed shredder suitable for all types of material. Customisable shredding programs allow operators to configure the machine to their specific requirements, reducing wrappage and maximising production.



TDS 820

**Independent shredding
shafts allow for maximum
application flexibility.**



Key features include the hydrostatic drive offering better protection against contamination and allowing for bi-directional shredding. The double shaft shredder has 2m long shafts with a fully welded tooth configuration, impressive throughput and excellent reduction.

The independent gearboxes enable each shaft to be run separately helping to reduce wrappage and improve the shredding of material.

Additional features include the tipping feeder which increases the feed area. Hopper extensions provide increased capacity in bulky applications. The TDS 820 is powered by the following engines dependent on geographic area and emission regulations: Scania DC13 330kw (440HP) Tier 4 final for the US and EU, Scania DC13 371kw (497HP) constant speed for the EU.

The machine is manoeuvred via a robust tracked undercarriage making it a great solution for difficult terrain.

KEY FEATURES



A powerful Scania engine with a low operating speed combined with an efficient hydrostatic drive creates a very responsive shredding action with protection against unshreddable contaminants



User friendly colour display offering simple operation and diagnostics
Customisable shredding programs allow operators to tailor the machine for specific applications



Robust German designed shredding chamber
Independently driven shafts give excellent shredding performance in even the most challenging of applications



Shaft cutting elements are a fully welded structure with hard-faced edges giving ultimate strength in difficult applications

Excellent service access reduces operator downtime



A separate transfer conveyor with a high specification belt ensures material is effectively removed from below the shredding chamber

TECHNICAL DATA



TRANSPORT DIMENSIONS

Length: 9100mm (29' 10")
Width: 2500mm (8' 2")
Height: 3200mm (10' 6")
Weight: 27500kg (60,627lbs)
(dependent on options)

WORKING DIMENSIONS

Length: 11700mm (38' 5")
(product belt @ 35")
Width: 2500mm (8' 2")
Feed Height: 3200mm (10' 6")
Discharge Height:
3900mm (12' 10") - 1700mm (5' 7")

SHREDDING UNIT

Type of shredder: Twin shaft slow speed
Shaft Length: 2000mm
Shaft diameter: 700mm
Torque per shaft: 100,000Nm
Tilting feeder capacity: 7m³
Autolube for shredder shaft bearing

POWERPACK

Engine:
• Scania DC13 331kW (440HP)
Tier 4 Final (USA & EU)
• Scania DC13 371kW (497HP)
Constant Speed (EU)
CleanFix variable pitch cooling fan
Shredder drive: Twin Hydrostatic
(independent shaft drive)
Fuel capacity: 500l
CAN BUS control system with user friendly colour
display offering simple operation and diagnostics

TRANSFER CONVEYOR

Width: 1300mm (4' 3")
Length: 2450mm (8' 0")
Max. belt speed: 130m/min (426' 6"/min)

PRODUCT CONVEYOR

Width: 1400mm (4' 7")
Length: 5500mm (18")
Max. belt speed: 130m/min (426' 6"/min)

TRACKED UNDERCARRIAGE (OPTION)

Bolt on tracks
500mm (20") shoe
2920mm (9' 7") sprocket centres

OPTIONS

Overband magnet
Various shaft/breaker bar configurations
Plant Autolube (excluding shredder shafts)
800mm hopper extensions

Specification subject to change without notice

CUSTOMER SUPPORT

With you every step of the way

We work with our customers to understand their equipment needs to select the product most suited to their business requirements. Terex Ecotec customer support incorporates a range of services including parts, technical support, warranty and financial services.



The Right Part at the Right Time

Terex Ecotec has a full inventory of genuine Terex parts through our global support locations and dealer network. We are committed to getting the right parts delivered at the right time. Using genuine Terex parts ensures optimum performance and reliability.



Expert technical support

Terex Ecotec provide highly qualified service personnel to ensure that we have the ability to provide technical support when our customers need it. This support is provided in conjunction with our dealer network. We ensure our customers are supported throughout the lifecycle of their machine.



Warranty Delivering on our promise so you can keep yours

Terex Ecotec warrants its new equipment to be free of defects in material or manufacture for a specified period from the date the equipment is first used.



Terex Financial Services Financing that works for you

Terex Ecotec are able to offer finance solutions to our customers. Our team of finance professionals know the importance of working closely with customers to understand their unique business challenges as well as their financial goals and requirements. Obtaining financing is often a time-consuming task, so we work hard to provide a reliable, flexible and responsive service.



**Delivering On Our Promises,
So You Can Keep Yours.**

Doppstadt

SM-SERIES

SMART SCREENING

TROMMEL LINE



Best Solution. Smart Recycling.

doppstadt.com



OPTIMUM SCREENING With Doppstadt trommel screen machines.

The rotating drum can screen even the most difficult materials, with the load-sensing material feed making optimum use of the large screening surface.

The Doppstadt screens with modular design can be adjusted to special tasks. They are extremely mobile and can easily be controlled by one

operator. Due to the direct drive, the drum can be changed very easily. By means of a stonegrid or vibrating screen or with the star screen above the hopper, a third fraction can be separated.

Thanks to the hydraulically controlled discharge conveyors, our drum screen machines are ready to go within less

than five minutes. The standard rotating and hydraulically controlled brush cleans the drum automatically. The machine level is adjustable for stability and a good throughput.

If the machine must be moved, a slip-on coupling for the drawbar is available.

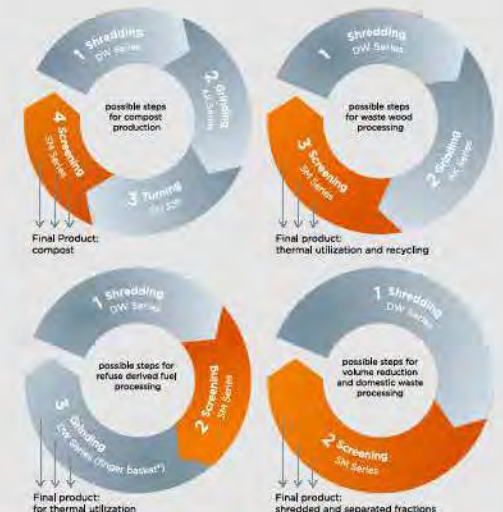


MULTIPLE COMBINATION POSSIBILITIES

For many fields of application.

With trommels of the SM series you can screen soil, compost, bark mulch, waste wood, building rubble and much more. The screens are ideally suited for combined application e.g. with Doppstadt shredders or windsifters.

COMPOSTING, WASTE WOOD, GARBAGE AND RDF PROCESSING



DETAILS



SLIP-ON COUPLING

The slip-on coupling allows the machine to be transported with a wheel loader (only machines with drawbar).



SWING-OUT DRIVE UNIT

Optimum access to the diesel engine and hydraulic pumps for easy maintenance and repair. The water and oil cooler is provided with an additional dust protection basket.



DRUM DRIVE

The drum with direct drive ensures operational safety and an easy replacement.



CLEANING BRUSH

Self-cleaning of the drum by rotating, hydraulically controlled brush*.



REMOTE CONTROL

Efficient control and monitoring of all of the screening machine's significant functions is possible with the remote control, e.g. from the wheel loader.



SCREEN DRUM

The screen drums can be replaced quickly and easily, enabling the flexibility needed to adjust to nearly any challenge with minimal downtime and conversion time.

REAR AND SIDE CONVEYOR

The coarse fraction is discharged by the rear conveyor, the fines are discharged by the side conveyor. The conveyors can be equipped with a magnetic pulley*, an over-band magnet*, and a wind sifter*. As an option, the conveyor length can also be adjusted and a flow divider* for the rear conveyor can be added.



CENTRAL CONTROL PANEL

Easy operation, exact adjustment and reading of the machine data by multi-functional display.



LARGE DOORS

Optimum access for control, service and maintenance work.

*Option

Explanations and illustrations by the example of the SM 620



SM-SERIES - TROMMEL SCREENS

Main advantages.

- load-sensing material feed to the drum
- swing-out drive unit for easy maintenance
- quick and easy drum change
- many available options to meet various requirements
- hydraulically controlled cleaning brush
- can be combined with other Doppstadt products
- one-man operation
(remote control of all main functions)



SM 414

The drum of the SM 414 has a length of approx. 4.2 m (13'9") and a diameter of 1.4 m (4'7"). For different applications various mesh sizes are available. Screening surface 15.9 m².

SM 414	
Permissible weight	10,500 kg (23,149 lb)
Drive	Diesel engine
Type	Caterpillar C 2.2
Power	30 kW (41 hp) at 2,000 rpm
Drum length	4,200 mm (13'9")
Drum diameter	1,400 mm (4'7")
Transport dimensions L / W / H	10,500 / 2,300 / 3,750 mm (34'5" / 7'7" / 12'4")



SM 414 K

The SM 414 K is equal to the SM 414, but it is mounted on a tracklaying chassis and permits an independent maneuvering of the machine without using a tractive unit, even on unsurfaced ground.

SM 414 K	
Total weight	12,000 kg (26,455 lb)
Drive	Diesel engine
Type	Caterpillar C 2.2
Power	34 kW (46 hp) at 2,400 rpm
Drum length	4,200 mm (13'9")
Drum diameter	1,400 mm (4'7")
Transport dimensions L / W / H	9,950 / 2,500 / 3,400 mm (32'8" / 8'2" / 11'2")





SM 518 PLUS

The SM 518 Plus has a screening surface of 22.5 m². The screen drum has a diameter of 1.8 m (5'11") and a length of approx. 5 m (16'5"). Optionally skeletal drums with changeable screens or a star screen module available. For different applications various mesh sizes are available.

SM 518 PLUS	
Permissible weight	17,000 kg (37,479 lb)
Drive	Diesel engine
Type	DEUTZ TCD 2.9 L4
Power	55 kW (75 hp) at 2,100 rpm
Drum length	4,700 mm (15'5")
Drum diameter	1,800 mm (5'11")
Transport dimensions L / W / H	11,000 / 2,550 / 4,000 mm (36'1" / 8'4" / 13'1")



SM 620 PLUS

The SM 620 Plus has a screen drum with 2 m (6'7") diameter and approx. 6 m (19'8") length. For different applications various mesh sizes are available. Screening surface 30.2 m². Alternatively a star screen module with 6 m² screen can be used.

SM 620 PLUS	
Permissible weight	19,000 kg (41,888 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	5,500 mm (18')
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	11,805 / 2,550 / 4,000 mm (38'9" / 8'4" / 13'1")





SM 620 K PLUS

The SM 620 K Plus is equipped with a crawler track unit, so it can be used without tractive unit and is applicable on unsurfaced ground thanks to its height adjustable chassis.

SM 620 K PLUS	
Total weight	24,000 kg (52,911 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	5,500 mm (18")
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	12,730 / 3,000 / 3,400 mm (41'9" / 9'1" / 11'2")





SM 620 SA PLUS

The SM 620 SA Plus is a mobile and powerful universal 2-fraction screen on a 24-t 2-axle semitrailer chassis with a more than 7 m³ hopper. The machine can optionally be used with a trommel or with a star screen insert.

SM 620 SA PLUS	
Total weight	24,000 kg (52,911 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	5,500 mm (18')
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	12,730 / 3,000 / 3,400 mm (41'9" / 9'1" / 11'2")



SM 720 SA PLUS

The SM 720 SA Plus has a screen drum with 2 m (6'7") diameter and approx. 7.1 m (23'4") length. For different applications various mesh sizes are available. A third fraction can be separated by using a vibrating grid or a stonegrid. Screening surface 38.8 m².

SM 720 SA PLUS	
Total weight	24,000 kg (52,911 lb)
Drive	Diesel engine
Type	DEUTZ TCD 3.6 L4
Power	85 kW (116 hp) at 1,800 rpm
Drum length	7,100 mm (23'4")
Drum diameter	2,000 mm (6'7")
Transport dimensions L / W / H	13,250 / 2,550 / 4,000 mm (43'6" / 8'4" / 13'1")



OPTIONS FOR SCREENS



HOPPER STAR SCREEN

The hopper star screen can be mounted on the hopper of the screen. It is driven by an additional hydraulic connection at the machine. The hopper star screen separates oversized items before the actual screening of the shredded material (e.g. shredded waste wood, trunks and roots). It enables the separation of the fines and the oversize in just one path.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K



VIBRATING GRID

The vibrating grid is used for separating bulky contaminants (e.g. big rocks) and prevents damage, e.g. of the drum. The vibration automatically moves the material which is then tipped at the side of the machine. The vibration also loosens cohesive materials and leads to a better screening result. It is driven by an additional hydraulic connection at the machine.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus
- SM 720 SA Plus



STONEGRID

The stonegrid is used for separating bulky contaminants (e.g. big rocks) and prevents damage, e.g. of the drum. The stonegrid is tilted hydraulically via remote control. The material is tipped at the left side of the machine.

Available for:

- SM 414
- SM 414 K
- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus
- SM 720 SA Plus



WIND SIFTER (REAR CONVEYOR)

The windsifter is used to separate light materials from the oversize fraction. Materials such as foils, plastics, etc. can be sorted out, so that the cleaned oversize is of further use (e.g. biomass, compost, etc.). The windsifter is mounted on the rear conveyor. The contaminants are blown into a container. It is driven by an additional hydraulic connection at the machine.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus
- SM 720 SA Plus



STAR SCREEN MODULE

The star screen unit is a compact module which can be used instead of the drum. Due to different speeds of the shafts the material is loosened up and pulled apart. Different grain sizes can be reached by using different star screen decks.

Available for:

- SM 518 Plus
- SM 620 Plus
- SM 620 K
- SM 620 SA Plus



WIND SIFTER ON STAR SCREEN DECK

The windsifter is used to separate light materials from the oversize fraction. Materials such as foils, plastics, etc. can be sorted out, so that the cleaned oversize is of further use (e.g. biomass, compost, etc.). The contaminants are blown into a container. It is driven by an additional hydraulic connection at the machine.

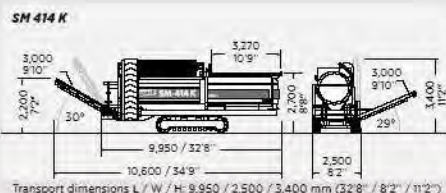
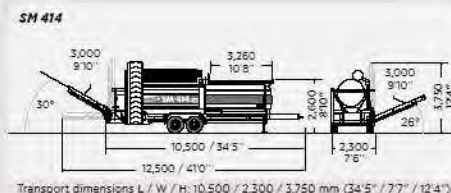
Available for:

- SM 620 Plus
- SM 620 K
- SM 620 SA Plus

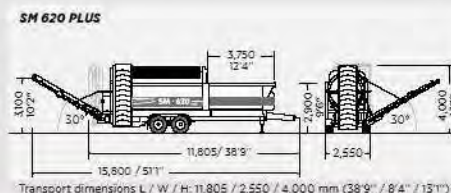
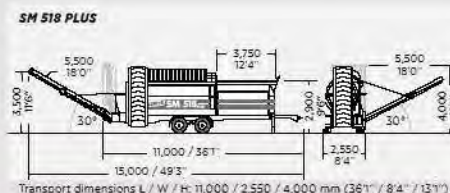


TECHNICAL DATA

SM-SERIES	SM 414	SM 414 K
		
Weight	10,500 kg (23,149 lb)	12,000 kg (26,455 lb)
Chassis	2-central-axle trailer chassis, for 80 km/h (50 mph) with ABS	Track drive
Drive	Diesel hydraulic	Diesel hydraulic
Type	Caterpillar C 2.2	Caterpillar C 2.2
Power	30 kW (41 hp) at 2,000 rpm	34 kW (46 hp) at 2,400 rpm
Torque	Max. 143 Nm	Max. 143 Nm
Exhaust level	EUROMOT III A	EUROMOT III A
Fuel tank	100 l (26 gal)	100 l (26 gal)
Drum	2 screening fractions, 3rd fraction by means of stonegrid	2 screening fractions, 3rd fraction by means of stonegrid
Drum Diameter	1,400 mm (4'7")	1,400 mm (4'7")
Drum Length	4,200 mm (13'9")	4,200 mm (13'9")
Mesh size	Selectable, 3 - 130 mm (0.12 - 5.12")	Selectable, 3 - 130 mm (0.12 - 5.12")
Mesh type	Selectable (staggered squares, round holes, comb)	Selectable (staggered squares, round holes, comb)
Drum wall thickness	Selectable	Selectable
Drum speed	0 - 21 rpm	0 - 21 rpm
Feeding hopper volume	3.0 m³ (106 ft³)	3.0 m³ (106 ft³)
Feeding width / height	3,260 / 2,600 mm (10'8" / 8'6")	3,270 / 2,700 mm (10'9" / 8'11")
Discharge conveyors	<div> <div>Rear</div> <div>Side</div> </div>	<div> <div>Rear</div> <div>Side</div> </div>
Length (option)	<div> <div>3,000 mm (9'11")</div> <div>5,000 mm (16'5")</div> </div>	<div> <div>3,000 mm (9'11")</div> <div>5,000 mm (16'5")</div> </div>
Discharge conveyors width	800 mm (2'7") 600 mm (2')	800 mm (2'7") 600 mm (2')
Belt speed m/s (ft/min)	0.9 m/s (2'7") 2.3 m/s (9'6")	1.0 m/s (3'3") 2.4 m/s (7'9")
Options e.g.	Stone grid, remote control, different conveyor lengths, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, skeletal drum on request	Stone grid, remote control, different conveyor lengths, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, skeletal drum on request



SM-SERIES	SM 518 PLUS	SM 620 PLUS
		
Weight	17,000 kg (37,479 lb)	19,000 kg (41,888 lb)
Chassis	2-central-axle trailer chassis, for 80 km/h (50 mph) with ABS	2-central-axle trailer chassis, for 80 km/h (50 mph) with ABS
Drive	Diesel hydraulic	Diesel hydraulic
Type	DEUTZ TCD 2.9 L4 (optional: electric motor)	DEUTZ TCD 3.6 L4 (optional: electric drive)
Power	55 kW (75 hp) at 2,000 rpm	85 kW (116 hp) at 1,800 rpm
Torque	Max. 300 Nm	Max. 400 Nm
Exhaust level	EUROMOT III B / Tier IV	EUROMOT IV / Tier 4 final
Fuel tank	200 l (79 gal)	200 l (79 gal)
Drum	2 screening fractions, Option: 3rd fraction by means of stonegrid, vibrating screen or hopper star screen, 4th fraction by means of a windfilter at the rear conveyor	2 screening fractions, Option: 3rd fraction by means of stonegrid, vibrating screen or hopper star screen, 4th fraction by means of a windfilter at the rear conveyor
Drum Diameter	1,800 mm (5'11")	2,000 mm (6'7")
Drum Length	4,700 mm (15'5")	5,500 mm (18'1")
Mesh size	Selectable, 3 - 130 mm (0.12 - 5.12")	Selectable, 3 - 130 mm (0.12 - 5.12")
Mesh type	Selectable (staggered squares, round holes, comb)	Selectable (staggered squares, round holes, comb)
Drum wall thickness	Selectable	Selectable
Drum speed	0 - 21 rpm	0 - 20 rpm
Feeding hopper volume	5.0 m³ (177 ft³)	5.0 m³ (177 ft³)
Feeding width / height	3,750 / 2,900 mm (12'4" / 9'6")	3,750 / 2,900 mm (12'4" / 9'6")
Discharge conveyors	<div> <div>Rear</div> <div>Side</div> </div>	<div> <div>Rear</div> <div>Side</div> </div>
Length (option)	<div> <div>5,500 mm (18'1")</div> <div>3,000 mm (9'11")</div> </div>	<div> <div>5,500 mm (18'1")</div> <div>3,000 mm (9'11")</div> </div>
Discharge conveyors width	800 mm (2'7") 800 mm (2'7")	1,000 mm (3'3") 1,000 mm (3'3")
Belt speed m/s (ft/min)	11 m/s (35'7") 2.3 m/s (7'6")	1.6 m/s (5'3") 3.3 m/s (10'9")
Options e.g.	Star screen module, stonegrid, vibrating grid or hopper star screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, winter equipment, other conveyor lengths, windfilter over rear conveyor, skeletal drum, flow divider for rear conveyor	Star screen module, stonegrid, vibrating grid or hopper star screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, winter equipment, other conveyor lengths, windfilter over rear conveyor, skeletal drum, flow divider for rear conveyor

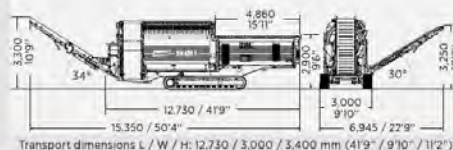


As of April 2019, subject to technical developments, all dimensions are in mm (ft/in). The new machines are approximately 100 mm wider and 100 mm higher and include options that are not part of the standard equipment.

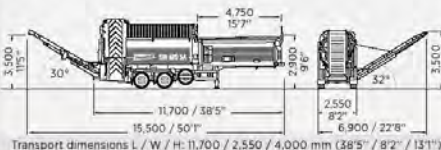
TECHNICAL DATA

SM-SERIES	SM 620 K PLUS	SM 620 SA PLUS
		
Weight	24,000 kg (52,911 lb)	24,000 kg (52,911 lb)
Chassis	Track drive with two speeds	Semitrailer chassis
Drive	Diesel hydraulic	Diesel hydraulic
Type	DEUTZ TCD 3.6 L4	DEUTZ TCD 3.6 L4 (optional: electric motor)
Power	85 kW (116 hp) at 1,800 rpm	85 kW (116 hp) at 1,800 rpm
Torque	480 Nm at 1,600 rpm	480 Nm at 1,600 rpm
Exhaust level	EUROMOT IV / Tier 4 final	EUROMOT IV / Tier 4 final
Fuel tank	400 l (105 gal)	400 l (105 gal)
Drum	2 screening fractions, Option: 3rd fraction by means of stonegrid or vibrating screen, 4th fraction by means of a windsifter at the rear conveyor	2 screening fractions, Option: 3rd fraction by means of stonegrid or vibrating screen, 4th fraction by means of a windsifter at the rear conveyor
Drum Diameter	2,000 mm (6'7")	2,000 mm (6'7")
Drum Length	5,500 mm (18')	5,500 mm (18')
Mesh size	Selectable, 3 - 130 mm (0.12 - 5.12")	Selectable, 3 - 130 mm (0.12 - 5.12")
Mesh type	Selectable (staggered squares, round holes, comb)	Selectable (staggered squares, round holes, comb)
Drum wall thickness	Selectable	Selectable
Drum speed	0 - 20 rpm	0 - 20 rpm
Feeding hopper volume	7.0 m³ (247 ft³)	7.0 m³ (247 ft³)
Feeding width / height	4,860 / 2,900 mm (15'11" / 9'62")	4,750 / 2,900 mm (15'7" / 9'62")
Discharge conveyors Length (option)	Rear: 5,500 mm (18'1") Side: 5,250 mm (17'3")	Rear: 5,500 mm (18'1") Side: 5,500 mm (18'1")
Discharge conveyors width	1,000 mm (3'3")	1,000 mm (3'3")
Belt speed m/s (ft in/s)	1.6 m/s (5'3") 3.1 m/s (10'2")	1.6 m/s (5'3") 3.1 m/s (10'2")
Options e.g.	Star screen inlay, stonegrid, vibrating screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, windsifter over rear conveyor, skeletal drum, flow divider for rear conveyor	Star screen inlay, stonegrid, vibrating screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, windsifter over rear conveyor, winter package, skeletal drum, flow divider for rear conveyor

SM 620 K PLUS



SM 620 SA PLUS



SM-SERIES	SM 720 SA PLUS
	
Weight	24,000 kg (52,911 lb)
Chassis	Semitrailer chassis
Drive	Diesel hydraulic
Type	DEUTZ TCD 3.6 L4 (optional: electric motor)
Power	85 kW (116 hp) at 1,800 rpm
Torque	480 Nm at 1,600 rpm
Exhaust level	EUROMOT IV / Tier 4 final
Fuel tank	400 l (105 gal)
Drum	2 screening fractions, Option: 3rd fraction by means of stonegrid or vibrating screen, 4th fraction by means of a windsifter at the rear conveyor
Drum Diameter	2,000 mm (6'7")
Drum Length	7,100 mm (23'4")
Mesh size	Selectable, 3 - 130 mm (0.12 - 5.12")
Mesh type	Selectable (staggered squares, round holes, comb)
Drum wall thickness	Selectable
Drum speed	0 - 20 rpm
Feeding hopper volume	7.0 m³ (247 ft³)
Feeding width / height	4,750 / 2,900 mm (15'7" / 9'62")
Discharge conveyors Length (option)	Rear: 5,500 mm (18'1") Side: 5,500 mm (18'1")
Discharge conveyors width	1,000 mm (3'3")
Belt speed m/s (ft in/s)	1.6 m/s (5'3") 3.1 m/s (10'2")
Options e.g.	Stonegrid, vibrating screen, remote control, additional hydraulic connections, magnetic pulleys at the side and rear conveyor, windsifter over rear conveyor, winter package, skeletal drum, flow divider for rear conveyor

SM 720 SA PLUS





doppstadt.com

Werner Doppstadt
Umwelttechnik GmbH & Co. KG
Steinbrink 13, 42555 Velbert
Deutschland

Telefon +49 2052 889-0
info@doppstadt.de



A TEREX BRAND

PRODUCT SPECIFICATION

6800CT

HORIZONTAL GRINDER



WHOLE TREES • STORM DEBRIS • SLASH • STUMPS • REGRIND

KEY FEATURES...

www.cbi-inc.com

The CBI Magnum Force 6800CT Horizontal Grinder is engineered to surpass every horizontal grinder that came before it. Once land clearing and wood waste professionals switch to CBI grinders for their ultimate production, performance, and durability, they never look back.

Improving on the 6800BT's revolutionary design, the 6800CT has a 15 percent larger screening area, wrapping more than 190° around the rotor, allowing production rates to surge beyond 200 tons an hour. Supported by a larger shaft and bearings and an optional 1200hp CAT C32, the engine powers the forged drum rotor through the toughest materials. The design of CBI's offset helix rotor minimizes energy loss from each strike and distributes material evenly across the 24 hammers, requiring less power while outproducing the competition. Built from a fully welded steel frame and reinforced heavy-duty weldments, this yellow monster processes land clearing debris, pallets, clean industrial waste, stumps, logs, mulch, bark, shingles, and whole trees as fast as it can be loaded, producing valuable end-products and giving operators command over real world job deadlines.

Ensuring the best fuel economy and the lowest possible cost per ton, CBI's user friendly interface displays simplified information for controls and monitoring. Operators can adjust and save multiple groups of feed speeds, pressures, and automated control systems to guarantee the most efficient performance across a wide range of materials. Speed sensors have been added to the feed system for a continuous and efficient pace of grinding. Remote monitoring gives owners a detailed report of operating data, machine status, alarms, and key metrics. Users can be sent automated maintenance notices to stay proactive on service, reducing downtime and keeping the machine in peak running condition year after year.

The 6800CT is designed for superior performance across all phases of the operation, including machine maintenance. An expanded service area provides open access to the engine. The grinding chamber can be raised from the ground level for easy access, allowing tip and screen changes to be done in minutes out in the field. Hydraulic filters are also at the ground level, with all setup functions combined into one valve bank. Sloped decks deter accumulation of debris and covers are easily removed for service. The fuel tank has been increased to 475 gallons. A 110 gallon hydraulic tank is strategically mounted for better access while reducing strain on the 5000 PSI hydraulic pumps. The clutch has a separate tank and cooler from the main hydraulics.

Supported 24/7 by a dashboard of updated reports, technical phone support, and CBI's Field Service Engineers, there's no guesswork when it comes to keeping this machine operating at top performance. All together, no other horizontal grinder in its weight class meets the production rates or low cost of ownership like the CBI Magnum Force 6800CT Horizontal Grinder.

CHANGE SCREENS IN MINUTES



60" wide cleated discharge belt provides unrestricted discharge of ground product.

Split hog box for ease of maintenance. The entire grinding chamber rises for quick tip and screen changes.

CAT C27; 1050hp engine or optional CAT C32; 1125hp or 1200hp engine.

High-torque feed roller. Speed sensors monitor the feed system's speed in real time to maintain a continuous and efficient pace of grinding.

LARGE CAPACITY FEED HOPPER



Infeed walls wing outwards to increase loading clearance and funnel material.

Heavy-duty support gussets are 100% welded.



Sloped decks deter debris accumulation.

Metal Detection System (MDS) protects machine from tramp metal.

A larger rotor shaft and bearings increase bearing life and allow for a 1200hp CAT C32 engine.

LARGER SHAFT AND BEARINGS



HIGH STRENGTH ROTORS FOR HIGH PRODUCTION



The 40" diameter x 60" wide upturn rotor has a forged, thick, high-strength core with 24 weld-on hammers. The offset helix pattern cuts the full width of the rotor, distributing material across the hammers for natural efficiency. This design increases throughput over conventional, pinned, or welded hammer rotors used by our competitors. CBI's bolt-on reversible tips grind more material for less cost than any other tip. Our Replace-A-Face™ hammer system allows the end user to swap out the face independent of the rest of the hammer for quick, easy, and inexpensive maintenance.

Various hammer inserts



Hog box opens in seconds



Increased hydraulic tank capacity



Wedge lock secures upper hog box



METAL DETECTION SYSTEM



A problem for any industrial grinder has to do with tramp metal entering the grinding chamber and causing significant damage, which leads to downtime. The Metal Detection System™ (MDS) engages in milliseconds whenever the grinder's rotor makes contact with tramp metal. The rotor is monitored by an adjustable electronic sensor to alert the control system when tramp metal is detected. It will automatically raise the top feed roll and reverse the infeed to allow the operator to find the tramp metal.

TRANSPORT DIMENSIONS

Width: 11'-1" (3,383mm)
Height: 12'-0" (3,657mm)
Length: 43'-2" (13,159mm)
Weight: 86,500 lbs. (39,236 kg) (approx.)

DISCHARGE CONVEYOR

Width: 60" (1,524mm)
Length: 36' (10,972mm)
Height: 16' 7/16" (4,887mm)

INFEED

6 strands heavy-duty drag chain
accepts 32" material
Top Feed Roll: 40"D x 60"W
Width: 60" (1,066mm)
Length: 17'-0" (5,181mm)

ENGINE/DRIVE

CAT C27; 1050hp engine
Option - CAT C32; 1125hp or
1200hp engine

CONTROLS

Parker IQANT™
Remote control operated
Telematics

HYDRAULICS

Hydrostatic, closed loop
Hydraulic capacity 110 gallons (416 L)

FAN

Reversing pitch radiator fan that
reverses airflow automatically

FUEL TANK

475 (1798 L)

ELECTRICAL

Variable speed system

TRACKS

700mm triple grouser

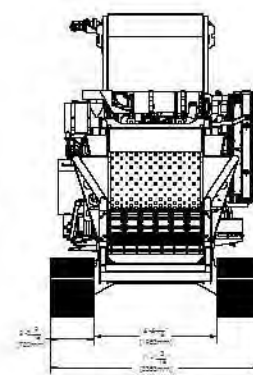
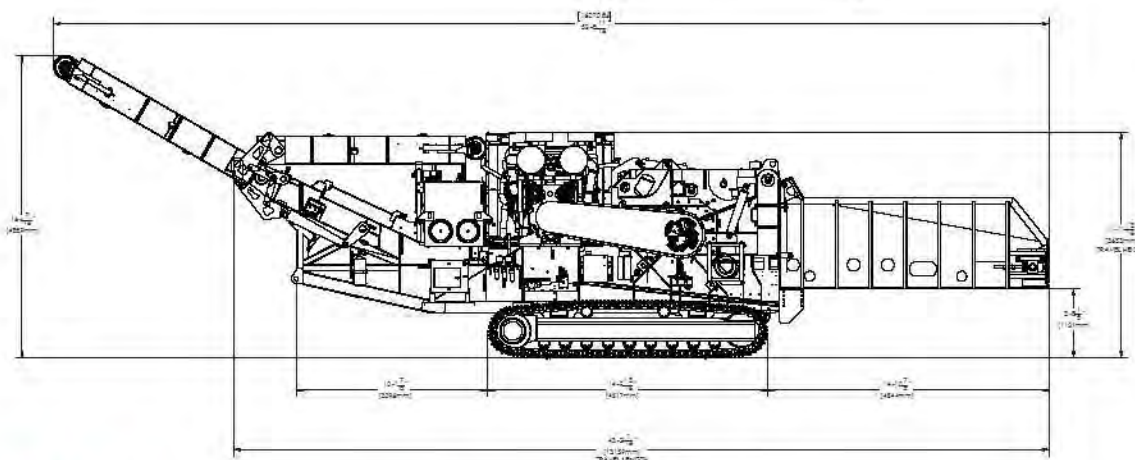
ROTOR

Shaft: 8" (203mm)
Width: 60" (1,524mm)
Diameter: 40" (1,016mm)
RPMs: 1440

OPTIONS

Hydraulic regrind door
Air compressor
Overband magnet
Magnetic head pulley

Specifications subject to change without notice.
Available as tracked, tracked dolly, portable, or stationary.



Continental Biomass Industries

World's best stationary and portable material recovery systems.
22 Whittier Street, Newton, NH, 03858
Phone: (603) 382-0556 Fax: (603) 382-0557
Web: cbi-inc.com Email: info@cbi-inc.com

Distributed by:

ECOHOG

THM ECS-2000 Tracked HogMag Eddy Current Separator

The original THM ECS-2000 Tracked HogMag Eddy Current Separator incorporates an Eddy Current Separator unit enhancing production by an additional 30% in comparison to the HM ECS-1500 wide model. This higher capacity unit is suitable for the waste processor with high volume of waste material with a need for separation of ferrous and non-ferrous metals. The THM ECS-2000 can process up to 40TPH achieving the highest level of separation in today's market.



KEY FEATURES

- Integrated Vibrating Pan
- Magnetic Drum
- Eddy Current Separator
- 3 Integrated folding stockpiling conveyors
- Crawler Tracks
- Heavy duty abrasion resistant belts
- Onboard Generator
- Hydraulic Powerpack
- Energy efficient motors
- Sealed shell bearings
- High throughput
- Low maintenance
- Low energy

SUITABLE FOR

- Waste Wood Processing
- Biomass
- Glass (MRF) Clean up
- Aluminium Can Recycling
- Scrap Metal Processing
- Automotive Fragment
- Shredder Material
- RDF / C&D / C&I
- Brass / Copper Recovery
- Incinerator Slag
- Foundry Sand

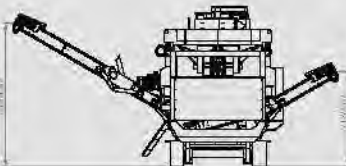
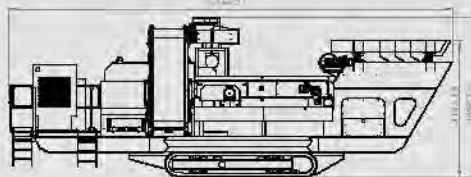
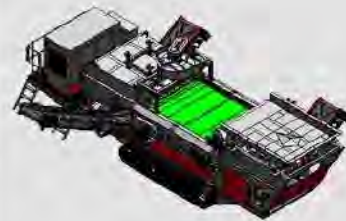
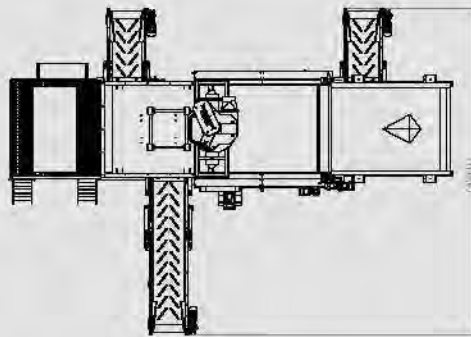
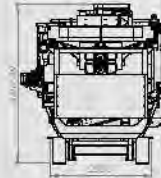
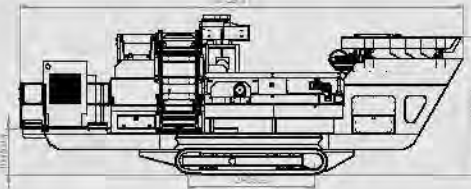
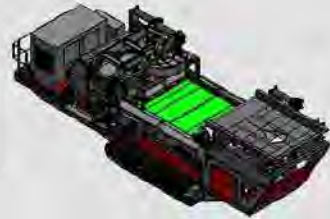
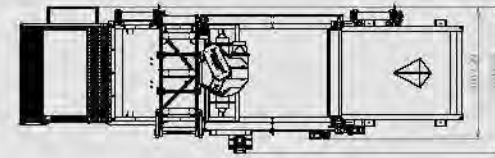
OPTIONAL EXTRAS

- Onboard EH-81 Airhog
- HYBRID** options available
- Onboard Air Compressor for maintenance, cleaning and dust suppression



Ecohog HQ
Quarry Road | Carrickmore
Omagh | Co. Tyrone | N.I.
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TECHNICAL DATA



Please note: design and specification may be subject to change.

SPECIFICATION

THM ECS-2000

Weight | 16,000 kg (approx.)
Transport Length (10,100mm)
Transport Height (3200mm)
Transport Width (3100mm)
Operating Length (10,100mm)
Operating Height (3200mm)
Max Operating Width (7500mm)

Vibrating Pan Feeder

2 x 2.2kW vibrating motors
Pan Length (2500mm)
Pan Width (1900mm)

Magnetic Drum

1 x 2.2kW IP55 geared motor
Drum Diameter (400mm)
Drum Length (2000mm)

ECS

1 x 1.5kW belt motor
1 x 7.5kW rotor motor
ECS Length (3000mm)
ECS Width (2000mm)

Stockpiling Conveyor 1

1 x 5.5kW IP55 geared motor
Belt Length (4000mm)
Belt Width (700mm)

Stockpiling Conveyor 2

1 x 5.5kW IP55 geared motor
Belt Length (6000mm)
Belt Width (700mm)

Stockpiling Conveyor 3

1 x 5.5kW IP55 geared motor
Belt Length (4000mm)
Belt Width (700mm)

AirHog

1 x 11kW motor

Electrics

Manual start/stop of each motor.

Motor disconnect switches
for maintenance

Motor run and trip illumination
on panel doors

Complete with pre start siren
and dual channel Emergency Stop

Power Supply

Diesel Generator
HYBRID options available

Hydraulically Driven

UL Certification

All products supplied by Ecohog will be
built to the highest specification and
control panels will be UL Approved for
the USA and Canadian markets.





APPENDIX C – CALCULATION OF CAPACITY OF VEHICLES QUEUING AT THE SITE



Calculation of Capacity of Vehicles Queuing at the Site

Proposed Environmental Compliance Approval

580 Hazelhurst Road, Mississauga, Ontario

*Proposed maximum Incoming Daily Rate of Solid Non-Hazardous Waste: **1,000 tonnes***

*Proposed maximum Incoming/outgoing Daily Rate of Excess Soil/Rock for Beneficial Reuse and inert materials: **2,000 tonnes***

*Proposed maximum residual waste, segregated recyclables, and ALCF product Daily Removal Rate: **1,000 tonnes** (including a maximum of 600 tonnes of ALCF)*

Bulk densities of incoming/outgoing material:

Mixed non-hazardous solid waste (Construction and Demolition Waste): **287 Kg/m³**

Excess soil for beneficial reuse: **2,000 Kg/m³**

Compacted residual waste, recyclables, ALCF: **415 Kg/m³**

Inert materials (concrete, brick/block, asphalt): **459 - 510 Kg/m³**

(April 2016 US EPA Volume-to-Weight Conversion Factors)

Incoming mixed non-hazardous solid waste (mainly construction & demolition (C&D) waste) is generally hauled in 20 to 40 yd³ bins, which are equivalent to 15.4 to 30.8 m³. Incoming/outgoing excess soil is hauled either by triaxle dump trucks or trailers with a load of soil weighing up to 20 or 40 tonnes, respectively (the average load is 30 tonnes). Outgoing compacted segregated recyclables/inert materials and ALCF products are hauled in trailers equipped with walking floors, which are typically 53 feet.

The calculated weight of a load of incoming mixed solid non-hazardous waste is $30.8 \text{ m}^3 \times 0.287 \text{ tonnes/m}^3 = 8,840 \text{ Kg}$, or $15.4 \times 0.287 = 4,420 \text{ Kg}$. Therefore, the weight of an average incoming load is 6,630 Kg. The typical weight of an average incoming load of excess soil (triaxle load) is 20 tonnes.

The typical weights of outgoing loads (trailer loads) are the following:

- Excess soil is 36 tonnes
- Residual waste is 34 tonnes
- Compacted recyclables/inert materials/ALCF is 22 tonnes.

Incoming Material	Density (kg/m ³)	Daily Rate (tonnes)	Average Weight carried by a vehicle (tonnes)	Number of vehicles			
				Daily	10 min period	20 min period	45 min period
Incoming Mixed solid non-hazardous waste (C&D waste)	287	1,000	6.63	151	1	-	-
Incoming Excess Soil	2,000	2,000	20	100	-	2	-
Outgoing Excess Soil	2,000	2,000	36	56	-	1	-
Outgoing Residual waste	415	1,000	34	30	-	-	1
Outgoing recyclables/inert materials/ ALCF	270	600	22	28	-	-	1



The average time span for a vehicle delivering or hauling waste or excess soil is 10 minutes. Therefore, the maximum number of vehicles delivering waste to the Site in a 10-minute period is estimated as one, and the maximum number of vehicles delivering soil in a 20-minute period is estimated as one. Compacted residual waste, recyclables, inert materials, and/or ALCF products scheduled for hauling off-site are loaded and shipped off-site 24 hours a day, 7 days a week. Only one truck trailer is required at the Site at one time for hauling residual waste and two trucks are required for hauling compacted recyclables, inert materials, and/or ALCF, as the average turnaround for a refuse/transfer trailer hauling the above material off-site is 45 minutes. The corresponding turnaround time for vehicles hauling excess soil for beneficial reuse off-site is 20 minutes.

Therefore, based on the data shown in the above table, the maximum number of vehicles at the Site at one time is **6**. Spatial limits of the Site allow up to **10** commercial vehicles within the property (entrance/exit scales, a tarping zone, loading/unloading operations within the limits of a processing/transfer building and a *Britespan* building structure, and queuing vehicles on Site).

Based on the capacity to stage vehicles off Hazelhurst Road, our operations are not impacting the traffic flow on a public road, either during on-peak or off-peak traffic periods.



APPENDIX D – DAILY OPERATIONS REPORT



v 1.0

DAILY OPERATIONS REPORT

Date: _____

Time: _____

End of Day Residual Tonnage *(Mark only commodities that apply)*

Commodity	Total In	Total Out	Difference	Residual
<i>Non-Hazardous Solid Waste</i>				
<i>Excess Soil/Rock</i>				
<i>Concrete/Asphalt</i>				
<i>Brick/Block</i>				
<i>Wood Waste</i>				
<i>Plastics</i>				
<i>Asphalt Shingles</i>				
<i>Drywall</i>				
<i>Metals</i>				
<i>Blue Box Recyclable Materials</i>				

Is the site secure? If not, Explain...

Is the site causing nuisances such as dust, odours, vectors, vermin, birds, litter, noise, or traffic? If so, Explain...

Is the site causing any adverse effects on the environment? If so, Explain...

Spill and Emergency response equipment review (quarterly basis):

Deficiencies on Site, Recommendations for Remedial Action, Actions Taken:

Name of the person who completed this report	Signature of the person who completed this report	Management Signature
	X	X



APPENDIX E – SOIL PROFILE



Soil Profile Sheet - YORK1 Hazelhurst Recycling Ltd.

YORK1 Hazelhurst Recycling Ltd. Use Only	
Date:	
Facility:	
YORK1 Reviewed By:	
Approval No:	
YORK1 Comments:	
Client to Complete	
Generator Information	Billing Information
Name:	Same as Generator: <input type="checkbox"/>
Address:	YORK1 Sales Representative:
City:	Name:
Province:	Address:
Postal:	City:
Contact:	Province:
Title:	Postal:
Phone:	Contact:
Cell:	Title:
Fax:	Phone:
E-Mail:	Cell:
Location Name:	Fax:
Location Description:	E-Mail:
aste Information	
Is the soil / waste material "solid" and passes a slump test? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the soil / waste material "ignitable"? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Is the soil / waste material "non-hazardous"? Yes <input type="checkbox"/> No <input type="checkbox"/>	
What percentage of debris is contained in the waste material?	
Other details on debris (concrete, asphalt, brick, etc)	
Reg 558 Leachate Analysis provided to YORK1: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Bulk Soil Analysis provided to YORK1: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Environmental Reports provided to YORK1: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Does the soil / material contain asbestos? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Does the soil / material have any of the following properties listed below? Yes <input type="checkbox"/> No <input type="checkbox"/>	
Toxic, explosive, radioactive, corrosive, reactive, ignitable, oxidizing, pathogen containing, infectious.	
Waste Transportation Information	
Hauler Name(s):	
Hauler Truck License Plate Numbers to be provided in advance: Yes <input type="checkbox"/> No <input type="checkbox"/>	
Hauler ECA Number for waste transportation:	
Copy of Hauler ECA Provided to YORK1 Yes <input type="checkbox"/> No <input type="checkbox"/>	
Generator Declaration	
I hereby certify, as an authorized representative of the Generator named above, that YORK1 has been fully informed of all information known about this waste including but not limited to the waste's generation process, composition, and physical characteristics, necessary to identify proper treatment, waste classification and disposal of waste and this information is true and accurate.	
Form Completed By:	
<input type="text"/>	<input type="text"/>
Name	Title
<input type="text"/>	<input type="text"/>
Signature	Date



APPENDIX F – SOIL SAMPLING AND TESTING METHODS AND SAMPLING FREQUENCIES



Soil Sampling and Testing Methods

Soil sampling and testing will be conducted in accordance with procedures set out in the following Ministry's documents:

- *"Principles of Sampling and Analysis of Waste for TCLP under Regulation 347"*, dated February 2002, as amended
- *"Guidance on Sampling and Analytical Methods for Use at Contaminated Sites in Ontario"*, revised December 1997, as amended,
- *Ontario Regulation 406/19*,

and in accordance with the instructions of the accredited laboratory carrying out the analytical testing.

Samples scheduled for analysis of petroleum hydrocarbons (PHCs), volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) with Henry's law constant greater than 1×10^{-5} atm \times m³/mol and/or vapour pressure greater than 0.05 mm Hg (e.g. acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, cresols, fluoranthene, fluorene, methylnaphthalene (1,2-), naphthalene and phenanthrene) will be discrete.

Samples scheduled for analysis of SVOCs with Henry's law constant less than 1×10^{-5} atm \times m³/mol and/or vapour pressure greater than 0.05 mm Hg, polychlorinated biphenyls (PCBs) and metals and inorganic parameters will be collected using a composite approach, as per the above-listed documents.

Verification Testing

For incoming soil characterized by the generator in accordance with the acceptance criteria for the Site, at least one (1) representative sample is collected per source to verify the quality of the incoming soil. The sample will be tested for the following parameters depending on the final destination of the soil:

- Transfer to an approved waste disposal site: analysis of parameters to demonstrate compliance with the waste disposal site's waste receipt restrictions
- Reuse: bulk analysis of petroleum hydrocarbons (PHCs, F1 through F4) including benzene, toluene, ethylbenzene and xylenes (BTEX), metals, and hydride-forming metals (antimony, arsenic, barium, beryllium, boron, cadmium, chromium, cobalt, copper, lead, molybdenum, nickel, selenium, silver, thallium, uranium, vanadium, and zinc), sodium adsorption ratio (SAR) and electrical conductivity (EC), if the soil excavated from the area where a substance has been used for the purpose keeping the area safe under conditions of snow or ice, and any contaminant of potential concern (COPC) identified during the assessment of past uses. The analysis for Synthetic Precipitation Leaching Procedure (SPLP) for certain contaminants indicated in Soil Rules for O. Reg. 406/19 should be conducted with the frequency of one soil sample per ten samples for bulk analysis to verify if the soil does not exceed leachate screening levels.

In addition, the testing in compliance with the procedure in Regulation 347 will be carried out to determine if the incoming contaminated soil is solid material if required.

These tests will be conducted upon receipt at the Site and prior to mixing with any similar soils, and in accordance with the procedures outlined in the above documents.

Frequencies of the incoming soil sampling and outgoing process soil are outlined in Tables 1 and 2, respectively.

Incoming Soil Sampling Frequencies

Table 1

Soil Generator Property Use	Type of Sampling	Analysis	Soil Volume (m ³)	Number of samples	Note
Industrial/ Commercial or Residential if Sampling Plan is required as per O.Reg. 406/19	In-Situ	Metals/Inorganics, PHC, PCB, VOC and SVOC(incl. PAH)	< 600	3	less than 600
			each 200	1	600 < volume < 10,000
			each 450 after the first 10,000	1	volume > 10,000
			each 2,000 after the first 40,000	1	volume > 40,000
	Ex-Situ		< 220	2	
			221 - 430	3	
			431 - 670	4	
			671 - 950	5	
			951 - 1,250	6	
			1,251 - 1,550	7	
			1,551 - 1,850	8	
			1,851 - 2,200	9	
			2,201 - 2,500	10	
			2,501 - 2,900	11	
			2,901 - 3,300	12	
			3,301 - 3,700	13	
		3,701 - 4,100	14		
		4,101 - 4,500	15		
		4,501 - 5,000	16		
		>5,000	N= [32 + (volume - 5,000)/300]/2		

**Soil Sampling Frequencies
for Outgoing Processed Soil for Reuse**

Table 2

<i>Stockpile Volume (m³)</i>	<i>Number of samples</i>
< 130	3
131 - 220	4
221 - 320	5
321 - 430	6
431 - 550	7
551 - 670	8
671 - 800	9
801 - 950	10
951 - 1,100	11
1,101 - 1,250	12
1,251 - 1,400	13
1,401 - 1,550	14
1,551 - 1,700	15
1,701 - 1,850	16
1,851 - 2,050	17
2,051 - 2,200	18
2,201 - 2,350	19
2,351 - 2,500	20
2,501 - 2,700	21
2,701 - 2,900	22
2,901 - 3,100	23
3,101 - 3,300	24
3,301 - 3,500	25
3,501 - 3,700	26
3,701 - 3,900	27
3,901 - 4,100	28
4,101 - 4,300	29
4,301 - 4,500	30
4,501 - 4,700	31
4,701 - 5,000	32
> 5,000	$N = 32 + (\text{volume} - 5,000)/300$



APPENDIX G – VOLUME-TO-WEIGHT CONVERSION FACTORS

Volume-to-Weight Conversion Factors

U.S. Environmental Protection Agency

Office of Resource Conservation and Recovery

April 2016

EPA's 1997 report, "Measuring Recycling: A Guide for State and Local Governments", was a guide to facilitate standardization of MSW data collection at the local level, which included volume-to-weight conversion factors for comparing recovery efforts between municipalities, regions and states. The factors are also valuable when planners work with the national recovery data presented in EPA's sustainable materials management report series.

This document provides updates to the volume-to-weight conversion factors found in the 1997 report Appendix B.

The goal of this update is to identify more current secondary data measurements of the various products. Of particular interest are products known to have been source reduced through light weighting since the early nineties such as plastic, glass and metal packaging. Some factors included on the original table are excluded from the revised table due to lack of updated data. Primary data collection was not performed.

The original Appendix B table included 12 materials categories; the updated table provides factors for 15 material categories, including the following.

- | | |
|--------------------------|--|
| • Appliances | • Municipal Solid Waste |
| • Automotive | • Paper |
| • Carpeting | • Plastic |
| • Commingled Recyclables | • Textiles |
| • Electronics | • Wood |
| • Food | • Yard Trimmings |
| • Glass | • Construction & Demolition Debris (C&D) |
| • Metals | |

All of the categories include multiple products and/or density measurements. Four product categories—carpeting, commingled recyclable material, electronics and construction and demolition debris—are new. Previously lead-acid batteries and scrap tires were separate categories but are combined into the single category "Automotive" in the updated table.

Other differences include the removal/addition of products within some of the categories to better reflect the current recycling industry. For example, eliminating "Tab Card" and adding "Mixed Paper" to the paper category reflects the move toward commingled recyclables collection. The addition of "Electronics" reflects the growth in these products since the original table was published.

The updated factors are shown in the table below.

Standard Volume-to-Weight Conversion Factors

Category	Recyclable Materials	Volume	Estimated Weight (lbs)	Source
Appliances	Major Appliances			
	<i>Dishwasher</i>	1 unit	125	1
	<i>Clothes Dryer</i>	1 unit	125	1
	<i>Stove</i>	1 unit	150	1
	<i>Refrigerator</i>	1 unit	250	1
	<i>Clothes Washer</i>	1 unit	150	1
Automotive	Lead-Acid Battery			
	<i>Auto</i>	one	36	3
	<i>Truck</i>	one	47	3
	Scrap Tire			
	<i>Light Duty Tires (passenger, light truck)</i>	one	22.5	5
	<i>Commercial Tires</i>	one	120	5
	Fluids			
	<i>Used Motor Oil</i>	gallon	7.4	2
	<i>Antifreeze</i>	gallon	8.42	2
	Other Automotive			
	<i>Oil Filters not crushed</i>	drum	175	1
	<i>Oil Filters crushed</i>	drum	700	1
	<i>Oil Filters</i>	gallon	5	1
Carpeting	Carpet			
	<i>Carpet</i>	cubic yard	147	6
	<i>Carpet Padding</i>	cubic yard	62	6
Commingled Recyclable Material	Containers (Plastic bottles, Aluminum cans, Steel cans, Glass bottles) and Paper			
	<i>Commingled Recyclables</i>	cubic yard	262	4
	Containers (Plastic bottles, Aluminum cans, Steel cans, Glass bottles), Corrugated Containers and Paper			
	<i>Campus Recyclables</i>	cubic yard	92	7
	<i>Commingled Recyclables</i>	cubic yard	111	4
	Containers (Plastic bottles, Aluminum cans, Steel cans, Glass bottles) – No paper			
	<i>Campus Recyclables</i>	cubic yard	70	7
	<i>Commingled Recyclables</i>	cubic yard	67	4
	<i>Commercial Recyclables</i>	cubic yard	113	8
	Containers (Cans, Plastic) - No glass			
	<i>Campus Recyclables</i>	cubic yard	32	7
	Containers (Cans, Plastic) and Paper - No glass			
	<i>Residential Recyclables</i>	cubic yard	260	2
	Containers (Food/beverage, Glass) Corrugated Containers and Paper			
	<i>Commercial Recyclables</i>	cubic yard	88	2
	<i>Commercial Recyclables</i>	cubic yard	58	21
	<i>Multifamily Recyclables</i>	cubic yard	96	2
	<i>Multifamily Recyclables</i>	cubic yard	51	21

Category	Recyclable Materials	Volume	Estimated Weight (lbs)	Source
Commingled Recyclable Material	<i>Single family Recyclables</i>	cubic yard	126	2
	Containers (Food/beverage, Glass) Corrugated Containers and Paper- No glass			
	<i>Campus Recyclables</i>	cubic yard	139	2
	<i>Commercial Recyclables</i>	cubic yard	155	2
Electronics	Computer Equipment			
	<i>Desktop</i>	one	27	24
	<i>Laptop</i>	one	9.8	24
	Monitor			
	<i>CRT</i>	one	40	1
	<i>15"</i>	one	30	2
	<i>17"</i>	one	45	2
	<i>21"</i>	one	60	2
	<i>Flat Panel</i>	one	24	1
	<i>Mixed Monitors</i>	one	29.4	24
	Televisions			
	<i>CRT < 19 inch</i>	one	41	1
	<i>CRT ≥ 19 inch</i>	one	73	1
	<i>Flat Panel</i>	one	29	1
	<i>Mixed TVs</i>	one	67.3	24
	Peripheral Devices			
	<i>Printers</i>	one	16.1	24
	<i>Mice</i>	one	0.2	9
	<i>Keyboards</i>	one	2.9	9
	Mobile Devices			
	<i>Cellular Phone</i>	one	0.22	9
	Mixed Electronics			
	<i>Brown Goods</i>	cubic yard	343	6
	<i>Computer-related Electronics</i>	cubic yard	354	6
	<i>Other Small Consumer Electronics</i>	cubic yard	438	6
Food				
	Fats, Oils, Grease	55-gallon	412	2
	Organics - commercial	cubic yard	135	21
	Source Separated Organics - commercial	cubic yard	1,000	15
	Food Waste - restaurants	cubic yard	396	21
	Food Waste	cubic yard	463	4
	Food Waste	cubic foot	22-45	4
	Food waste - university	gallon	3.8	22
	Food Waste	64 gallon toter	150	4
	Food waste	2 cubic yard full towable	2,736	4
Glass	Bottles			
	<i>Loose</i>	cubic yard	380	4

Category	Recyclable Materials	Volume	Estimated Weight (lbs)	Source
Metals	Aluminum Cans			
	<i>Uncompacted</i>	cubic yard	46	4
	<i>Uncompacted</i>	case = 24 cans	0.7	11
	<i>Baled</i>	cubic yard	250-500	10
	Steel Cans			
	<i>Whole</i>	cubic yard	50-175	10
	<i>Baled</i>	cubic yard	700-1,000	10
	Steel Cans - Institution			
	<i>Whole</i>	can	0.09	7
	<i>Whole</i>	cubic yard	136	7
Paper	Newsprint			
	<i>Loose</i>	cubic yard	360-800	1
	<i>Baled</i>	cubic yard	750-1,000	10
	Books - paperback, loose	cubic yard	428	23
	Old Corrugated Containers			
	<i>Flattened</i>	cubic yard	106	4
	<i>Baled</i>	cubic yard	700-1,100	10
	Old Corrugated Containers and Chip Board			
	<i>Uncompacted</i>	cubic yard	74.54	4
	Office Paper			
	<i>Computer Paper</i>			
	<i>Loose</i>	cubic yard	375-465	1
	<i>Compacted/Baled</i>	cubic yard	755-925	1
	<i>Mixed</i>			
	<i>Loose</i>	cubic yard	110-380	1
	<i>Loose</i>	cubic yard	323	4
	<i>Compacted</i>	cubic yard	610-755	1
	<i>Shredded</i>	cubic yard	128	4
	<i>Mixed Baled</i>	cubic yard	1,000-1,200	10
	Miscellaneous			
	<i>Cartons (milk and juice) uncrushed</i>	cubic yard	50	7
Plastic	PET			
	<i>PET Bottles - baled</i>	30"x42"x 48"	525-630	12
	<i>PET Thermoform - baled</i>	30"x42"x 48"	525-595	12
	HDPE			
	<i>HDPE Dairy - baled</i>	30"x42"x 48"	525-700	12
	<i>HDPE Mixed - baled</i>	30"x42"x 48"	525-700	12
	Mixed PET and HDPE			
	<i>Loose</i>	cubic yard	32	7
	Mixed Bottles/Containers #1 - #7			
	<i>Loose</i>	cubic yard	40.4	4
	Mixed Bottles/Containers #3 - #7			

Category	Recyclable Materials	Volume	Estimated Weight (lbs)	Source
Plastic	<i>Loose</i>	cubic yard	25.7	4
	Film			
	<i>LDPE, loose</i>	cubic yard	35	13
	<i>LDPE, compacted</i>	cubic yard	150	13
	<i>LDPE, baled</i>	30" x 42" x 48"	1,100	13
	Miscellaneous			
	<i>Trash Bags</i>	cubic yard	35	6
	<i>Grocery/Merchandise Bags</i>	cubic yard	35	6
	<i>Expanded Polystyrene Packaging/Insulation</i>	cubic yard	32	6
Textiles	Mixed Textiles			
	<i>Loose</i>	cubic yard	125-175	10
	<i>Baled</i>	cubic yard	600-750	10
Wood	Wood			
	<i>Wood Chips, green</i>	cubic yard	473	1
	<i>Wood Chips, dry</i>	cubic yard	243	1
	<i>Saw Dust, wet</i>	cubic yard	530	1
	<i>Saw Dust, dry</i>	cubic yard	275	1
	<i>Pallets</i>	one	25	1
	<i>Pallets and Crates</i>	cubic yard	169	18
	<i>Christmas Trees, loose</i>	cubic yard	30	1
Yard Trimmings	Yard Trimmings			
	<i>Leaves</i>	cubic yard	250-500	1
	<i>Leaves (Minnesota)</i>	cubic yard	300 - 383	15
	Mixed Yard Waste			
	<i>Uncompacted</i>	cubic yard	250	1
	<i>Compacted</i>	cubic yard	640	1
	Prunings & Trimmings	cubic yard	127	6
	Branches & Stumps	cubic yard	127	6
Municipal Solid Waste	MSW - Commercial			
	Commercial - dry waste	cubic yard	56-73	16, 8
	Commercial - all waste, uncompacted	cubic yard	138	21
	Mixed MSW - Residential, Institutional, Commercial			
	<i>Uncompacted</i>	cubic yard	250-300	14
	<i>Compacted</i>	cubic yard	400-700	14
	Mixed MSW - Multifamily uncompacted	cubic yard	95	21
	MSW - Landfill			
	<i>Compacted - MSW Small Landfill with Best Management Practices</i>	cubic yard	1,200-1,700	17
	<i>Compacted - MSW Large Landfill with Best Management Practices</i>	cubic yard	1,700-2,000	17

Category	Recyclable Materials	Volume	Estimated Weight (lbs)	Source
Municipal Solid Waste	<i>Compacted - MSW Very Large Landfill with Best Management and Cover Practices, Combined MMSW/Industrial/and other solid waste, or/and Leachate Recirculation</i>	cubic yard	>2,000	17
C &D	Concrete			
	<i>Large Concrete with Re-bar</i>	cubic yard	860	18
	<i>Large Concrete without Re-bar</i>	cubic yard	860	18
	<i>Small Concrete with Re-bar</i>	cubic yard	860	18
	<i>Small Concrete without Re-bar</i>	cubic yard	860	18
	Asphalt Paving			
	<i>Large Asphalt Paving with Re-bar</i>	cubic yard	773	19
	<i>Large Asphalt Paving without Re-bar</i>	cubic yard	773	19
	<i>Small Asphalt Paving with Re-bar</i>	cubic yard	773	19
	<i>Small Asphalt Paving without Re-Bar</i>	cubic yard	773	19
	Roofing			
	<i>Composition Roofing</i>	cubic yard	731	18
	<i>Other Asphalt Roofing</i>	cubic yard	731	18
	Other Aggregates	cubic yard	860	18
	Wood			
	<i>Clean Dimensional Lumber</i>	cubic yard	169	18
	<i>Clean Engineered Wood</i>	cubic yard	268	18
	<i>Other Recyclable Wood</i>	cubic yard	169	18
	<i>Painted/Stained Wood</i>	cubic yard	169	18
	<i>Treated Wood</i>	cubic yard	169	18
	Gypsum Board			
	<i>Clean Gypsum Board</i>	cubic yard	467	18
	<i>Painted/Demolition Gypsum</i>	cubic yard	467	18
	Aggregate			
	<i>Large Rock</i>	cubic yard	999	18
	<i>Small Rock/Gravel</i>	cubic yard	999	18
	Dirt and Sand	cubic yard	929	18
	Remainder/Composite Construction and Demolition	cubic yard	417	18
	Construction & Demolition Bulk	cubic yard	484	20
	Metal			
	<i>Major Appliances</i>	cubic yard	145	18
	<i>Other Ferrous</i>	cubic yard	225	18
	<i>Other Non-Ferrous</i>	cubic yard	225	18
	<i>Remainder/Composite Metal (avg of metals, without used oil filters)</i>	cubic yard	143	18
	<i>HVAC Ducting</i>	cubic yard	47	18

- 1 Oregon Department of Environmental Quality. 2007 Oregon Material Recovery and Waste Generation Rates Report September 2008 08-LQ-092. Attachment B: Measurement Standards and Reporting Guidelines 07-LQ-134.
<http://www.deq.state.or.us/lq/pubs/docs/sw/MRAttachmentB.pdf>
- 2 Department of Ecology, State of Washington. Coordinated Prevention Grant Conversion Sheet. March, 2014.
www.ecy.wa.gov/pubs/1107016.pdf
- 3 Factor developed using lead per battery data from Battery Council International. Recycling Rates 2009 to 2013. April 2014.
http://c.ymcdn.com/sites/batterycouncil.org/resource/resmgr/BCI_Recycling_Rate_Study_200.pdf applied to battery composition data from Sullivan, JL and Gaines, L. 2010. A Review of Battery Life Cycle Analysis: State of Knowledge and Critical Needs. October 2010. Center for Transportation Research, Energy Systems Division, Argonne National Laboratory ANL/ESD/10-7.
- 4 Keep America Beautiful. Volume-to-Weight Recycling and Trash Conversion Factors Report. December 2013.
- 5 Rubber Manufacturers Association (RMA). 2013 U.S. Scrap Tire Management Summary. November 2014.
http://www.rma.org/download/scrap-tires/market-reports/US_STMarket2013.pdf
- 6 California Integrated Waste Management Board. Targeted Statewide Waste Characterization Study: Detailed Characterization of Construction and Demolition Waste. June 2006. <http://www.calrecycle.ca.gov/publications/Documents/Disposal%5C34106007.pdf>
Brown Goods: larger, non-portable electronic goods that have some circuitry. Examples include microwaves, stereos, VCRs, DVD players, radios, audio/visual equipment, and non-CRT televisions (such as LCD televisions).
Computer-related Electronics: electronics with large circuitry that is computer-related. Examples include processors, mice, keyboards, laptops, disk drives, printers, modems, and fax machines.
Other Small Consumer Electronics: portable non-computer-related electronics with large circuitry. Examples include personal digital assistants (PDAs), cell phones, phone systems, phone answering machines, computer games and other electronic toys, portable CD players, camcorders, and digital cameras.
- 7 Keep America Beautiful, Recycle-Bowl Competition. Accessed February 2015. <http://recycle-bowl.org/wp-content/uploads/Recycle-Bowl-Estimating-Data-Fact-Sheet.pdf>
- 8 Great Forest. Volume to Weight Conversion Ratios for Commercial Office Waste in New York City. January 2013. Primary data; Commingled; large commercial properties (500,000 sq. ft – 1m sq. ft) in the New York metropolitan area.
<http://www.greatforest.com/files/FileUpload/files/Great%20Forest%20-%20Waste%20Conversion%20Paper%20->
- 9 US EPA Electronics Waste Management in the United States Through 2009 . May 2011.
- 10 WasteCare Corporation. Some Typical Loose and Baled Weights of Various Materials. Accessed April 2015.
<http://www.wastecare.com/Products-Services/Balers/aboutbalers.htm>.
- 11 The Aluminum Association. U.S. Aluminum Beverage Can Recycling.
http://www.aluminum.org/sites/default/files/section_images/UBCRecyclingRate2013.pdf
- 12 The Association of Postconsumer Plastic Recyclers (APR). Model Bale Specifications. <http://www.plasticsrecycling.org>
- 13 Caldwell, Maggie. Recycling Plastic Film and Shrink Wrap. May 16, 2014. <http://www.federalinternational.com/blog/recy>
- 14 Caterpillar Performance Handbook. 40th Edition. January 2010.
- 15 Minnesota Pollution Control Agency. Data provided by professional composter. 2015. Source separated organics - food scraps, non-recyclable paper (paper plates/towels/etc) and compostable plastics.
- 16 Minnesota Department of Administration 2015 hauler records (excludes organics).
- 17 Minnesota Pollution Control Agency. 2013 MPCA MSW Landfill Annual Report Data.
- 18 California Integrated Waste Management Board. Targeted Statewide Waste Characterization Study: Detailed Characterization of Construction and Demolition Waste. June 2006
- 19 Tellus scaled down by factor from Florida C&D study -- Converting C&D Debris from Volume to Weight: A Fact Sheet for C&D Debris Facility Operators, University of Florida, 2000.
- 20 Florida Dept of Environmental Protection <http://www.dep.state.fl.us/waste/categories/recycling/cd/canddmain.htm>
- 21 CalRecycle. 2014 Generator-Based Characterization of Commercial Sector Disposal and Diversion in California. September 10, 2015.
<http://www.calrecycle.ca.gov/Publications/Documents/1543/20151543.pdf>
Organics - putrescible material hauled by a contracted third party to a permitted facility mainly engaged in producing compost or mulch, or in anaerobic digestion of organics. Minor mechanical separation of contaminants or recyclable materials may occur at the facility prior to composting or digestion.
- 22 Goldstein, Nora. "Food Scraps Composting Laboratory". *BioCycle*. January 2013, Vol. 54, No. 1, p. 33.
<https://www.biocycle.net/2013/01/22/food-scraps-composting-laboratory/>
- 23 U.S. EPA. Standard Volume-to-Weight Conversion Factors. Last updated: February 28, 2006. <https://www.epa.gov/smm/metrics-waste-reduction>
- 24 National Center for Electronics Recycling (NCER). <http://www.electronicrecycling.org/>
Mixed monitors and TVs: total pounds collected divided by total units collected.



APPENDIX H – WASTE AND SOIL STORAGE CAPACITIES CALCULATIONS



WASTE AND SOIL/ROCK STORAGE CAPACITY CALCULATIONS

Proposed Environmental Compliance Approval for a Waste Transfer/Recycling Station

580 Hazelhurst Road, Mississauga, Ontario

Maximum waste and soil storage capacities at the Site have been calculated based on bulk densities of the stored waste/materials, specified storage areas, and stockpile heights. We have chosen to use the “compacted” vs. the “uncompacted” waste densities seeing as how commercial, industrial, and institutional waste will be accepted via rear-packer trucks, compactor bins, and front-end trucks. These data are summarized below.

Stored Waste/ Material	Bulk Density (kg/m³)	Total Area (m²)	Stockpile Height (m)	Location on Site
Mixed compacted solid non-hazardous waste including wood waste, blue box recyclable materials, residual waste, and segregated recyclables including:	287.15	799.2	6.1	Processing/Transfer Building (Area A) in the southwestern portion of the Site
Drywall	277		Up to 4.6	
Metal	134			
Paper/Cardboard	415			
Tires	10.2 - 54*			
Excess soil	2,000	900	6.1	Britespan building structure (Area B) in the southcentral portion of the Site
Excess rock (shale)	2,675			
Inert Materials including:	-			
Concrete/brick/block	510			
Asphalt	459			

Note: * Weight of one tire in kilograms (Volume-to-Weight Conversion Factors (US EPA, April 2016))

1. Proposed Storage Capacity for Solid Non-Hazardous Waste, Residual Waste, Blue Box materials and Segregated Recyclables Stored Indoors:

Mixed compacted solid non-hazardous waste, including blue box recyclable materials, residual waste, blue box materials, and segregated recyclables to be stored on a tipping floor in the Processing/Transfer Building (Area A). The waste will be bordered by push walls 2.4 metres high from two sides with an open end to the north towards the bay doors, to the east towards the compactor, and partially to the west. The proposed dimensions of the tipping floor are 37.0 metres by 21.6 metres. The waste pile above 2.4 metres high will be heaped to a maximum height of 6.1 metres, shaped as a truncated pyramid. It is assumed a slope of 1 : 1 of the heaped portion of the pile and the open end of the pile to the north, east, and partially to the west.

The total volume of the pile is calculated as:

$$V_{\text{waste}} = L \times W \times h_1 - 0.5 \times (h_1^2 \times (2 \times W - c + 2 \times L - d) + [1/3 \times h_2 \times (a^2 + a \times b + b^2)]) = 3,599.68 \text{ m}^3,$$

Where:

L = 37.0 m, is the length of the tipping floor

W = 21.6 m, is the width of the tipping floor

h₁ = 2.4 m, is the height of the push wall

h₂ = 6.1 – 2.4 = 3.7 m, is the height of the heaped portion of the pile above the push wall

a = (L + W – 2 × h₁)/2 = 22.35 m, is the mean side of the base of a truncated pyramid

b = (L + W – 6 × h₂)/2 = 16.05 m, is the mean side of the top of a truncated pyramid

c = 6.5 m, length of the west push wall

d = 33.2 m, length of the south push wall.

Therefore, the maximum capacity of the waste pile stored indoors is:

$$M = V_{\text{waste}} \times \text{density} = 2,722 \times 0.28715 = 1,033.65 \text{ tonnes}$$



The proposed storage capacity for solid non-hazardous waste is **1,000** tonnes.

2. Proposed Storage Capacity of Excess Soil/Rock and Inert Materials Stored in the Britespan Building Structure:

Excess soil and rock for beneficial reuse and inert materials will be stored in a covered *Britespan* building structure with a footprint of 900 m² on an impermeable tipping floor (*Area B*). The proposed dimensions of the tipping floor are 25 metres by 22 metres. The pile will be heaped to a maximum height of 6.1 metres, shaped as a truncated pyramid with the assumed slope 1 : 1.

The total volume of the pile is calculated as:

$$V_{\text{soil}} = 1/3 \times h \times (a^2 + a \times b + b^2) = 1,922.5 \text{ m}^3,$$

Where:

L = 25 m, is the length of the tipping floor

W = 22 m, is the width of the tipping floor

h = 6.1 m, is the height of the pile

a = (L + W)/2 = 23.5 m, is the mean side of the base of a truncated pyramid

b = (L + W - 4 × h)/2 = 11.3 m, is the mean side of the top of a truncated pyramid

Therefore, the maximum capacity of the soil/rock pile (assuming the pile consists of soil only, as a conservative approach) stored indoors is:

$$M = V_{\text{soil}} \times \text{density} = 1,922.5 \times 2,000 = 3,845 \text{ tonnes}$$

The proposed storage capacity for excess soil and rock is **3,000** tonnes.

Inert materials will also be stored within the limits of the *Britespan* building structure, assuming that the total volume of the stored material, including excess soil and rock, does not exceed 3,000 tonnes.



APPENDIX I – DAILY INSPECTION REPORT



DAILY INSPECTION REPORT

YORK1 HAZELHURST RECYCLING LTD.

Date:	Shift:		Weather :	
Description:			Temperature	
			Precipitation	
			Snow	
			Rain	
			Minimal	

Inspection Areas: Perimeter Security Fence, Property Lines, Loading, Unloading, Transfer, Processing and Storage Areas

Item	Yes/No	Finish
Security Issue		
Vermin Issue		
Vector Issue		
Odour Issue		
Dust Issue		
Litter Issue		
Noise Issue		
Traffic Issue		

Equipment Inspection:

Equipment in Good Working Order (Y/N)	If no, What is the Negative Impact on the Environment

Corrective Action:

Corrective Actions to Remedy a Site Condition	Corrective Actions to Remedy Equipment Issues (Maintenance)

Reported By :

Name:	Date and Time:	Submitted to:
Signature:		
Position:		Pedro Ferreira



APPENDIX J – PROPERTY MAINTENANCE LOG



v 1.0

PROPERTY MAINTENANCE LOG

[illegible]



APPENDIX K – ODOUR BEST MANAGEMENT PRACTICES PROTOCOL



Best Management Practices Protocol (BMPP) for Odour Control

580 Hazelhurst Road, Mississauga, Ontario

This *Best Odour Management Practices Protocol (Protocol)* describes the best management practices that will be used for the control of potential odorous emissions from YORK1 Hazelhurst Recycling Ltd.'s (YORK1) waste processing/transfer facility located at 580 Hazelhurst Road in Mississauga, Ontario (Facility). This Protocol for odour control has been developed to satisfy the requirements for a proposed Environmental Compliance Approval (ECA).

This Protocol was prepared following the "Best Management Practices for Industrial Sources of Odour" (January 31, 2017) guidance published by the Ontario Ministry of the Environment and Climate Change, now the Ministry of the Environment, Conservation and Parks (MECP).

The objectives of this Protocol are:

- Identify and characterize the potential sources of odour associated with the Facility
- Identify potential receptors of the odour emissions
- Describe how the odour emissions can be controlled and list the proposed control measures
- Describe the Plan implementation schedule, including training personnel
- Describe inspection, maintenance, monitoring and record-keeping procedures.

1. Facility Location and Process Description

The Site is located at 580 Hazelhurst Road in Mississauga, Ontario.

The following material will be accepted at the Site:

- Solid non-hazardous waste generated from residential and ICI sources, including construction and demolition waste, including but not limited to:
 - Metal waste
 - Cardboard/paper waste
 - Drywall waste
 - Asphalt shingles
 - Tires
 - Wood waste
- Blue box recyclable materials
- Excess soil and rock for beneficial reuse
- Inert materials, including concrete, block, and asphalt.

Incoming solid non-hazardous waste will be inspected by a trained Site representative, unloaded on the tipping floor within the Processing/Transfer Building, sorted/segregated, and processed into alternative low-carbon fuel (ALCF). The ALCF will be hauled to customers/receiving facilities. The wastes, blue box recyclable materials, and excess soil and rock for beneficial reuse are generated from residential, commercial, industrial, and institutional sectors in the Province of Ontario.

2. Responsibilities

The following responsibilities are designated for YORK1 personnel:

Management Level:

- Reviewing the effectiveness of the current odour control measures
- Providing the required resources to implement the Odour Control Plan

- Managing Environmental Health and Safety (EHS) Supervisor activities
- Auditing the monitoring program's effectiveness
- Organizing, auditing and monitoring the training of the Facility personnel and contractors

Supervisor Level:

- Reviewing the effectiveness of the current odour control measures
- Scheduling and coordinating the implementation of odour-control measures
- Performing Facility inspections and monitoring of odour control measures and completing a daily inspection report provided in the *Design & Operations Report* for the Facility.

Facility Personnel and Contractors:

- Following the odour control procedures outlined in the Odour Control Protocol
- Monitoring the effectiveness of the current odour control measures.

3. Best Management Plan for Odour Emissions

The Protocol contains a description of procedures to identify and characterize the potential sources of odour and associated control measures, the scheduling of the Protocol implementation, the required monitoring and record-keeping procedures, and the approach to review and update the Protocol.

3.1. Identification and Classification of Potential Odour Emission Sources

The waste material received at the Site is primarily construction and demolition (C&D) and institutional/commercial and industrial waste (ICI) with low putrescible content (less than 3%), and excess soil and rock for beneficial reuse which may contain a small fraction of materials that may release odorous emissions. Incidental amounts of source-separated organics (SSO) and putrescible waste which may be accepted at the Site will be processed indoors within the limits of a sealed Processing/Transfer Building with the use of odour control measures, therefore, the potential release of odorous emissions is minimized. The identified sources of potential odorous emissions are listed in Table 1 below.

Table 1. Processes Potentially Discharging Contaminants to the Atmosphere

Process	Location	Contaminant
Loading/Unloading	Processing/Transfer Building	Dust, odour
Sorting, Tipping, Transfer	Processing/Transfer Building	Odour
ALCF Processing	Processing/Transfer Building	Odour
Excess Soil/Rock Processing	Britespan Soil Processing Structure	Dust, odour

3.2. Factors Affecting Odour Emissions

The impact of odour-producing sources can be affected by various factors, including physical barriers such as a building, utilizing various odour control techniques, local weather conditions (wind speed, direction, temperature, precipitation), etc.

Odour control measures may include preventative measures, such as considerations in the design and installation of structures and their control devices, consideration of implemented planning operations and measures to prevent the generation of odours, etc. and reactive measures that are applied to control generated odour or dispersion of potential odorous emissions reaching sensitive receptors. The list of these measures is provided in Table 2 below.

Table 2. Description of Odour Preventative and Control Measures

Emission Source	Control Measures/ Preventive Procedure	Description	Frequency
Material handling – loading/ unloading (indoor)	Minimize truck turnaround time	Waste unloading is to be done through two or three bay doors at the same time	N/A
	Reduce transfer numbers	Reduction in the number of transfers where practical	When practical
	Reduce handling durations	Reduction in total time material remains outdoors while material handling	When possible
Material handling (Excess soil/rock handling) – Indoor piles	Enclosed (indoors), closed doors	The Site will keep the building doors closed, except for truck movement	When possible
	Reduction of stockpile surface area	Use larger piles rather than several small piles	N/A
	Reduction in storage pile height	Use smaller pile heights where possible to minimize the potential for odour migration	N/A
ALCF Processing	Odour control system installation, if required	The system will consist of a misting unit that applies an odour neutralizer over the tipping floor	If required

Should odour emissions associated with the waste handling with the potential to migrate off-site be identified, the source will be documented, and appropriate correction action will be implemented.

3.3. Odour Management Plan Review Procedures and Schedule

YORK1 personnel will be appropriately trained to follow the above procedures once upon hiring, and then regularly on an annual basis. A review of these procedures and the effectiveness of odour control measures will be conducted by management yearly.

3.4. Training

The Plan requires that employees have appropriate training in managing odour-related issues. Specific areas of training include:

- Identification of potential sources of odour emissions at the facility
- Control techniques in place for managing odour issues and how to maintain them, conduct odour observation and fill out the associated paperwork
- What to do in the case of an unexpected odour emission release, and,
- Who to notify of any concerns or problems pertaining to odour, and how to handle odour complaints.

Any change in the odour control policy will trigger refreshment training for YORK1 personnel.

3.5. Procedures for Handling Complaints

All YORK1 personnel should be trained on how to direct a complaint to an appropriate supervisor responsible for receiving complaints. The following steps should be taken by a trained supervisor in the event that a complaint is received:

- Obtain a *Complaint Form* (provided in the D&O report for the Facility) and ask the complainant for the information required on the form (contact information, description of odour, time of occurrence, etc.)
- Notify the Halton-Peel MECP district office of the complaint (905-319-8292)
- Complete the remainder of the *Complaint Form* that does not require the information from the complainant (description of the facility operations and weather conditions)
- Conduct a Facility and, if needed, off-site inspection, including completion of a Daily Inspection Form (provided in the D&O report for the Facility) to determine whether the odours are still present and the cause.
- Commence mitigation procedures, if required.
- Document the complaint.

4. Inspection, Maintenance and Documentation

Routine odour inspections will be conducted at the Facility during the daily Site inspections with the completion of a *Daily Inspection Form* (provided in the D&O Report for the Facility). The Site area will be inspected by perimeter walk-around as well as the interior of the Processing/Transfer Building. Additionally, when there is an upset condition to the normal operation of the Facility or a change of operations that may result in odorous emission generation, an odour inspection will be conducted. Any deficiencies identified during the inspection will be addressed as soon as practical. Upon identification of the waste emitting odours it will be moved to enclosed storage bins and immediately returned to the waste sender or removed from the Site to appropriate disposal facilities.

The following are records that will be kept at the Facility:

- *Daily Inspection Forms*
- *Complaint Forms.*

In addition, daily records for materials received, rejected and/or tested are kept on-site as part of the Facility operations and will be available, if required, for purposes of odour complaint investigation and assessment by an MECP inspector. The period in which the records will be kept will be in compliance with the waste disposal site ECA conditions.

5. Odour Management Plan Review and Continuous Improvement

Inspections and monitoring procedures will assist YORK1 personnel and the EHS Supervisor in maintaining the Odour Control Plan. The Plan will be reviewed periodically and updated, as required:

- When there are significant changes in the odour emission sources
- Every five (5) years
- When there are verified complaints associated with odour emissions from the Facility, and,
- When there are noticeable odour emissions occurring more frequently and/or at an increased odour level.

Prepared By:



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Reviewed By:

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Vice President, Environmental Services



APPENDIX L – DUST BEST MANAGEMENT PRACTICES PROTOCOL



Best Management Practices Protocol (BMPP) for Dust Control 580 Hazelhurst Road, Mississauga, Ontario

This *Best Management Practices Protocol for Dust Control (Protocol)* describes the best management practices that will be used for the control of potential dust emissions (including fugitive) from YORK1 Hazelhurst Recycling Ltd.'s (YORK1) waste recycling facility located at 580 Hazelhurst Road in Mississauga, Ontario (Facility). This *Protocol* for dust control has been developed to satisfy the requirements of the proposed Environmental Compliance Approval (ECA).

This Protocol was prepared following the "Procedure for Preparing an Emission Summary and Dispersion Modelling Report" (February 2017) guidance published by the Ontario Ministry of the Environment and Climate Change, now the Ministry of the Environment, Conservation and Parks (MECP).

The objectives of this Protocol are:

- Identify and characterize the potential sources of dust emissions (including fugitive) associated with the Facility
- Identify potential receptors of the dust emissions
- Describe how the dust emissions can be controlled and list the proposed control measures
- Describe the Plan implementation schedule, including training of personnel
- Describe inspection, maintenance, monitoring, and record-keeping procedures.

1. Facility Location and Process Description

The Site is located at 580 Hazelhurst Road in Mississauga, Ontario.

The following material will be accepted at the Site:

- Solid non-hazardous waste generated from residential and ICI sources including construction and demolition waste, including but not limited to:
 - Metal waste
 - Cardboard/paper waste
 - Drywall waste
 - Asphalt shingles
 - Tires
 - Wood waste
- Blue box recyclable materials
- Excess soil and rock for beneficial reuse
- Inert materials, including concrete, block, and asphalt.

Incoming solid non-hazardous waste will be inspected by a trained Site representative, unloaded on the tipping floor within the Processing/Transfer Building, and sorted/segregated, and residual waste will be hauled out to the final destinations. The wastes, blue box recyclable materials and excess soil/rock for beneficial reuse are generated from residential, commercial, industrial, and institutional sectors in the Province of Ontario.

2. Responsibilities

The following responsibilities are designated for YORK1 personnel:

Management Level:

- Reviewing the effectiveness of the current dust control measures
- Providing the required resources to implement the *Protocol*
- Managing Environmental Health and Safety (EHS) Supervisor activities
- Auditing the monitoring program's effectiveness
- Organizing, auditing, and monitoring the training of the Facility personnel and contractors.

Supervisor Level:

- Reviewing the effectiveness of the current dust control measures
- Scheduling and coordinating the implementation of dust control measures
- Performing Facility inspections and monitoring of dust control measures and completing dust control logs (forms are provided in **Appendices A through C**).

Facility Personnel and Contractors:

- Following the dust control procedures outlined in the *Protocol*
- Monitoring the effectiveness of the current dust control measures.

3. Best Management Plan for Dust Emissions

The Plan contains a description of procedures to identify and characterize the potential sources of dust and associated control measures, the scheduling of the Plan implementation, the required monitoring and record-keeping procedures, and the approach to review and update the Plan.

3.1. Identification and Classification of Potential Dust Emission Sources

The waste material received at the Site is primarily construction and demolition (C&D) waste, institutional/commercial and industrial (ICI) waste, inert and blue box recyclable materials, and excess soil and rock for beneficial reuse. The identified sources of potential odorous emissions are listed in Table 1 below.

Table 1. Facility Dust Sources

Process/Activity	Location	Possible Cause	Factors affecting dust emissions
Road dust – paved roads	Paved roads	<ul style="list-style-type: none">• Disturbance of dust on road surfaces caused by vehicles• Granular materials falling from trucks• Disturbance of dust on road surfaces caused by wind	<ul style="list-style-type: none">• Unpaved road surface silt and moisture• Paved road conditions (cracks, moisture)• Wind conditions• Vehicle speed and weight• Waste material condition (particle size, moisture)
Material Handling - loading/ unloading	Processing building, Britespan building structure	<ul style="list-style-type: none">• Disturbance of material being loaded/unloaded• Wind erosion on exposed material	<ul style="list-style-type: none">• Material particle size distribution and moisture• Wind conditions• Loading/unloading conditions (drop height, bucket capacity)

3.2. Factors Affecting Dust Emissions

The impact of dust-generating sources can be affected by various factors such as material particle size distribution, weather conditions (wind, precipitation), control measures in place, and the frequency of disturbing activities.

Based on these factors, reducing the surface availability of silt on unpaved roads, minimizing disturbances and mitigating the impact of wind on a source can reduce the emissions of the fugitive dust. The list of these control measures is provided in Table 2 below.

Table 2. Dust Mitigation Practice Options

		Road Dust	Material Handling	Material Storage
Best Management Practices	Speed Limits	√		
	Vehicle Restrictions	√		
	Storage Pile Configuration			√
	Storage Pile Heights			√
	Storage Pile Area			√
	Minimize Drop Heights		√	√
	Meteorological Considerations	√	√	√
	Optimize Drop-off Area Configuration		√	
	Routine Maintenance			
	Truck Sizing (larger trucks, fewer hauls)	√	√	
Physical Controls	Watering	√	√	√
	Surface Treatment	√		
	Windscreens		√	√
	Road Sweeping	√		
	Road Water Trucks	√		
	Paving	√		
	Truck Covers (tarps)	√		

Should dust emissions associated with the waste handling with the potential to migrate off-site be identified, the source will be documented, and appropriate correction action will be implemented.

3.3. Preventative and Control Measures

Preventative and control measures can affect factors influencing the generation and dispersion of fugitive dust emissions and are applied to minimize potential impacts related to these emissions.

Table 3 describes preventative and control measures for fugitive dust emissions at the Facility.

Table 3. Description of Fugitive Dust Preventive and Control Measures

Emission Source	Control Measure/ Preventative Procedure	Description	Frequency
Road dust (unpaved and paved roads)	Posted speed limits	Trucks using the Facility will be restricted to a maximum speed of 20 km/hr to avoid excessive amounts of airborne dust. Vehicle speed limit signs will be posted	Traffic speeds will be monitored by site personnel. All contractors who arrive at the Facility are to be informed of the speed limit
	Meteorological conditions	Meteorological conditions (rainfall) will assist in dust suppression	N/A
	Truck bed covering	Enclosing open truck beds to eliminate the potential for wind-borne emissions	Upon transportation of dry material, if necessary
	Road sweeping	Road sweeping of paved roads	Periodically (daily, if necessary)
Material handling (loading/unloading)	Minimize drop heights	Loading of material to be done as close to the piles, bins or trucks as possible	Low drop heights will be maintained at all times
	Enclosed (indoors), closed doors	The building doors will be kept closed, except to allow for truck and loader/excavator access	When possible
	Reduction of stockpile surface area	The building doors will be kept closed, except to allow for truck and loader/excavator access	When possible
	Reduction in storage pile height	Use larger piles rather than several small piles to minimize the total surface area	Optimizing stockpile placement will be considered when
	Watering	Use smaller pile heights where possible to minimize emissions	N/A
	Floor washing	Sprinklers are installed overhead of the indoor stockpiles	Based on visual observations of dust emissions and the moisture
Indoor ALCF processing (shredder, grinder, separator) and soil processing	Water suppressant system	Wet floor washing by a third-party contractor, with the removal of waste wash water by vacuuming	Based on visual observation and in response to complaints
	Enclosed (indoors)	The equipment is located indoors, and the Site will keep the building doors closed, except occasionally to allow for trucks and loader access	Consistent indoor operation, door closed when possible

3.4. Training

The *Protocol* requires that employees have appropriate training in managing dust-related issues. Specific areas of training include:

- Control techniques in place for managing dust issues and how to maintain the controls, conduct dust emissions observation, and fill out the associated paperwork
- What to do in the case of an unexpected fugitive dust release, and,
- Who to notify of any concerns or problems pertaining to dust.

Any change in the dust control policy will trigger refresher training for YORK1 personnel.

4. Inspection, Maintenance, and Documentation

An inspection of the conformity with the dust control *Protocol* will be documented weekly using the *Fugitive Dust Inspection Form* (see **Appendix A** for an example of an inspection form). In addition, daily weather conditions will be recorded in the *Daily Inspection Log*, which is included in the Design & Operations Report for the Facility. Traffic routes at the Site will be regularly swept and/or watered with a truck sweeper and water truck, which will be retained on an as-needed basis, to prevent potential off-site dust migration. These activities will be documented in the *Daily Roads Sweeping/Watering Log* using the form attached in **Appendix B**.

In the event of a non-conformance, the inspector will add the incident to the *Non-Conformance Log* (see **Appendix C** for an example of a Non-Conformance log). Corrective action is to be taken to eliminate the causes of the non-conformance. It is expected that all deficiencies identified in inspections be addressed

immediately. Reviews of the Non-Conformance Logs will be done quarterly as part of the BMPP continuous improvement program.

Table 4 provides a summary of the inspections that take place at the site under this Plan and the inspection frequency.

Table 4: Inspection Frequency Summary

Inspection Type	Frequency
Wind Speed Monitoring, weather conditions	Daily
Fugitive Dust Inspection Form	Weekly and whenever the online wind speed monitoring identifies wind in excess of 50 km/h measured at a 10-metre anemometer height
Equipment Maintenance Inspection Form	Monthly
Sweeping/Watering Log	Daily
Non-conformance Log	Whenever a non-conformance/spill occurs

Table 5 presents all the inspection and maintenance procedures in place and the respective documentation to support ongoing conformity with preventative and control measures.

Table 5: Inspection Documentation for the Facility Organized by Emission Source Type

Dust Emission Source Type	Documentation	Document Control/Recordkeeping
Paved Traffic Routes	Fugitive Dust Inspection Form	2 Years
	Roadways Sweeping Log	
	Non-Conformance Log	
Material Handling	Fugitive Dust Inspection Form	2 Years
	Material Handling Activity Log	
	Non-Conformance Log	
Material Storage	Fugitive Dust Inspection Form	2 Years
	Material Storage Activity Log	
	Non-Conformance Log	
Material Spills	Fugitive Dust Inspection Form	2 Years

As part of recordkeeping procedures, the above information should be recorded in electronic files and/or hard copies for a minimum period of two years. The Site Supervisor is responsible for recording the information listed above, and copies of all documents are kept in the Site office/Scale house.

5. Dust Management Plan Review and Continuous Improvement

Inspections and monitoring procedures will assist YORK1 personnel and the EHS Supervisor in maintaining the dust control *Protocol*. The *Protocol* will be reviewed periodically and updated, as required:

- When there are significant changes in the dust emission sources
- Every five (5) years
- When there are verified complaints associated with dust emissions from the Facility, and,
- When there are noticeable dust emissions occurring more frequently and/or at an increased dust level.

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Senior Remediation Engineer



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Todd Parry

Approved By:

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Attachments:

- Appendix A – Fugitive Dust Inspection Form
- Appendix B – Daily Road Sweeping/Watering Log
- Appendix C – Non-Conformance Log
- Appendix D – Dust Emission Sources and Area Receptors Map

APPENDIX A

FUGITIVE DUST INSPECTION FORM



Date:

Inspector Name:

Fugitive Dust Weekly Inspection Form

Paved Truck Traffic Routes

Please check all segments that were inspected:

Paved Facility Entrance ☐

Paved Plant Road ☐

If some segments were not inspected, please indicate below which segment and why it was not inspected.

Inspection Items	Response	Requirement	Conformance (Y or N)	Description of Non-Conformance
Is visible dust observed from any section of traffic route?		N		
Are appropriate vehicle speeds enforced?		Y		
Are roadways well maintained?		Y		
Has the watering log been maintained?		Y		
Has the non-conformance log been maintained?		Y		
Have previous non-conformances been rectified?		Y		

Material Storage / Screening/ Handling

Please check all areas that were inspected: Screener ☐ Storage Pile ☐ Loading Truck Loading/Unloading ☐ Storage Areas ☐

If some areas were not inspected, please indicate below which are and why it was not inspected:

Inspection Items	Response	Requirement	Conformance (Y or N)	Description of Non-Conformance
Is visible dust observed from any handling location?		N		
Are low drop heights maintained?		Y		
Are truck freeboard heights maintained?		Y		
Are truck loads covered when required?		Y		
Are material handling locations well maintained?		Y		
Has the activity log been maintained?		Y		
Has the non-conformance log been maintained?		Y		
Have previous non-conformances been rectified?		Y		

APPENDIX B

DAILY ROAD SWEEPING/WATERING LOG



Daily Truck Traffic Routes Sweeping/Watering Log

[illegible]

APPENDIX C

NON-CONFORMANCE LOG

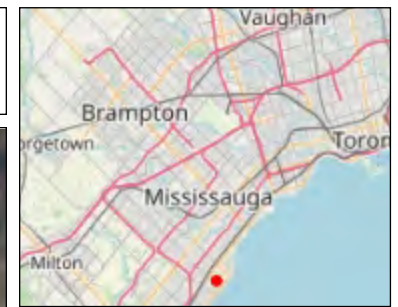


Non-Conformance Log

[illegible]

APPENDIX D

DUST EMISSION SOURCES AND AREA RECEPTORS MAP



Legend

- Municipal Wards
- Properties
- Address Text
- Property Limits
- Proposed Waste Processing/Transfer Building
- Proposed Britespan Soil Processing Structure

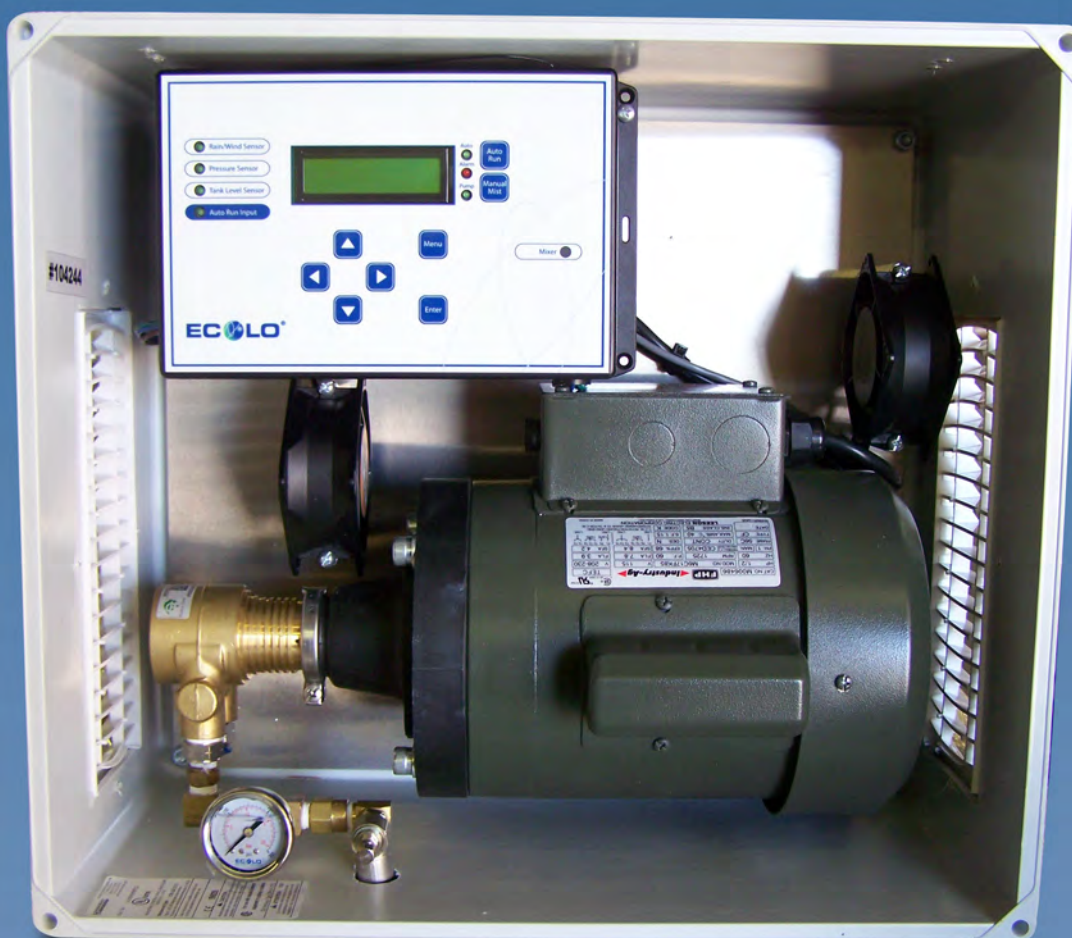
Notes

114.7 0 57.33 114.7 Meters



APPENDIX M – TYPICAL ODOUR CONTROL SYSTEM DETAILS

- Continuous duty motor
- Easy installation - tank or wall mount
- Tamper proof locked enclosure
- Totally enclosed fan cooled motor for 24/7 operation
- Self priming pump head



The Ecolo AMC System, combined with our effective odor specific AirSolution, is the most effective method for eliminating odors in a broad range of industrial and environmental applications.

The all new AMC system is part of the AirStreme line of products by Ecolo.

All components are securely enclosed in a NEMA rated fan cooled cabinet and features an advanced digital controller for quality and industry leading programmability.

The AMC System is ideal for misting in a range of applications, including:

- Mosquito misting
- Odor control
- Humidification
- Fly control
- Dust suppression
- Environmental cooling

Features of the NEW AMC System

- Integrated controller design.
- Surge protection
- Advanced programming capabilities - event timer, repeat cycle, everyday, individual day, weekday/weekend
- Digital display with touch pad programming and indicator lights for accessories - rain, wind, tank level, auto run, alarm pump, tank mixer
- Adaptive microprocessor with real time clock
- Internal battery back up
- Password protection
- Data collection capabilities: runtime, pump hours, daily peak temperature, daily peak current
- Operates up to 150 nozzles
- Optimal operating pressure, 150 psi

Optional Accessories for the AMC:



Rain Sensor

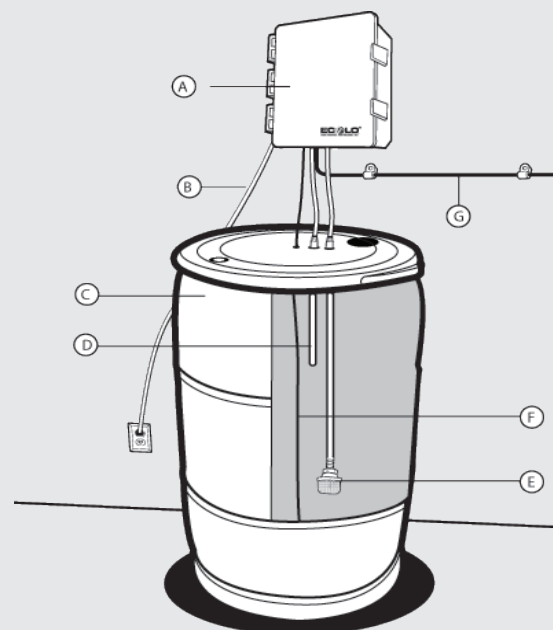


Wind Sensor



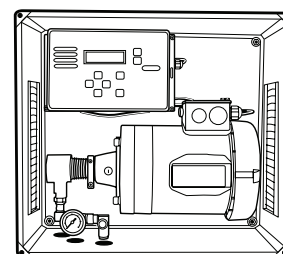
3-Way Remote

Standard Install Configuration



PART	DESCRIPTION
A	AMC Controller
B	Power cord
C	55 Gallon drum
D	Return line
E	Strainer
F	Tank level sensor
G	Discharge line

Integrated Controller Design



DUTY	HP	HZ	WEIGHT	V
Cont	1/2	60	41 LBS	110/220

DIMENSIONS: 18" X 16" X 10"



APPENDIX N – LITTER BEST MANAGEMENT PRACTICES PLAN



LITTER BEST MANAGEMENT PRACTICES PLAN

YORK1 HAZELHURST RECYCLING LTD.

Address: 580 Hazelhurst Road, Mississauga, Ontario

Litter control is one of the operational issues at the waste disposal/transfer facility. Litter includes solid materials that may become airborne and carried by the wind away from unloaded and stockpiled wastes. This Litter Management Plan outlines the best management practices to be implemented by the waste processing/transfer facility management for following regulatory requirements. In addition to the regulatory requirements, YORK1 Hazelhurst Recycling Ltd. is committed to maintaining high aesthetic standards for all its waste processing/transfer facilities to keep up environmental sustainability.

The control of litter is an important part of the daily operations of the facility. The goal of the facility operations is to implement best management practices and have all blowing litter contained within the site. As loading/unloading operations and waste processing are conducted indoors only, the likelihood of litter migration within the Site is minimal, however, the facility operator as necessary will implement the following procedures and techniques to control litter:

1. All trucks must be tarped upon entering and exiting the facility. The un-tarpping should be conducted in designated areas only.
2. If possible, incoming waste should be unloaded inside the sorting/processing building.
3. Portable skid-mounted litter fences may be provided for deployment downwind as close as practical to the un-tarpping/processing areas, as needed.
4. Semi-permanent fencing may be provided around the operation areas as an additional barrier to the migration of litter off-site when litter has not been contained by the portable litter fences. The fencing will be relocated as needed.
5. Permanent fencing may be constructed, as needed.
6. On very windy days when all other procedures are not successful in controlling blowing litter, the operator may apply cover material more frequently or immediately to the incoming waste if it is unloaded outside the processing building. The operator may also consider closing the facility to incoming waste.
7. Site personnel may be directed to collect any litter that has escaped the above control measures. The personnel should not only collect litter within the facility but also at the adjacent properties, provided that the property owner's permission is received. If additional assistance is required, the corresponding service agencies may be retained.
8. If the litter is distributed by the wind into trees and bushes on facility property or adjoining properties, portable lifting equipment may be employed to retrieve the litter.
9. Portable litter vacuums may be used to collect litter that has accumulated on litter fences.
10. Roads leading to the site will be routinely inspected for litter. If the litter accumulated on the roads is associated with the trucks entering the facility, then the litter will be picked up on a routine basis. All necessary safety precautions must be followed.
11. Before and after photos of any litter removal effort may be taken and the corresponding records should be made in the daily inspection reports.
12. Site management's contacts should be provided to the community/neighbours.

The management of litter at the landfill is a daily activity. All facility personnel are responsible for complying with the litter management plan requirements.

Facility Manager _____



APPENDIX O – COMPLAINT FORM

COMPLAINT REPORT

Date: _____

Time: _____

Complainant Details

Contact Name	Phone Number
Email Address	

Complaint Information

Complaint Date	Complaint Taken By
Complaint Details	
Corrective Action	
Suspected Causes	
Corrective Action Person	

Diagram (If required)

Weather Conditions: Wind Direction:
--

Name of the person who completed this report	Signature of the person who completed this report	Management Signature
	X	X



APPENDIX P – TRAINING MANUAL AND FORMS

VERSION 1.0

LAST REVISED: MARCH 31ST, 2022



SITE EMPLOYEE TRAINING

YORK1 TRANSFER STATIONS

PURPOSE OF THIS MANUAL

This manual is intended to be a training plan that applies to all York1 operated waste transfer stations and was developed to ensure that all employees that operate the site understand their site-specific environmental compliance approval and are trained in its operation.

GENERAL LEGISLATION

Employees should familiarize themselves with the specific legislation that pertains to operating a waste disposal site. Ontario Reg. 347 is where all information can be found. It is important to know that no waste disposal site can operate without an environmental compliance approval.

SPECIFIC LEGISLATION

No person shall use, operate, establish, alter, enlarge or extend a waste management system or a waste disposal site except under and in accordance with an environmental compliance approval.

No person shall deposit, or cause, permit or arrange for the deposit of, waste upon, in, into or through any land or land covered by water or in any building that is not a waste disposal site for which an environmental compliance approval or renewable energy approval has been issued.

No person shall use, or cause, permit or arrange for the use of, any facilities or equipment for the storage, handling, treatment, collection, transportation, processing or disposal of waste that is not part of a waste management system for which an environmental compliance approval or renewable energy approval has been issued

Failure to comply by the above regulations can result in penalties for improper management of a waste system.

DUST MANAGEMENT/NUISANCE PROCEDURES

In order to maintain a clean and nuisance free operation YORK1 Hazelhurst Recycling Ltd. has set forth five processes which will prevent any dust from becoming a nuisance to neighbouring properties.

SPEED LIMIT TO 10KM/H

By ensuring vehicular traffic does not pass 10km/h will ensure that does not get picked up and blown around.

WET/DRY SWEEPING

by conducting wet/dry sweeping we can ensure that any fugitive dust is collected and thus preventing any nuisance from occurring. YORK1 Hazelhurst Recycling Ltd. maintains a sweeping log which can be viewed by any onsite personnel.

DUST SCREEN FENCE

The dust screen fence prevents and dust from unloading and loading operations at the rear of the transfer station. This fence will catch any fugitive dust and allow air flow through it.

BAY DOORS

By keeping the bay door closed during non-operational periods and periods during operation will prevent significant fugitive dust emissions.

ENVIRONMENTAL CONCERNS

When receiving waste from customers, all employees must confirm that the material is what has been stated by conducting a visual inspection. Once confirmed the material may be offloaded and dealt with accordingly. If at any point an unapproved material was offloaded than that material must be dealt with in accordance with Ontario Regulation 347.

APPROVED WASTE

solid, non-hazardous waste generated within the residential, industrial, institutional and commercial sectors including construction and demolition waste.

REFUSAL PROCEDURES

If a customer attends to dispose of any waste not approved under our environmental compliance approval, we must refuse it and report it management for further investigation and/or possible MECP notification.

ECA REQUIREMENTS

Disposal of waste from maintenance shall be conducted in accordance with the Environmental Protection Act and local regulations. Removed sediment must be disposed of in the garbage as solid waste.

EQUIPMENT & OPERATORS

Management is responsible to ensure that all drivers or operators of any waste handling equipment are fully trained and able to operate such equipment in a safe manner.

Drivers and operators are responsible to ensure that their vehicle is equipped with all necessary safety and emergency response items are available and their unique locations.

PUBLIC COMPLAINT PROCEDURES

If at any point the general public makes a formal complaint, a formal inspection of the site will be conducted, and all necessary steps will be taken to correct such complaint. Management will keep a record of the complaint and a copy of the steps taken to correct the issue.

EMERGENCY RESPONSE PLAN

**In the event that there is a serious injury or incident in the office or yard the following procedures shall be followed:
FOR SERIOUS INJURIES CALL 911**

A serious injury is an injury that could result in a loss of life our portion of the body, disability, or substantial loss of blood.

1. First Response

- Notify the Vice-President, Operations Manager
- Ensure the area is safe to enter don't enter the area if it poses a hazard to your health and safety
- Check the individual state don't move the individual unless the situation is life threatening only trained first aider shall conduct first date
- Don't move any objects at the scene unless the injured person at further risk if objects remain
- Until qualified help arrives your action should be to keep the individual calm and warm

2. Emergency Notification

- The Supervisor/Operations Manager or their designate will communicate the emergency by using the air horn and give one long blast 5 seconds to engage the Emergency Response Team (ERT)
- The Supervisor/Operations Manager or their designate will contact Emergency Services if required
 - "I am calling to report a serious incident we believe the injuries to be....
 - "The address is: 580 Hazelhurst Road in Mississauga"
 - "We will meet the Emergency Services Vehicle at the main entrance at Hazelhurst Road"

3. Report to Emergency Services

- The Supervisor/Operations Manager will report to Emergency Services with assistance from office/yard personnel the circumstances of the emergency and any other pertinent information that might be requested.

4. Upon hearing the hard work and our fire alarm activities shall stop

5. Emergency Response Team (ERT)

- Upon hearing the emergency notification, the ERT will proceed to the appropriate location and provide all necessary assistance up to and including First Aid.
- One member of the ERT (designated by the Vice-President) will meet the Emergency Services at the designated location and escort the Emergency Personnel to the scene.

EMERGENCY RESPONSE TEAM MEMBERS

Name	Position	Phone Number
Vince Mora	Vice-President	(647) 889-7071
Pedro Ferreira	Director – Transfer Station Operations	(416) 827-3724
Michael Carr	Manager – Transfer Station Operations	
	Director, Health & Safety	
	VP – Human Resources	

EMERGENCY EVACUATION PROCEDURE

In the event that there is an emergency in the office or yard that requires the area to be evacuated the following procedure will be adhered to:

1. Emergency Notification

- The Supervisor/Operations Manager will retrieve the emergency air horn and give **3 long blasts** for an emergency evacuation and/or sound the fire alarm.

Emergency Air Horn Locations: _____

The Supervisor/Operations Manager will contact emergency services if required.

2. All employees

- Upon hearing the emergency notification will proceed to the appropriate location in the event of an evacuation employees will assemble at or on:

Primary Assembly Point: _____

3. Supervision

- Will take a head count of all employees under their care and report to the Operations Manager/Vice President.

4. Report to Emergency Services

- The Supervisor/Operations Manager will report to emergency services with assistance from office & yard personal, the circumstances of the emergency, possibility of missing persons, and any other pertinent information.

5. No employees

- Are permitted to grant interviews to members of the press unless expressed written consent has been given by the owner of the company.

Training

The company will provide designated members with approved First Aid & CPR Training. An emergency evacuation drill will take place once per year.

Communication

A written copy of the Emergency Response Plan will be provided to all Management. The Operations Manager/Vice President will discuss any new and critical information with respect to potential hazards as they may arise. All employees shall be informed about the location of the fire safety and first aid equipment.

Record keeping

Records of all meetings drills and reports regarding emergency planning will be kept and maintained on file at the office by Management.

Evaluation

Management will evaluate the success and shortfalls of this program in conjunction with the Joint Health and Safety Committee/Safety Representative to ensure their office compatibility and after a reported incident, accident or emergency drill.

FIRE RESPONSE PLAN

IN CASE OF FIRE

1. Upon the discovery of fire:

- Leave the area immediately
- Activate the fire alarm or alert the Supervisor/Operations Manager immediately who can activate alarm (**emergency notification system**)
- Close all doors behind you as you exit the building
- Evacuate using the nearest exit and proceed to the emergency assembly location (see below)
- Call the Fire Department, 911

2. Upon hearing the fire alarm/emergency notification system

- Follow the emergency evacuation plan
- Leave the building via the nearest fire exit
- Close all doors behind you as you exit the building
- Evacuate using the nearest exit and proceed to the emergency assembly location (see below)

Site-Specific Instructions:

1. Immediately drop what you are doing and proceed to the exit the area.
2. Proceed to the emergency assembly location.
3. All Employees are required to check in with the Supervisor/Operations Manager (or designate).
4. The Supervisor/Operations Manager (or designate) will ensure all employees are accounted for.
5. No employees are permitted to re-enter the building without the authorization of Emergency Services.

EMERGENCY ASSEMBLY LOCATION:

ADDRESS:

MAJOR INTERSECTION FOR OUR BUILDING:

SPILL RESPONSE PLAN

ALL SPELLS WILL BE REGARDED AS HAZARDOUS AND SHALL BE TREATED AS SUCH

If you discover a spill or leak of a hazardous or unidentified material, please follow the below steps:

- S** Safely away create everyone from the immediate area, secure area and evaluate the spill for appropriate response. Contact a member of the Spill Response Team.
- P** Prevent the spread of fumes by all closing doors/windows.
- I** Initiate appropriate spill procedure, if safe to do so.
- L** Leave all electrical equipment alone. Do not turn on or off.
- L** Locate any information regarding the chemical, reviewing the Safety Data Sheet (SDS) if possible and following the necessary steps.

In the event of a hazardous spill in the yard/shop the following steps will be taken:

1. Refer to:

- specific Spill Response Procedures
- Emergency Response Procedures
- Safety Data Sheets (SDS)
- Safe Work Practices or Safe Work Procedures

PROJECT SPECIFIC INSTRUCTIONS:

- Location must establish the level of danger to personnel and if/when its applicable to evacuate the scene.
- Spill Response and clean-up efforts will be accomplished in accordance with federal and Municipal Authorities Chemical Spill Control Program Spill Response and Control.
- The location of the SPILL KIT must be known by all site personnel.
- Incident investigation and reporting will be done in accordance with the incident investigation program.
- Notify the H&S Team immediately.

LOCATION OF THE SPILL KITS:

SPILL RESPONSE TEAM MEMBERS

Name	Position	Phone Number
Vince Mora	Vice-President	(647) 889-7071
Pedro Ferreira	Director – Transfer Station Operations	(416) 827-3724
Michael Carr	Manager - Transfer Station Operations	
	Director, Health & Safety	
	VP – Human Resources	

FIRE EXTINGUISHER USE

How To Use A Fire Extinguisher



Remember the **PASS** word (**P**ull - **A**im - **S**queeze - **S**weep)

P

Pull

Pull The Pin



Break seal
and test
extinguisher



A

Aim

Aim At
The Base
Of Fire



Ensure you have
a means of
escape



S

Squeeze

Squeeze The
Operating
Handle



To operate
extinguisher
and discharge
the agent



S

Sweep

Sweep From
Side To Side



Completely
extinguish
the fire



SafetyBanners.ORG

SITE ORIENTATION & SPECIFIC GUIDELINES

POSITION:

ALLERGIES/MEDICAL CONDITIONS:

SITE ADDRESS:

EMERGENCY CONTACT (NAME< RELATION & NUMBER):

Mark items as indicated: COMPLETED ☒, NOT APPLICABLE ☐

GENERAL REQUIREMENTS	<ul style="list-style-type: none"> - Health & Safety Policy Statement - Violence & Harassment: Zero tolerance, report incidents immediately - Site Safety Rules: Review and understand - Disciplinary Measures: Progressive disciplinary policy, IDLH items are zero tolerance. - Fitness for Duty Policy: Zero tolerance - Circle, Pre-use Equipment Checks: To be completed daily. - Horseplay/fighting/pranks: Zero tolerance 	<ul style="list-style-type: none"> - Toolbox Talks: Completed weekly - Reporting: Report hazards, incidents and injuries immediately (<i>Hazard Reporting Form</i>) - JHSC: Meeting minutes posted on safety board. Know your JHSC Worker Rep. - Worker Rights: Right to Know, Right to Participate, Right to Refuse Unsafe Work 	<input type="checkbox"/>
HYGIENE	<ul style="list-style-type: none"> - COVID-19: Daily Assessment Completed - Drinking Water: Available in main office - Washrooms: Treat with respect, report any issues. 	<ul style="list-style-type: none"> - Smoking/Vaping: Only in designated areas - Garbage: Clean up as necessary 	<input type="checkbox"/>
EMERGENCY EQUIPMENT, SERVICES & PROCEDURES	<ul style="list-style-type: none"> - First Aid Equipment & Eye Wash Station: Located in dispatch, know first aider on site. - Fire Extinguishers: Located on all equipment, and in office, shop area. - Transporting Injured Workers: Know the policy - Spill Response Plan: Located H&S Board. - Fire Response Plan: Located H&S Board. 	<ul style="list-style-type: none"> - Health & Safety Board, Map to Hospital, Emergency Phone Numbers, etc.: Located on health & safety board (dispatch). - Emergency Evacuation Procedure & Notification: The Muster Point location is at the STOP sign on S/E corner of the lot. 	<input type="checkbox"/>
PERSONAL PROTECTIVE EQUIPMENT REQUIREMENTS	<ul style="list-style-type: none"> - Work clothes: No shorts, tank tops, ripped or loose clothing. - High Visibility Vests: Traffic control, around mobile equipment, rigging crane loads. 	<ul style="list-style-type: none"> - Footwear/Hardhats: CSA approved, intact and mandatory at all times. - Hand/Skin/Ear/Eye/Respiratory Protection: As required, where hazard exists. 	<input type="checkbox"/>
HAZARDOUS CHEMICALS	<ul style="list-style-type: none"> - Training: WHMIS-2015 required, yearly update - SDSs: Located in site office 	<ul style="list-style-type: none"> - Spill Kit: Located in the Shop - Spills: Report immediately 	<input type="checkbox"/>
JOB SAFETY	<ul style="list-style-type: none"> - Site Signage: Abide by signage and know danger before entering. - Guardrails/handrails: Set up control zone if removed, ensure replacement if you leave area or when work is complete. - Housekeeping: Ensure clear work areas, access/egress ways and stairwells. Daily material clean-up. 	<ul style="list-style-type: none"> - Compressed Gas Cylinders: Capped, tied off and upright. Adequately stored - Electrical: Cord and tool inspections and adequate grounding. Do not work live. Lockout/Tag-out as required. - Material Handling: Use proper lifting techniques to avoid injury. 	<input type="checkbox"/>
TRAINING – Place a check <input checked="" type="checkbox"/> beside all training obtained (* = mandatory training for all workers, ** = mandatory for all workers working at heights greater than 3m)			
*WHMIS-2015: [exp. date] _____	<input type="checkbox"/>	*MOLTSD WORKER H&S AWARENESS	<input type="checkbox"/>
**WORKING AT HEIGHTS	<input type="checkbox"/>	BASICS OF SUPERVISION	<input type="checkbox"/>
TRAFFIC CONTROL – R3	<input type="checkbox"/>	ECA REVIEW	<input type="checkbox"/>
RUBBER TIRE LOADER	<input type="checkbox"/>	SKID STEER / FORKLIFT	<input type="checkbox"/>
		*MOLTSD SUPERVISOR H&S AWARENESS	<input type="checkbox"/>
		FIRST AID/CPR: [exp. date] _____	<input type="checkbox"/>
		FIRE EXTINGUISHER	<input type="checkbox"/>
		EXCAVATOR	<input type="checkbox"/>

DECLARATION – read before signing

I, _____ am employed by _____
(print name) (print company name)

certify that: I have received a site-specific orientation. I understand my responsibility is to work safely and productively and to observe efficient and safe work procedures, practices as dictated by this program, the WSIB and applicable York1 policies and regulations.

Employee's Signature: X _____ Manager/Supervisor's Signature: X _____



“CONFIDENTIAL”

YORK1 Hazelhurst Recycling Ltd. - Training Orientation Checklist

Name:																												
Orientation By:		Date:																										
<i>Reviewed with Employee</i>																												
<table border="0"><tr><td><input type="checkbox"/> Accident/Incident Investigation/Reporting</td><td><input type="checkbox"/> Health and Safety Policy Statement</td></tr><tr><td><input type="checkbox"/> Cold Stress</td><td><input type="checkbox"/> Heat Stress Policy</td></tr><tr><td><input type="checkbox"/> Competent Supervisor</td><td><input type="checkbox"/> Heavy Equipment Policy</td></tr><tr><td><input type="checkbox"/> Discipline Process Procedures</td><td><input type="checkbox"/> Joint Health & Safety/Worker Trade Committee</td></tr><tr><td><input type="checkbox"/> Emergency Evacuation</td><td><input type="checkbox"/> Personal Protective Equipment (PPE)</td></tr><tr><td><input type="checkbox"/> Fall Protection/Working at Heights</td><td><input type="checkbox"/> Return to Work Program</td></tr><tr><td><input type="checkbox"/> Fire Evacuation</td><td><input type="checkbox"/> Right Refuse Unsafe Work/Work Stoppage</td></tr><tr><td><input type="checkbox"/> Hazard Identification Policy</td><td><input type="checkbox"/> Workplace Inspection</td></tr><tr><td><input type="checkbox"/> Health and Safety Duties Under the Act</td><td><input type="checkbox"/> Workplace Violence Threat Management</td></tr><tr><td><input type="checkbox"/> Health & Safety Orientation Policy</td><td><input type="checkbox"/> Emergency Procedures: Spill Response</td></tr><tr><td><input type="checkbox"/> Health & Safety Responsibilities (all parties)</td><td></td></tr><tr><td>Other _____</td><td></td></tr></table>					<input type="checkbox"/> Accident/Incident Investigation/Reporting	<input type="checkbox"/> Health and Safety Policy Statement	<input type="checkbox"/> Cold Stress	<input type="checkbox"/> Heat Stress Policy	<input type="checkbox"/> Competent Supervisor	<input type="checkbox"/> Heavy Equipment Policy	<input type="checkbox"/> Discipline Process Procedures	<input type="checkbox"/> Joint Health & Safety/Worker Trade Committee	<input type="checkbox"/> Emergency Evacuation	<input type="checkbox"/> Personal Protective Equipment (PPE)	<input type="checkbox"/> Fall Protection/Working at Heights	<input type="checkbox"/> Return to Work Program	<input type="checkbox"/> Fire Evacuation	<input type="checkbox"/> Right Refuse Unsafe Work/Work Stoppage	<input type="checkbox"/> Hazard Identification Policy	<input type="checkbox"/> Workplace Inspection	<input type="checkbox"/> Health and Safety Duties Under the Act	<input type="checkbox"/> Workplace Violence Threat Management	<input type="checkbox"/> Health & Safety Orientation Policy	<input type="checkbox"/> Emergency Procedures: Spill Response	<input type="checkbox"/> Health & Safety Responsibilities (all parties)		Other _____	
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<input type="checkbox"/> Health & Safety Orientation Policy	<input type="checkbox"/> Emergency Procedures: Spill Response																											
<input type="checkbox"/> Health & Safety Responsibilities (all parties)																												
Other _____																												
Health and Safety Training																												
Subject	Date Trained	Refresher Required	Refresher Date	Training Completed																								
Certified H&S Rep.																												
Competent Supervisor																												
Confined Space																												
Electrical (TQAA)																												
Fall Protection																												
Working at Heights																												
First Aid																												
Heavy Equip. _____																												
N. Gas																												
Powered Equipment																												
Propane																												
Traffic Control																												
WHMIS																												
Other:																												
As an employee of York1 Waste Solutions Ltd., I understand the requirement to work in compliance with the <i>Occupational Health and Safety Act</i> , the construction regulations, and the rules and guidelines included in the company health and safety program.																												
Employee Signature:		Manager, Health and Safety:																										
_____		_____																										



" CONFIDENTIAL" YORK1 Hazelhurst Recycling Ltd. - Equipment List

	Machine Type	Brand	Model	Trained Operator	Trained Maintenance Staff
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					



APPENDIX Q – ENVIRONMENTAL EMERGENCY RESPONSE AND CONTINGENCY PLAN



Emergency Response & Contingency Plan

YORK1 Hazelhurst Recycling Ltd.

580 Hazelhurst Road, Mississauga, Ontario

A manager has been appointed to deal with all emergency situations that may arise, and all emergency contacts will be displayed throughout the property, including the location of all fire extinguishers and fire escape routes. This manager will document any incidents and contact emergency services if needed.

The emergency response plan outlines the response to the following emergencies: **PERSON'S INJURY, FIRE, and SPILL**

In the event that there is a serious injury at the Site, the following procedure should be followed:

FOR SERIOUS INJURIES, CALL 911

Injury Response Plan

1. First Response:

- Notify the manager
- Ensure the area is safe to enter; do not enter the area if it poses a hazard to your health and safety
- Check the individual's state, do not move the individual unless the situation is life-threatening. Only trained first aiders shall conduct first aid
- Do not move any objects at the scene, unless the injured person is at further risk if objects remain
- Until qualified help arrives, your action should be to keep the individual calm and warm

2. Emergency Notification:

- The supervisor or his designate will use radio communication or will retrieve the emergency air horn and give one long blast (5 seconds) to engage the Emergency Response Team (ERT)
- The manager or his designate will contact emergency services if required:

"I am calling to report a serious accident; we believe the injures to be _____"

"The address is 580 Hazelhurst Road. We will meet the emergency service vehicle at the gate entrance at Hazelhurst Road."

The circumstances of the injury/emergency, the possibility of missing persons or any other pertinent information will also be reported.

3. Upon hearing the horn work and/or fire alarm, onsite activities shall STOP

4. Emergency Response Team (ERT)

- Upon hearing the emergency notification, the ERT will proceed to the appropriate location and provide all necessary first aid
- One member of the ERT (designated by the manager) will meet emergency services at the designated location and escort the emergency personnel to the scene.

Emergency Response Team Members		
Name	Company	First Aid (Y/N)Y
Pedro Ferreira	YORK1 Waste Solutions Ltd.	Y
Michael Carr	YORK1 Waste Solutions Ltd.	Y

In case of any process upset, power failure, labour disruption, extreme weather events, or pandemic, the operations at the Site should be ceased until the matter is resolved, and YORK1 personnel and the corresponding municipal and/or MECP institutions should be notified.

Fire Response Plan

During the process of recycling, many areas will be subjected to potential fire sources; therefore, fire prevention and protection are of the utmost importance to any waste/recycling site.

The Fire Plan Components:

1. Emergency procedures to be used in case of fire, including:
 - Sounding the alarm
 - Notifying the Fire Department
 - Provisions for access for firefighting activities
 - Instructions for occupants on procedures to be followed
 - Evacuating endangered persons and
 - Confining, controlling, and extinguishing the fire
2. Instructions:
 - On ways to prevent fires
 - Methods to control fire hazards throughout the business
 - Schematic diagrams describing the type, location, and operation of building fire emergency systems
3. Method and frequency of conducting fire drills
4. Detailed maintenance procedures for fire protection systems and building features
5. Alternate fire safety measures in the event of a temporary shutdown of fire protection equipment or systems, so that occupant safety can be assured.

Ten-Step Process for Fire Prevention:

Step 1: Conduct Fire Safety Audit (Identify all fire risks and employee resources)

Step 2: Appointment and Organization of Emergency Supervisory Staff and Their Responsibilities

Step 3: Develop Emergency Procedures in Case of Fire

Step 4: Fire Drill Procedures and Training

Step 5: Maintenance of Building Facilities and Fire Protection Equipment

Step 6: Alternate measures for Temporary Shutdown of Fire (if an emergency warning or suppression systems are down)

Step 7: Control of Fire Hazards (avoid, prevent, reduce and control all fire hazards)

Step 8: Fire Department Access and Fire Suppression Information

Step 9: Preparing Schematic Diagrams and Site Plan

Step 10: Posting Emergency Procedures and Emergency Phone Numbers in key locations

Fire Prevention Procedure:

Because of the nature of waste processing and recycling operations, it is especially important that good housekeeping techniques be used as well as good site inspection prior to the start of work. These actions will either eliminate or control fuel sources, heat sources, or the air supply that can combine to cause a fire. Some general points to consider are as follows:

- The operational site should be secured (perimeter fencing) to prevent any unauthorized entry
- All combustible recycled materials should be segregated, secured, and contained in properly labeled containers or removed at the conclusion of the workday
- Two fire extinguishers (water and chemical) will be within 3 m of any “hot work” area
- Extinguishers used will conform to the weather conditions
- All fire protection equipment will be kept free from obstructions and will be clearly visible at all times
- All fire suppression equipment will be inspected on a regular weekly and monthly basis by a Supervisor and/or a Safety Representative, and on an annual basis by a competent third-party organization
- Documentation reports of weekly, monthly, and annual inspections will be completed and retained for regulatory inspection
- All means of egress and fire access routes must be properly designated and signed and kept free of any obstructions at all times
- Emergency numbers for the Police, Fire Department, ambulance, and the nearest Emergency Clinic should be posted in strategic locations on the Site
- Safety Data Sheets (SDS) should be kept on-site for all of the fuels/chemicals present on-site during operations
- Fireproof blankets should be used in order to cover any combustible material on the Site
- Any “hot work” will conclude one-half hour prior to the end of the work shift in order to allow visible inspection of any burning or smouldering of material
- There will be a mandatory **“No Smoking in the Workplace”** policy established, implemented, and enforced
- A fire evacuation plan will be developed and reviewed at least once a year, and document the training
- All employees will attend and successfully complete the Fire Prevention and Fire Extinguisher training program on an annual basis
- All subcontractors and visitors shall read and sign this procedure prior to entering and conducting any business on the facility
- Documented site inspections will be conducted on a weekly and monthly basis. Reports will be retained for regulatory inspection.

IN CASE OF FIRE

Upon the discovery of the fire:

- Leave the area immediately
- Activate the fire alarm or alert the office manager, who can activate the alarm immediately
- Close all doors behind you
- Evacuate using the nearest exit and proceed to the emergency assembly location
- Call the fire department (911)

Upon hearing the fire alarm/emergency notification system:

- Follow the Emergency Evacuation Plan
- Leave the building via the nearest fire exit
- Close all doors behind you
- Proceed to the emergency assembly location

Project Specific Instructions:

1. Immediately drop what you are doing and proceed to exit the area
2. Employees are to proceed to the meeting point, making no stops along the way
3. Employees are to check in with the trade supervisor
4. Your supervisor will ensure all employees are accounted for
5. No employee is to re-enter the property without the manager's go-ahead

Emergency Assembly Location: _____

Address: 580 Hazelhurst Road, Mississauga, Ontario

Major Intersection for your building: Lakeshore Road West and Hazelhurst Road

Spill Response Plan

To ensure that all York1 Medulla Transfer employees are knowledgeable in spill prevention methods and best practices, all employees are to be trained to understand all applicable legislation.

To minimize the risk of spills or releases to the environment, appropriate protective procedures must be implemented, such as double containment, overflow protection, and other measures as part of activities involving the use, storage, or handling of petroleum liquid products or waste materials on the Site.

Containers of waste materials and liquid petroleum products should be stored in a manner to prevent release into the environment. This requires selecting locations and methods to minimize exposure to rainfall, surface water, and the ground. Enclosures, shelters, and secondary containment should be used where appropriate. Containment pans should be placed under equipment where there is a potential for a leak or discharge.

SPILL RESPONSE:

All spills, leaks, etc. of any oil, fuel, chemical, or other hazardous or unidentified substance likely to contaminate the environment must be reported immediately (*the Incident Report form is attached*). All spills and leaks must be investigated and a supervisor's investigation report should be submitted to the owner (Recycling Depot) and to the MECP's Spills Action Centre at **1-800-268-6060** and a written report to the MECP District Manager outlining the nature of the spill or upset, and action taken for clean-up, correction and prevention of future occurrences should be submitted within three (3) calendar days of the event. This information will also be recorded.

IF THE SPILL CAN NOT BE SAFELY CONTAINED USING THE SPILL KIT OR IF THE SPILL IS CAUSING A THREAT TO LIFE, EVACUATE THE BUILDING AND CONTACT THE LOCAL FIRE DEPARTMENT AND EMERGENCY SERVICES AT 911

The containers with fuel and liquid products at the Site should be stored in a manner to ensure the accessibility to the fire response personnel and/or fire department and the stability of containers. The containers are appropriately labelled and secured in accordance with the *Fire Protection and Prevention Act, 1997, Occupational Health and Safety Act* and other relevant regulations.

Potential sources of construction-related spills include equipment failure, fuel/liquid handling, transfer accidents, storage tank spills, damage by passing vehicles, etc.

The following protection measures to prevent spill occurrence are employed:

- Concrete blocks (a metal cage for propane containers) are installed around the outdoor storage locations to prevent accidental bumping by passing vehicles
- All fuel nozzles are equipped with functional automatic shut-offs and overflow alarms
- A spill kit is located within the limits of the transfer/processing building, containing absorbent material
- Daily inspections of the storage locations are conducted by a designated representative.
- Up to ten fire extinguishers are located at the Site, including spots within the proximity of storage locations.
- The entrance gate is locked overnight to prevent potential vandalism of the storage locations.

Upon discovery of a minor spill:

1. Ensure the safety of all staff and building occupants
 - Warn all staff and building occupants
 - Notify the on-site manager. Act as the Spill Coordinator until their arrival
 - If unsure of the product, consult with SDS sheets
 - Wear proper Personal Protective Equipment (PPE) contained in the spill kit located in the scale house
 - Attempt to stop the leak or eliminate the source of the spill if safe to do so
 - Eliminate ignition sources, do not turn on or off electrical equipment, and provide natural ventilation
2. Contain the spill (If safe to do so)
 - Use the content of the provided spill kit
 - If necessary, ensure all drains are covered to prevent run-off
 - Attempt to stop the spread of the spill/leak by using absorbent material
 - Place the absorbent material in an approved container and dispose of it in accordance with the SDS sheet
 - If any leak/spill reaches the drainage system, contact the appropriate authorities as listed in the Emergency Contact Section

The same methods are applied for waste expected to be generated from emergency situations.

If a spill occurs, a designated representative/manager will conduct the investigation and complete an Incident Report containing the following information:

- Description of the spill location
- The time and date of the spill
- The time and estimated volume of spilled material, and the manufacturer's name
- Potentially affected area
- Weather conditions
- The cause of the spill
- Immediate containment and/or cleanup actions taken
- Current status of cleanup actions.

Follow-up written reports, associated laboratory analyses, confirmatory field sampling, and other documentation may also be required.

SPILL KIT

A Spill kit is located at the Site at the specified location within the Processing/Transfer Building.

A Typical Spill Kit at the waste management storage yard may contain the following:

- Oil sorbent pads, particulate sorbent, oil sorbent socks, spill control pillows for storage yards where vehicles for transporting liquid waste are stored
- Instruction booklet
- Roll barricade tape
- Spill clothing kits
- Plugging compounds
- Shovel, rake set
- Spill squeegee, floor and bench size, Polypropylene broom
- Bench brush
- Dustpan
- Liquid cleaner
- Chem/Kleen-Ups towels
- Hazardous waste disposal bags
- Waste disposal bags.

Personal protective equipment (PPE) sets are available at the Site for permanent workers handling hazardous waste and stored at the location of a spill kit. If a spill occurs during loading/unloading activities or site operations, YORK1 personnel are responsible for containing and cleaning up minor releases or spills. Major spills may require the assistance of a licensed clean-up contractor.

Notification Protocol

The following agencies will be notified if an emergency event occurs (a major spill of waste containing pollutants occurred, which cannot be immediately contained and cleaned up by the site personnel, fire, etc.):

- MECP's Spills Action Centre at **1-800-268-6060**
- MECP District Manager (written report outlining the nature of the spill or upset, and action taken for clean-up, correction, and prevention of future occurrences submitted within three (3) calendar days of the event)
- Local municipality
- The owner of the pollutant
- Local police service (if required)
- Local fire department (if required)
- Local ambulance (if required).

A spill notification procedure is regulated by O. Reg. 675/98. According to this Regulation, if a spill of not more than 100 litres of fluid, other than fluid transported as cargo, or 25 litres of fuel in areas with public access or 100 litres of fuel in areas restricted from public access to the fuel system or other operating systems of a motor vehicle occurs or a spill of materials which are subject to the Transportation of Dangerous Goods (TDG) Act (1992), it is exempt from the notification requirements of Ontario Environmental Protection Act (EPA) under the following circumstances:

- The spill does not enter and is not likely to enter any waters directly or through drainage structures
- The spill does not cause and is not likely to cause any adverse effects, other than those that are readily remediated through clean-up and restoration of surfaces that are prepared for vehicular traffic or paved, gravelled, sodded areas adjacent to those surfaces; and
- Arrangements for the remediation referred to above are made and conducted immediately.

Spills can be reported to the MECP either through online service (<https://report-pollution.ene.gov.on.ca>) or by phone at 1-866-663-8477. When you submit your report, you will be asked to provide information about:

- When the pollution event happened (date and time)
- Where the pollution event happened
- The source of the pollution, such as a construction site/waste disposal site, or road location
- Issue being reported, for example, potential air or water pollution
- The weather conditions at the time when the incident occurred (if known)
- The intensity of the wind
- Effect of pollution.

EMERGENCY TELEPHONE LIST

Name	Position	Company/Agency	Phone Number
Pedro Ferreira	Director	York1 Waste Management Solutions Ltd.	416-827-3724
	Manager	York1 Hazelhurst Recycling Ltd.	
	Safety Coordinator	York1 Hazelhurst Recycling Ltd.	
-	Spill Action Centre	Ministry of the Environment, Conservation and Parks (MECP)	1-800-268-6060
-	-	Police/Fire Department	911
Mississauga Office of Emergency Management	-	The City of Mississauga	311 (905-615-4311 outside City limits)
	After Hours Dispatch		905-615-3000
Peel Region Police Services	Automated Phone Line	Region of Peel	905-453-2121
Emergency	-	Credit Valley Hospital	905-813-2200
-	-	Ministry of Labour, Mississauga Office	905-273-7800
<i>Waste Management Companies for Emergency Services</i>			
-	-	YORK1 Rosewarne Transfer Ltd.	705-646-1597
-	-	GFL	519-943-0101
-	-	Safety-Kleen Canada Inc.	905-840-0118
-	-	QM Environmental	905-388-4444



Incident Report

YORK1 Hazelhurst Recycling Ltd.
580 Hazelhurst Road, Mississauga, Ontario

No.	Item	Description
1	Name of Caller	
2	Name of Company	YORK1 Hazelhurst Recycling Ltd.
3	Location of Emergency	
4	Return Telephone Number	
5	Time of Incident	
6	Materials Involved (solid, liquid, gas; properties, nature, volume)	
7	Location of Incident (subject area; if a spill, is it contained ?)	
8	Source of Incident (if known, e.g. tank)	
9	Cause of Incident (accident, error, vandalism, beakdown, etc.)	
10	Potential Impact (existing of future impact or effect)	
11	Response Action (containment, recovery, future prevention, etc.)	
12	Follow-up (indicate if report forthcoming)	
13	Notification (who else was notified: Police, Municipality, Fire Dept., Etc.)	

Note any directions from the Ministry and the name of the person contacted. Notify the owner of the ECA and the Ministry of the Environment, Conservation and Parks (MECP) if necessary



APPENDIX R – FINANCIAL ASSURANCE ESTIMATE



Financial Assurance Calculation

Proposed Environmental Compliance Approval (ECA) for a Waste Processing/Transfer Facility

580 Hazelhurst Road, Mississauga, Ontario

Proposed Daily Maximum Storage Capacity:

Proposed Processing/Transfer Building (indoor storage):

Solid non-hazardous unprocessed/processed waste and segregated recyclables: **400 tonnes**

Processed Alternative Low Carbon Fuel (ALCF) (this material has value): **600 tonnes**

Total storage capacity: 1,000 tonnes

Proposed Britespan Building Structure (indoor storage):

Excess soil/rock for beneficial reuse and inert materials: **3,000 tonnes**

Non-hazardous waste is handled via truck and trailer, and by using the highest fee provided by local waste haulage businesses, we can assume that it costs \$2.64 per kilometer to haul a load of waste to the Walker South Landfill in Thorold, Ontario, and to the Ridge Landfill in Blenheim, Ontario. The typical weight of an outgoing load (trailer load) is the following:

- Solid non-hazardous unprocessed/processed waste is 35 tonnes
- Contaminated soil is 20 tonnes (triaxle load)
- Compacted recyclables/inert materials is 22 tonnes.

Based on the quotes obtained from the above landfills, the cost of disposal of non-hazardous wastes at Walker South Landfill is \$45.00 per metric tonne (mT) and at Ridge Landfill is \$30.90/mT.

Unit costs for loading, hauling, and disposal of solid non-hazardous processed and unprocessed waste, recyclable materials, processed ALCF, and excess soil for beneficial reuse are summarized in the table below:

Unit cost:	Excess Soil for Beneficial Reuse	Non-hazardous waste, recyclables (other than metal and tires) (per tonne)	
	United Soils Management, Stouffville	Walker South Landfill	Ridge Landfill
Loading (per tonne)	\$1.00	6.00	\$6.00
Roundtrip Distance (km)	-	192	550
Travel Time (round trip), hr	2	-	-
Hauling (per km)	-	\$2.64	\$2.64
Hauling (per hour)	\$120	-	-
Transportation cost (per tonne)	\$ 12.00	\$14.48	\$41.49
Disposal (tipping fees)	\$ 95.00 (per triaxle load)	\$ 46.50	\$ 30.90
Subtotal:	\$ 17.75	\$ 60.98	\$ 72.39

Waste Processing/Transfer Facility

With the calculations completed above, we can safely assume that the maximum total cost of disposal of solid non-hazardous waste and selected recyclables per metric tonne is \$72.39. With the waste building at its capacity, we can simply multiply the cost per tonne by the maximum waste capacity to come up with the amount required in order to remove all the non-hazardous waste and selected



recyclables off-site. As a conservative approach, we assume that all material stored in the proposed processing/transfer building is unprocessed solid non-hazardous waste; therefore, the following calculation is used as per the Ontario financial assurance guidelines:

$$\text{\$ 72,390.00} = 1,000 \text{ tonnes} \times \$72.39/\text{per tonne}$$

Soil Processing/Transfer Facility

Excess soil/rock for beneficial reuse will be disposed of at the United Soils Management reuse site in Stouffville. Assuming that all material stored within the proposed *Britespan Building* is excess soil, the corresponding cost for disposal of this material is:

$$\text{\$ 53,250.00} = 3,000 \text{ tonnes} \times \$17.75/\text{per tonne}$$

Soil for Beneficial Reuse requires analytical testing before hauling to reuse sites.

As per *Rules for Soil Management and Excess Soil Quality Standards* of O. Reg. 406/19, for the above amount of stored soil for re-use the following number of soil samples should be collected and tested:

- fifteen (15) bulk soil samples to be tested for metals and inorganic parameters, petroleum hydrocarbons (PHCs) including benzene, toluene, ethylbenzene and xylenes (BTEX), and a number of specific parameters based on the history of the site origin, namely, volatile organic parameters (VOCs), polycyclic aromatic hydrocarbons (PAHs) and polychlorinated biphenyls (PCBs).
- At least one soil sample to be tested for Toxicity Characterization Leaching Procedure (TCLP)
- Two soil samples to be tested for the Synthetic Precipitation Leaching Procedure (SPLP).

As per a quote provided by Bureau Veritas Analytical Laboratories (Mississauga), the total cost of the above analyses is **\$8,050.00**. The estimated consultant (G2S Consulting Inc. quote) cost associated with the above soil sampling is **\$2,250.00**. The total reuse soil testing cost is **\$10,300.00**.

$$\text{Grand Subtotal: } \text{\$ 135,940.00} = \text{\$ 72,390.00} + \text{\$ 53,250.00} + \text{\$ 10,300.00}$$

Project Management Cost:

$$\text{PM} = \$135,940.00 \times 10\% = \text{\$ 13,594.00}$$

Contingency Cost:

$$\text{CC} = \$135,940.00 \times 15\% = \text{\$ 20,391.00}$$

Building Demolition

Building Demolition Cost is \$0 as the buildings will not be abandoned, nor demolished, and have significant asset value.

The facility will be fenced off; therefore, no security devices will need to be installed.

Final Calculation

$$\text{Financial Assurance (FA)} = \text{\$ 135,940.00} + \text{\$ 13,594.00} + \text{\$ 20,391.00} = \text{\$169,925.00}$$

Based on the calculation above, the Financial Assurance for the waste processing/transfer facility located at 580 Hazelhurst Road in Mississauga, Ontario, is **\$ 169,925.00**



Attachments:

1. Confidential Disposal Quotes – Beneficial Soil Reuse
2. Confidential Haulage – Beneficial Soil Reuse
3. Confidential Disposal Agreements – Non-Hazardous Waste
4. Confidential Loading Quotes
5. Confidential Haulage Quotes - Non-Hazardous Waste
6. Confidential Soil Testing Quotes



ATTACHMENT 1
Confidential Disposal Quotes – Beneficial Soil Reuse

Todd Parry

From: melinda.ernst@unitedsoilsmanagement.com
Sent: January 22, 2024 3:51 PM
To: Todd Parry
Cc: Alec Cloke
Subject: Re: Clean Fill Quote 2024

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Todd,

The rate is, \$120/ hour for trucking, and \$95 for tipping.

Thanks,

Melinda Ernst
Infrastructure Manager
United Soils Management
Cell: (416)347-6630
Email: melinda.ernst@unitedsoilsmanagement.com



Clean Fill Site
14245 Ninth Line
Stouffville, ON
L4A 7X3

Stouffville Office
6043 Main St
Stouffville, ON
L4A 3P6

Woodbridge Office
1 Whitmore Rd # 16 & 17
Woodbridge, ON
L4L 8G4

From: Todd Parry <TParry@york1.com>
Date: Monday, January 22, 2024 at 2:42 PM
To: Melinda.ernst@unitedsoilsmanagement.com <melinda.ernst@unitedsoilsmanagement.com>
Subject: Fwd: Clean Fill Quote 2024

Get [Outlook for iOS](#)



Todd Parry

Director, Environmental & Sustainability

+1-416-428-3928

TParry@york1.com

www.york1.com

5090 Commerce Blvd, Suite 200

Mississauga, Ontario

L4W 5M4



Please consider the environment before printing this email.

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From: Todd Parry <TParry@york1.com>

Sent: Monday, January 22, 2024 1:37 PM

To: melinda.ernst@unitedsoilmanagment.com <melinda.ernst@unitedsoilmanagment.com>

Cc: George Kirchmair <GKirchmair@york1.com>; Viktor Kopetsky <VKopetsky@york1.com>; alectcloke@rogers.com <alectcloke@rogers.com>

Subject: Clean Fill Quote 2024

Melinda,

As discussed, can you provide me with a quote for 2024 for the receipt of clean beneficial re-use soil at USM (per triaxle load) as well as a trucking quote per hour for a triaxle.

Thanks,



ATTACHMENT 2
Confidential Haulage Quotes – Beneficial Soil Reuse



TRANSPORT LTD.

10-Wheeler Drive

Bolton, Ontario,

L7E 1G9

Tel: 647-680-2425 e-mail: jc@japgobindtransport.ca

TO WHOM IT MAY CONCERN

08-JAN-2024

Jap Gobind Transport Ltd provides essential transportation services to York 1 and its subsidiaries in GTA. With triaxle dump trucks at \$120 per hour and End Dump/live bottom trailers at \$140 per hour for the year 2024, we offer reliable support for construction projects.

Our reputation for excellence in the industry is reinforced by our membership in the Health and Safety Excellence Program by WSIB Ontario. Additionally, our registration with the Ministry of Environment and Climate (#R-004-1572065573) Change underscores our commitment to environmental responsibility.

Jap Gobind Transport Ltd prioritizes safety, adhering to stringent industry standards to ensure the well-being of our employees and stakeholders. We are dedicated to delivering superior service while upholding the highest standards of professionalism and compliance.

If anyone requires any further information, please do not hesitate to contact me at 647-680-2425.



Jasbir Singh Chahal

Director



ATTACHMENT 3
Confidential Disposal Agreements – Non-Hazardous Waste



December 7, 2023

YORK1

48 Millwick Drive
Toronto, ON M9L 1Y3

ATTENTION: Frank Mora
VIA EMAIL: fmora@york1.com
RE: 2024 Pricing Schedule

Effective January 1st, 2024, the following waste allocation and rates will apply:

2024 WASTE VOLUME ALLOCATION: 20,000 MT

CUSTOMER NAME	WASTE SERVICE	WASTE TYPE	RATE
York1	Disposal WEG – South Landfill	Transfer Station Refuse	\$46.50 per MT

LANDFILL SURCHARGES	RATE
Dig Outs:	\$300.00 FLAT RATE
Empty Drums - not crushed or cut: processing fee	\$25.00 per DRUM
Drums - not crushed or cut: reloading fee	\$50.00 per DRUM
Biomedical Bags – YELLOW and/or RED: reloading fee	\$200.00 per LOAD

This price adjustment is reflective of a number of factors; inflation, supply chain issues and substantially higher landfill operating costs due to changing governmental policies (i.e. PFAS). With this in mind, effective January 1st, 2024, we find it necessary to adjust our pricing to include an Environmental Surcharge of 2.5% in addition to our existing Fuel Surcharge. This increase supports Walker's ability to provide the superior service you have valued over the years.

We would like to take this opportunity to thank you for your business and appreciate your continued loyalty. If you have any questions about our pricing schedule, waste allocations or the operations at the Walker Waste – South Landfill, please do not hesitate to contact me direct at 905-708-7073 or Kate Fahey, Account Manager, at 289-547-2948.

Yours truly,
WALKER ENVIRONMENTAL DIVISION

Patti Bosco
Sales Manager, Transfer & Disposal

Non-Hazardous Solid Waste Disposal Agreement

This AGREEMENT effective as of the 1st day of January, 2024 (this “**Agreement**”), between **RIDGE (CHATHAM) HOLDINGS L.P.**, a partnership existing under the laws of the Province of Ontario (“**Ridge**”) and **YORK1 ENVIRONMENTAL WASTE SOLUTIONS LTD.**, a corporation existing under the laws of the Province of Ontario (“**YORK1**” and with Ridge, the “**Parties**” and each a “**Party**”)

WHEREAS:

1. Ridge owns and operates a landfill located in Southwestern Ontario with a municipal address of 20262 Erieau Road, Blenheim, Ontario (“**Ridge Landfill**”);
2. YORK1, its subsidiaries and related companies among other things, owns and operates many waste transfer stations in the Province of Ontario that accept Acceptable Solid Non-Hazardous Waste (as such term is defined below); and
3. Ridge is desirous of YORK1, its subsidiaries and related companies delivering quantities of Acceptable Solid Non-Hazardous Waste to the Ridge Landfill and YORK1 desires to deliver such Acceptable Solid Non-Hazardous Waste to the Ridge Landfill on and pursuant to the terms and conditions set out in this Agreement.

NOW THEREFORE, in consideration of the premises and the mutual representations, warranties and covenants contained herein, the Parties agree as follows:

1. Definitions

The following words and phrases shall have the following meanings when used in this Agreement:

- a. “**Acceptable Solid Non-Hazardous Waste**” is defined as municipal solid waste (“**MSW**”), industrial, commercial or institutional waste (“**ICI**”), and construction or demolition material (“**C&D**”) that is not:
 - Hazardous Waste (as such term is defined below);
 - Special Waste (as such term is defined below); or
 - Any other waste not otherwise permitted to be disposed of at the Ridge Landfill under Applicable Laws or the Permits.
- b. “**Applicable Laws**” means (i) the Permits, and (ii) any statute, law, by law, resolution, judgement, order, decree, rule, regulation, directive, standard, or similarly binding authority, now existing or at any time during the term enacted, adopted, promulgated, issued or enforced by any Governmental Authority relating to the protection of the environment, human health or safety, or the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of any Hazardous Waste.
- c. “**Governmental Authority**” means any federal, provincial, or municipal authority or other government or political subdivision thereof, and any entity, department, commission, bureau, agency, authority, board, court, official or officer, domestic or foreign, exercising executive, judicial, regulatory or administrative functions of or pertaining to government including an agency, authority, regulatory body or subdivision of the categories listed above.
- d. “**Hazardous Waste**” includes, but is not limited to (i) any petroleum or Petroleum products, natural gas, or natural gas products, radioactive materials, asbestos, medical, bio-medical, urea

formaldehyde foam insulation, transformers or other equipment that contain dielectric fluid containing levels of polychlorinated biphenyls, and radon gas; and (ii) any chemicals, materials, waste or substances defined as or included in the definition of “Hazardous”, “Toxic”, “Radioactive”, “Dangerous” or words of similar import, under any Applicable Laws; including mixtures thereof with other materials, such as asbestos or lead.

- e. **“Permits”** means any and all permits, licenses, approvals, certificates of approval or authorization issued by any Governmental Authority to the applicable Party in respect of the operation of the Ridge Landfill, including for clarity, the disposal of Acceptable Solid Non-Hazardous Waste.
- f. **“Special Waste”** means waste not normally included in the composition of MSW or ICI, including, for example, contaminated soils and asbestos, fly ash, foundry sands or gypsum, oilfield waste and other similar industrial process residues.
- g. **“Tax” or “Taxes”** include all taxes, duties, premiums, assessments, imposts, levies, rates, withholding, dues, government contributions and other charges of any kind whatsoever imposed by any Governmental Authority, whether direct or indirect, including, without limitation, those levied on, or measured by, or referred to as sales, retail sales, consumption, use goods and services, harmonized sales, value-added or ad valorem.

2. Term

- a. The Term of this Agreement (the **“Term”**) will commence on January 1, 2024 and will continue until December 31, 2025 unless terminated earlier pursuant to the terms hereof or extended by the mutual written agreement of the Parties. The Term may be extended for an additional one (1) year upon the mutual written consent of the Parties.
- b. This Agreement may be terminated by either Party upon twenty (20) business days’ written notice to the other Party (the **“Defaulting Party”**) upon the occurrence of any of the following events:
 - i) If the Defaulting Party is in default of any material term of this Agreement and the default has not been cured within twenty(20) business days of written notice of that default having been given by the other Party to the Defaulting Party;
 - ii) If the Defaulting Party becomes insolvent, makes an assignment for the benefit of creditors or is the subject of any proceeding under any bankruptcy and/or insolvency law;
 - iii) If the Defaulting Party winds up, dissolves, liquidates, or takes steps to do so or otherwise ceases to function as a going concern; or
 - iv) If a receiver or their custodian (Interim or Permanents) of any of the assets of the Defaulting Party is appointed by private instrument or by court order or if any execution or other similar process of any court becomes enforceable against the Defaulting Party or its assets or if distress is made against any of the Defaulting Party’s assets.

The parties hereby agree not to exercise the right to terminate if within the curative provision, the Defaulting Party undertakes commercially reasonable steps to cure and the non-defaulting party reasonably expects that the Defaulting Party’s *bona fide* efforts to cure will be successful within a reasonable time period.

3. Delivery of Acceptable Solid Non-Hazardous Waste to the Ridge Landfill

During the Term, YORK1 agrees to deliver to the Ridge Landfill (as mutually agreed upon, but subject to the restrictions in this paragraph) an aggregate total of not less than Ninety-Five

Thousand (95,000) tonnes and not more than One Hundred and Five Thousand (105,000) tonnes of Acceptable Solid Non-Hazardous Waste per contract year during normal business hours. Should YORK1 want to exceed their maximum allowable volume of One Hundred and Five Thousand (105,000) tonnes of Acceptable Solid Non-Hazardous Waste per contract year, then pricing for such additional volume will be adjusted based on mutually agreeable terms.

If YORK1 is unable to deliver to the Ridge Landfill at least Ninety-Five Thousand (95,000) tonnes of Acceptable Solid Non-Hazardous Waste per contract year, then York 1 shall pay to Ridge the tonnage shortfall (which would be the difference of Ninety-Five Thousand (95,000) tonnes and the actual tonnages delivered) multiplied by the applicable Tipping Fee for that contract year. In the event of a tonnage shortfall, YORK1 shall make payment as described herein within thirty (30) days after the end of the applicable contract year.

Should the Ridge Landfill during regular business hours, be closed and refuse Acceptable Solid Non-Hazardous Waste from YORK1, the minimum put or pay commitment will be adjusted downward on a prorated basis based on the then current calendar year (for example a 20 day closure and refusal period would reduce the commitment of 95,000 tonne by 7,600 mt ($95,000 \times 230/250$) and 87,400 metric tonne would be the new commitment for that period. If any closure and refusal period continues for more than thirty (30) days, YORK1 may terminate this agreement without penalty.

For certainty, if Waste Connections of Canada Inc. or any of its affiliates (collectively, “**Waste Connections**”) delivers tonnes of Acceptable Solid Non-Hazardous Waste on a tolling arrangement (“**Waste Connections’ Waste**”) to any of YORK1’s waste transfer stations and YORK1 delivers Waste Connections’ Waste to the Ridge Landfill, Waste Connections’ Waste shall not be counted towards the minimum Ninety-Five Thousand (95,000) tonnes required to be delivered by YORK1 under this Agreement.

4. **Ridge’s Requirements**

Ridge:

- a. shall identify to YORK1 the location of the deposit area for the Acceptable Solid Non-Hazardous Waste (each a “**Deposit Area**”);
- b. shall be responsible for up keeping and maintaining the grounds and areas surrounding all of the Deposit Areas; and
- c. Herby agrees to grant YORK1 temporary, limited, unobstructed and revocable access to the Deposit Areas to perform, from time to time, the activities described herein.

5. **Fees at Ridge Landfill**

Ridge will invoice YORK1 the following tipping fee plus applicable taxes (each a “Tipping Fee”) for each tonne of Acceptable Solid Non-Hazardous Waste it delivers to the Ridge Landfill:

Contract Year One – January 1st, 2024 to December 31st, 2024
Delivered to Ridge Landfill at \$ 29.00 per tonne *

Contract Year Two – January 1st, 2025 to December 31st, 2025
Delivered to Ridge Landfill at \$ 30.00 per tonne *

* Carbon and HST taxes are extra. YORK1 acknowledges that the carbon tax rate is currently 2.44% and will increase to 3.00% as of April 1, 2024. At this time, the next increase has yet to be announced, but YORK1 agrees that, during the Term, Ridge may pass on to YORK1 any future increases in the carbon tax rate that are directly tied to the provincial carbon tax capped at an additional 3%, at Ridge's sole discretion.

Ridge will invoice YORK1 the following service fees provided YORK1 requires the following ad hoc services:

Service	2024*	2025*
Burial	\$ 185.00	\$ 195.00
Scrape Out	\$ 185.00	\$ 195.00
Certificate of Destruction	\$ 135.00	\$ 145.00
Hot Box per 20 min	\$ 110.00	\$ 120.00
Emergency Tipper Fee	\$ 210.00	\$ 220.00

YORK1 shall make payment to Ridge of all invoices issued by Ridge within thirty (30) days of the invoice date. If YORK1 is late making a payment under this Agreement, then the amount owing shall be subject to interest at the rate of 0.5% per month.

For certainty, YORK1 shall not pass on any of the fees above (or any other fees associated with disposing of material at the Ridge Landfill) to Waste Connections for the disposal of Waste Connections' Waste at the Ridge Landfill.

6. Rights of Inspection/Refusal/Rejection.

Ridge has the right to inspect all vehicles entering and exiting the Ridge Landfill and to refuse to accept or reject (including, after acceptance), any material delivered to the Ridge Landfill either before or after it is off-loaded, if Ridge reasonably believes the material delivered by or on behalf of YORK1 contains material other than Acceptable Solid Non-Hazardous Waste. Ridge shall provide written notification to YORK1 of any materials that are refused or rejected (email and photographic evidence shall be deemed to be appropriate in such circumstance) and such notification shall include an explanation as to why such material was refused or rejected (the "**Notice of Non-Conformance**"). All waste which is not Acceptable Solid Non-Hazardous Waste will be immediately removed by YORK1, or its agents, for its delivery to an appropriate disposal facility or return to YORK1's location. In the event YORK1 fails to promptly remove and dispose of such non-conforming waste, then such non-conforming waste may be removed and disposed of by Ridge or its agent and Ridge shall charge YORK1 for its reasonable actual costs incurred in so doing.

7. Indemnification

- a. YORK1 shall indemnify Ridge, its directors, officers, employees and agents from and against any and all liabilities, claims, demands, losses, penalties, expenses, reasonable legal costs, damages,

actions, suits or other proceedings sustained, brought or prosecuted by third parties which are directly attributable to the willful misconduct or grossly negligent acts or omissions of YORK1, its officers, employees, agents or other persons for whom it is at law responsible in connection with this Agreement. In no event shall YORK1, its directors, officers, employees and agents be liable for the consequential, special, punitive or indirect damages, losses or costs, howsoever caused or suffered by Ridge, its directors, officers, employees and agents.

- b. Ridge shall indemnify YORK1, its directors, officers, employees and agents from and against any and all liabilities, claims, demands, losses, penalties, expenses, reasonable legal costs, damages, actions suits or other proceedings sustained, brought or prosecuted by third parties, which are caused by the willful misconduct or grossly negligent acts or omissions of Ridge, its respective officers, employees, agents or other persons for whom it is at law responsible in connection with this Agreement, the Ridge Landfill and the Deposit Areas therein. In no event shall Ridge, its directors, officers, employees and agents be liable for consequential, special, punitive or indirect damages, losses or costs, howsoever caused or suffered by YORK1, its directors, officers, employees and agents.
- c. The indemnifying Party's obligations as set forth above in Sections 7(a) and 7(b) are expressly conditioned upon each of the following: (a) the indemnified Party shall promptly notify the indemnifying Party in writing of any threatened or actual claim or suit; (b) the indemnifying Party shall have sole control of the defense or settlement of any claim or suit; and (c) the indemnified Party shall cooperate with the indemnifying Party to facilitate the settlement or defense of any claim of suit.

8. **Force Majeure.**

The performance of this Agreement may be suspended by either Party due to causes or causes beyond the reasonable control of such Party, and not caused, directly or indirectly, by the lack of finances, poor planning, fault or negligence of the Party seeking to have its performance obligation excused, and such cases shall include, but not be limited to, acts of God, acts of war, riot, floods, fire, explosion, accident, or sabotage; lack of adequate fuel, power, raw materials, labour or transportation facilities; government laws, regulations, permitting, requirements, orders or actions; breakage or failure of machinery or apparatus; national defense requirements; injunctions or restraining orders; labour trouble and strike; closure or a material reduction in the disposal capacity due to Permit or other restrictions at the Ridge Landfill. The Party asserting a right to suspend performance under this section must, forthwith, after it has knowledge of the effective cause, notify the other Party in writing of the cause for suspension, the performance suspended and the anticipated duration of suspension. The Party claiming suspension must work diligently to remedy the situation giving rise to the suspension and must keep the other Party informed as to its progress in remedying the situation. The Party asserting a right to suspend performance will advise the other Party in writing when the suspending event has ended, and when performance will be resumed. Once the suspending event ends, the Parties shall agree on the date of the resumption of performance. Payment obligations are not suspended during the duration of suspension under this section.

9. **General Provisions**

- a. **Notices.** All notices, request, demands and other communications required or permitted to be given under this Agreement must be in writing and will be deemed to have been duly given if (a) delivered personally to the offices of YORK1 or Ridge during normal business hours, (b) mailed by

registered mail (return receipt requested) with postage prepaid; or (c) sent by next day or overnight nationally recognized courier or post, addressed as follows:

To YORK1:
Frank Mora
5090 Commerce Blvd., Suite 200
Mississauga, ON L4W 5M4

With a copy to the YORK1 Legal Department at the same address above.

To Ridge:
Attn: Legal Department
6220 Hwy 7, Suite 600
Woodbridge, ON L4H 4G3

Such addresses may be changed, from time to time, by means of a notice given in the manner provided in this section.

All such notices, requests, demands and other communications will be deemed to have been received (a) if delivered personally, the day delivered, (b) if mailed by registered mail (return receipt requested), on the second business day following the day on which the written receipt of such mail is signed, or (c) if sent by next day or overnight post or courier, on the day delivered.

- b. **Confidentiality.** Except as provided herein, each Party agrees not to disclose the existence or terms of this Agreement to any third party without the prior written consent of the other Party, such consent not to be unreasonably withheld or delayed or unless required to so do by a Governmental Authority of competent jurisdiction. Notwithstanding the foregoing, the Parties may disclose this Agreement to their affiliates, legal and financial advisors and, to the extent necessary, to its subcontractors/employees on a need to know basis.
- c. **Governing Law.** This Agreement shall be governed by the laws of the Province of Ontario and the applicable laws of Canada therein. The Parties irrevocably attorn to the courts in Ontario to resolve any disputes.
- d. **Entire Agreement.** This Agreement constitutes the entire agreement between the Parties pertaining to the subject matter of this Agreement and supersedes all prior agreements, understanding, negotiations and discussions, whether oral or written, of the Parties pertaining to the subject matter of this Agreement, and there are no representations, warranties or other agreements between the Parties in connection with the subject matter of this Agreement except as specifically set out in this Agreement.
- e. **Currency.** Unless otherwise specified, the word "dollar" and the "\$" sign refer to Canadian currency.
- f. **Amendments.** No amendment, discharge, modification, restatement, supplement, termination or waiver of this Agreement or any Section of this Agreement is binding unless it is in writing and executed by each Party. No waiver of, failure to exercise, or delay in exercising, any Section of this Agreement constitutes a waiver of any other Section (whether or not similar) nor does any waiver constitute a continuing waiver unless otherwise expressly provided.
- g. **Severability.** If any provision of this Agreement is declared void, such provision shall be deemed severed from this Agreement, which shall otherwise remain in full force and effect.


- h. **Relationship.** Nothing contained in this Agreement and no action taken by either Party hereto shall be deemed to create a partnership, association, joint venture or any other kind of entity or other relationship between YORK1 and Ridge.
- i. **Assignment.** Neither Party shall assign, subcontract, delegate, or otherwise transfer this Agreement, or its rights and obligations herein, without obtaining the prior written consent of the other Party, such consent not to be unreasonably withheld, and any attempt of assignment, subcontract, delegation, or transfer in the violation of the foregoing will be null and void; provided, however, that either Party may assign this Agreement in connection with a merger, acquisition, reorganization or sale of all or substantially all of its assets, or other operation of law, without any consent of the other Party. This Agreement shall be binding upon the Parties and their respective successors and permitted assigns.

IN WITNESS WHEREOF, THE PARTIES HAVE EXECUTED THIS AGREEMENT ON THE DATE FIRST NOTED ABOVE.

**YORK1 ENVIRONMENTAL WASTE
SOLUTIONS LTD.**

**RIDGE (CHATHAM) HOLDINGS L.P.
BY ITS GENERAL PARTNER
RIDGE (CHATHAM) HOLDINGS G.P. INC.**

Per: _____
Name:
Title:
I have the authority to bind the corporation.

Per:  _____
Name: Alim Lalani
Title: General Counsel - Canada
I have the authority to bind the corporation.



ATTACHMENT 4
Confidential Loading Quotes



January 25th, 2024

Re: Quotation for Loading Garbage at YORK1 Facilities

Attention: Todd Parry
YORK1 Environmental
5090 Commerce Blvd, Suite 200
Mississauga, Ontario L4W 5M4
416-428-3928
TParry@york1.com

Please find below our quotation to provide equipment and labour to load garbage into trucks at YORK1 Facilities.

Quotation: \$6.00 per metric tonne

Sincerely,

Matthew Guizzetti
General Manager
York1 Excavating Ltd.
(647) 808-8732
mguizzetti@york1.com



March 27th, 2024

**Re: Quotation for Loading Soil
YORK1 Waste Transfer Facilities Across Ontario**

Attention: Todd Parry
YORK1 Environmental
5090 Commerce Blvd, Suite 200
Mississauga, Ontario L4W 5M4
416-428-3928
TParry@york1.com

Please find below our quotation to provide equipment and labour to load soil into trucks at YORK1 Facilities.

Quotation: \$1.00 per metric tonne

Sincerely,

Matthew Guizzetti
General Manager
YORK1 Excavating Ltd.
(647) 808-8732
mguizzetti@york1.com



ATTACHMENT 5
Confidential Haulage Quotes – Non-Hazardous Waste



January 22, 2024

George Kirchmair
York1 Environmental Ltd.
5090 Commerce Blvd, Suite 200
Mississauga, Ontario
L4W 5M4

Re: Waste Haulage Quote Via Walking Floor Trailers

Attention: Mr. Kirchmair

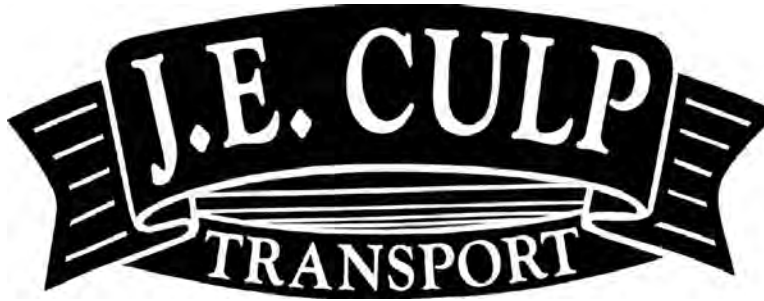
This quote is to provide waste haulage services within Ontario using YORK1 Rosewarne Transfer Ltd
Walking Floor Trailers.
Transportation Cost = \$2.50 per km

Please feel free to contact the undersigned for any further details.

Sincerely,

A handwritten signature in blue ink, appearing to read "Nick Andrews", with a stylized flourish extending from the end.

Nick Andrews
General Manager



4815 MERRITT RD.
LINCOLN, ON, L3J1J2
TEL: (905) 563-5055

WWW.JECULPTRANSPORT.COM

1/09/2024

To whom it may concern,

Our waste transport rate for York 1 would be \$2.48/km to Pinetree or Carleton. And our transport rate to a Canadian landfill would be \$2.64/km.

Thank you

Daniel Culp

Operations Manager



ATTACHMENT 6
Confidential Soil Testing Quotes

Services Quotation - C35501



Company York Environmental Solutions

Attention

Project PSA 2024

Date Issued Dec 21, 2023

Effective Jan 01, 2024 to Dec 31, 2024

Project Manager

Lori Dufour

Lori.Dufour@bureauveritas.com

Account Manager

Claudio Lucente

(416) 455-1035

Claudio.Lucente@bureauveritas.com

Primary Lab Bureau Veritas Mississauga

PACKAGE / TEST	METHOD REFERENCE	MATRIX	UNIT FEE
Moisture Only			\$13.00
Moisture	Carter 2nd ed 51.2 m	Soil	
Particle Size Distribution with Graph ⁽²⁾	N/A	Soil	\$199.70
Sodium Adsorption Ratio (SAR)	EPA 6010C	Soil	\$26.20
Conductivity	OMOE E3530 v1 m	Soil	\$7.00
Low Level Total Suspended Solids	SM 24 2540D m	Water	\$14.50
Total Suspended Solids	SM 24 2540D m	Water	\$14.50
Fluoride	SM 24 4500-F C m	Water	\$15.60
Chloride by Automated Colourimetry	SM 24 4500-Cl E m	Water	\$15.60
Conductivity	SM 24 2510 m	Water	\$12.30
pH	SM 24th - 4500H+ B	Water	\$10.30
Sulphate by Automated Turbidimetry	SM 24 4500-SO42- E m	Water	\$15.60
Nitrate & Nitrite as Nitrogen in Water	SM 24 4500-NO3I/NO2B	Water	\$31.10
O.Reg 153 SOIL			
O.Reg 153 Metals & Inorganics Pkg (Soil)	Multiple	Soil	\$151.30
O.Reg 153 Metals Package (Soil)	Multiple	Soil	\$119.30
O.Reg 153 OC Pesticides (Soil)	EPA 8081B/ 8082A	Soil	\$140.60
O.Reg 153 PAHs (Soil)	Multiple	Soil	\$129.80
O.Reg 153 PCBs (Soil)	EPA 8082A m	Soil	\$75.80
O.Reg 153 PHCs, BTEX/F1-F4 (Soil)	Multiple	Soil	\$157.00
O.Reg 153 VOCs by HS & F1-F4 (Soil)	Multiple	Multiple	\$275.90
O.Reg 153 Semivolatiles Package (Soil)	Multiple	Soil	\$297.50
O.Reg 153 ICPMS Metals (Soil)	EPA 6020B m	Soil	\$69.60
O.Reg 153 VOCs by HS (Soil)	Multiple	Multiple	\$119.00
O.Reg 153 WATER			
O.Reg 153 Metals & Inorganics Pkg (Wtr)	Multiple	Water	\$124.90
O.Reg 153 Metals Package (Water)	Multiple	Water	\$97.60
O.Reg 153 OC Pesticides (Water)	EPA 8081B/ 8082A	Water	\$140.60
O.Reg 153 PAHs	Multiple	Water	\$129.80
O.Reg 153 PCBs (Water)	EPA 8082A m	Water	\$75.80
O.Reg 153 PHCs, BTEX/F1-F4	CCME PHC-CWS m	Water	\$157.00
O.Reg 153 VOCs by HS & F1-F4	Multiple	Water	\$275.90
O.Reg 153 Semivolatiles Package (Water)	Multiple	Water	\$297.50
O.Reg 153 Dissolved ICPMS Metals (Water)	EPA 6020B m	Water	\$64.90
O.Reg 153 VOCs by HS (Water)	Multiple	Water	\$119.00
O.Reg 153 VOCs (Water)	Multiple	Water	\$119.00
TCLP			
O.Reg 558 TCLP Benzo(a)pyrene	EPA 8270E	Soil	\$115.80

Services Quotation - C35501



Company York Environmental Solutions

Attention

Project PSA 2024

Date Issued Dec 21, 2023

Effective Jan 01, 2024 to Dec 31, 2024

Project Manager

Lori Dufour

Lori.Dufour@bureauveritas.com

Account Manager

Claudio Lucente

(416) 455-1035

Claudio.Lucente@bureauveritas.com

Primary Lab Bureau Veritas Mississauga

PACKAGE / TEST	METHOD REFERENCE	MATRIX	UNIT FEE
O.Reg 558 TCLP Benzene HS	Multiple	Soil	\$194.80
O.Reg 558 TCLP Inorganics Package	Multiple	Soil	\$135.60
O.Reg 558 TCLP PCBs	EPA 8082A m	Soil	\$75.80
TCLP PHCs, BTEX/F1-F4	Multiple	Soil	\$232.80
O.Reg 558 TCLP Semi-Volatile Organics	EPA 8270D m	Soil	\$297.50
O.Reg 558 TCLP VOCs by HS	Multiple	Soil	\$194.80
TCLP Leachate Preparation	EPA 1311 Update I m	Soil	\$54.30
SPLP			
O.Reg 406 Excess Soil SPLP VOCs	Multiple	Soil	\$194.80
Additional non quote tests			\$443.70
Total Metals in SPLP Leachate by ICPMS	EPA 6020B m	Soil	
SPLP Leachate Preparation	Multiple	Solid	
SPLP PAHs	EPA 8270E	Soil	
SPLP VOCs	Multiple	Soil	
METALS			
Dissolved Metals by ICPMS	EPA 6020B m	Water	\$64.90
Total Metals Analysis by ICPMS	EPA 6020B m	Water	\$64.90
Chromium (VI) in Water	EPA 7199 m	Water	\$33.60
Lab Filtered Metals by ICPMS	EPA 6020B m	Water	\$64.90
Mercury in Water by CVAA	EPA 7470A m	Water	\$33.60
Individual Metals			\$65.10
Acid Extractable Metals by ICPMS	EPA 6020B m	Soil	
Dissolved Metals by ICPMS	EPA 6020B m	Water	
Total Metals Analysis by ICPMS	EPA 6020B m	Water	
GENERAL CHEMISTRY PACKAGE			
RCAP - Surface Water	Multiple	Water	\$281.20
SEWER BYLAW			
Toronto Sanitary&Storm Sewer (100-2016)	Multiple	Multiple	\$1,127.60
Toronto Sanitary & Com. Sewer (100-2016)	Multiple	Multiple	\$1,127.40
PESTICIDES			
OC Pesticides (Selected) & PCB	EPA 8081B/ 8082A	Soil	\$140.60
OC Pesticides (Selected) & PCB	EPA 8081B/ 8082A	Water	\$140.60
ADDITIONAL CHARGES			
Composite of Solids	N/A	Soil	\$27.10
En Core Sampler (Hermetic Sampler)	N/A	N/A	\$15.00
Grinding, Compositing, & Homogenizing	N/A	Soil	\$15.00
Filtration of a Liquid Sample	N/A	Water	\$15.00
Sample on Hold	N/A	N/A	\$10.00

Services Quotation - C35501



Company	York Environmental Solutions	Project Manager	Account Manager
Attention		Lori Dufour	Claudio Lucente
Project	PSA 2024		
Date Issued	Dec 21, 2023		(416) 455-1035
Effective	Jan 01, 2024 to Dec 31, 2024	Lori.Dufour@bureauveritas.com	Claudio.Lucente@bureauveritas.com
Primary Lab	Bureau Veritas Mississauga		

PACKAGE / TEST	METHOD REFERENCE	MATRIX	UNIT FEE
Non hazardous disposal/container supply	N/A	N/A	\$8.50
Methanol Vial incl. disposal (1 vial)	N/A	N/A	\$2.55
Terra Core Soil Samplers	N/A	N/A	\$2.10
Moisture	Carter 2nd ed 51.2 m	Soil	\$2.00
Moisture (Subcontracted) ⁽¹⁾	CCME PHC-CWS m	Soil	\$2.00
Sampling Syringes	N/A	N/A	\$1.10
Sub-Total			\$12,736.55

COMMENTS:

- Prices quoted do not include applicable taxes.
- All TAT quoted is in business days (TAT is calculated from the time of receipt at the testing laboratory).
- ⁽¹⁾Test Location: Bureau Veritas Calgary (19th)
- ⁽²⁾Test Location: Bureau Veritas Calgary (41st)
- Pricing for any analyses sent to a facility outside the BV network is set by the subcontract lab and is therefore subject to change.
- Unless otherwise agreed to in writing, quotations and services are subject to Bureau Veritas' standard Terms and Conditions, which are available at www.bvna.com.

May 10, 2024

Reference No. G2S24100

Viktor Kopetsky
Senior Remediation Engineer
YORK1
5090 Commerce Boulevard, Suite 200
Mississauga, Ontario
L4W 5M4

**Budgetary Cost Estimate
Soil Characterization Reports (SCRs)
Various Sites – Barrie, Ontario**

1.0 Introduction

G2S Consulting Inc. (G2S) is pleased to provide a cost estimate to complete Soil Characterization Reports (SCRs) for various properties located within 150 km of Barrie, Ontario.

2.0 Objectives and Scope of Work

The Ministry of the Environment, Conservation and Parks (MECP) introduced a new On-Site and Excess Soil Management Regulation (O. Reg. 406/19, as amended) and Rules for Soil Management and Excess Soil Quality Standards, December 8, 2020. The regulation changes the definition of soil as a waste unless it is being transported for beneficial reuse. Soil quality must meet the new Excess Soil Quality Standards (ESQS) and the quantity of soil must be consistent with the beneficial reuse specified for a Reuse Site (Receiving Site).

Under O. Reg. 406/19, the following steps are required for non-exempt projects:

- **Step 1:** Preparation of an Assessment of Past Uses (APU) Report,
- **Step 2:** Preparation and Implementation of a Sampling and Analysis Plan (SAP),
- **Step 3:** Preparation of a Soil Characterization Report (SCR),
- **Step 4:** Preparation of an Excess Soil Destination Assessment Report (ESDAR), and
- **Step 5:** Development and Implementation of a Tracking System.

It is noted that Steps 1 to 4 must be conducted or supervised by the Source Site Qualified Person (QP) such as G2S. Step 5 can be undertaken or overseen by the Source Site Project Leader.

Sampling Requirements

The new Excess Soil Regulation specifies the minimum number of samples required and parameters to be tested, based on volume as well as sampling approach (in situ versus stockpiles).

G2S proposes to obtain soil samples and samples for chemical testing in accordance with the sampling requirements outlined in O.Reg 406/19. Despite any chemical testing program, ultimate acceptance of excess soil lies with the Reuse Site (Receiving Site) and their written approval to receive the material, based on review of the reports provided. In this regard, additional sampling and testing may be requested depending on the Reuse Site.

G2S's scope of work will include the following tasks:

- Collection of soil samples.
- Submission of representative soil samples to a Canadian Association for Laboratory Accreditation Inc. (CALA) accredited laboratory for analysis.
- Preparation of a Soil Characterization Report.

3.0 Methodology

A G2S technician will log the soil conditions at each sample location and transport the samples back to the G2S offices for further review. Samples will be examined for visual and olfactory indicators of contamination. A Photo Ionization Detector (PID) or equivalent will be used to screen the soil samples for Total Organic Vapour (TOV).

The proposed analytical suite will include the parameters outlined in O. Reg. 406/19. It is noted the recommended analyses may change based on observations made during sample collection and on the actual volume of excess soil to be generated at the Project Area. The soil samples will be tested by a third-party accredited laboratory.

G2S will prepare a Soil Characterization Report (SCR), which will include:

- Introduction and background information,
- Scope of the investigation, including methodology,
- Review and evaluation of the results,
- Figures and tables comparing the data to O. Reg. 153/04, as amended and O. Reg. 406/19, as amended criteria for on-site and/or off-site reuse,
- Site plan showing sample locations,
- Laboratory Certificates of Analysis, and
- Conclusions and recommendations.

Based on G2S's proposed scope of work, the estimated cost for each property is outlined in the following table:

Table 1: Cost Estimate (per property sampled)

Item	Description	Fees	Disbursements
1	Field Staff* • Collection and Preparation of Soil Samples	\$750	\$0
2	Chemical Analyses	Client to pay direct	
3	Report Preparation and Project Management • Preparation of SCR	\$1,900	\$0
4	Expenses & Disbursements • Mileage, consumables, courier, rentals, etc.	\$0	\$400
<i>Sub-total</i>		<i>\$2,650</i>	<i>\$400</i>
Total for SCR (Excluding HST)		\$3,050	

* Assumes samples can be collected during a 4-hour Site visit. Unit rates will apply to time spent on Site greater than 4 hours.

4.0 Scheduling

G2S is prepared to commence work on this project immediately upon receiving your written authorization to proceed. The following outlines G2S's anticipated timelines:

Task	Estimated Time to Complete
Field Investigation	1 business day on Site
Laboratory Testing	5 to 7 business days
Report Preparation	2 weeks after completion of field investigation (Results can be provided via email as soon as they are reported by the laboratory)

5.0 Schedule of Rates

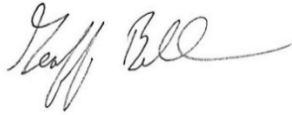
Additional works as authorized by the client (draft reports, meetings, soil/ground water analytical testing, additional consultations etc.) will be completed on a time and disbursement basis. If additional work is required, a budget update will be provided.

6.0 Closing Remarks

G2S would like to thank you for the opportunity to provide this budgetary cost estimate. Should you have any questions regarding this cost estimate, please do not hesitate to contact this office. We look forward to working with you on this assignment.

Yours truly,

G2S Consulting Inc.



Geoff Bell, P.Geo. (Limited)
Principal, Senior Geoscientist



APPENDIX S – PUBLIC NOTIFICATION

Recipients List
for Notifications Regarding Proposed ECA for Waste Recycling Facility
580 Hazelhurst Road, Mississauga, Ontario

<i>No.</i>	<i>Street Address</i>	<i>Owner</i>	<i>Tenant</i>	<i>PIN</i>	<i>Owner's Mailing Address</i>
1	584 Hazelhurst Road	Concor Holdings Inc.	U-Need Storage (Mississauga terminal)	13493-0030	40 Bellini Avenue, Brampton, Ontario, L6P 0E2
2	570 Hazelhurst Road	Lemko Entreprises Inc.	Starline Production Rentals Inc.	13493-0028	Owner - 803 Canyon Street, Mississauga, Ontario, L5H 4M3
3	550 Hazelhurst Road			13493-0027	Tenant - 585 Southdown Rd, Mississauga ON L5J 4V1
4	2875 Lakeshore Road West	The Hydro-Electric Power Commission of Ontario	Vacant	13493-0182	P.O. Box 5700, Markham, Ontario, L3R 1C8
5	No municipal address	CRH Canada Group Inc.	Vacant	13493-0198	2300 Steeles Avenue West, 4th floor Concord, Ontario, L4K 5X6

July 21, 2025

Mr. Bogdan Demkowicz
Lemko Enterprises Inc.
803 Canyon Street
Mississauga, Ontario L5H 4M3

Re: **Notification to Lemko Enterprises Inc., the Owner of 550 and 570 Hazelhurst Road, Mississauga
PINs 13493-0027, 13493-0028
Proposed YORK1 Hazelhurst Recycling Facility at 580 Hazelhurst Road, Mississauga**

Dear Mr. Demkowicz:

This is to notify you that **YORK1 Environmental Waste Solutions Ltd. as General Partner for and on behalf of YORK1 Environmental Waste Solutions Depot LP**, is planning to commence the operation of the YORK1 Hazelhurst Recycling Facility at the following location: 580 Hazelhurst Road in Mississauga, Ontario.

The YORK1 Hazelhurst Recycling Facility will be operating under Environmental Compliance Approval from the Ministry of the Environment, Conservation and Parks. The following waste will be accepted for processing into alternative low-carbon fuel (ALCF): solid non-hazardous waste from residential, industrial, commercial, and institutional sources, including construction and demolition waste, metal waste, asphalt shingles, drywall, plastics, tires, and blue box recyclable materials. In addition, excess soil and rock for beneficial reuse will be accepted, re-sampled if required, and hauled to final receivers. Mixed non-hazardous waste, including blue box recyclable materials, will be received and processed within the enclosed processing/transfer building with implemented measures to mitigate any potential environmental impact to the environment.

The waste processing will include screening, sorting, segregation, and compaction. Waste processing into ALCF will include separation, grinding, and shredding.

If you have any questions/concerns/objections regarding the proposed YORK1 Hazelhurst Recycling Facility, please contact us at questions@the-recycling-depot.com.

You can also send your comments by e-mail to the Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, at the following e-mail address:

wasteproposalcomments@ontario.ca, or send written comments to Mohsen Keyvani, P.Eng., Director, Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, 135 St. Clair Avenue West, Toronto, ON M4V 1P5 within fifteen (15) days of the receipt of this notification letter to have your comments or concerns considered as part of the ECA application review process.

Sincerely,



George Kirchmair, P.Eng.
Executive Vice President, Strategic Development

July 21, 2025

Director
Starline Production Rentals Inc.
585 Southdown Road
Mississauga, Ontario L5J 4V1

Re: **Notification to Starline Production Rentals Inc., the Tenant of 550 and 570 Hazelhurst Road, Mississauga**
PINs 13493-0027, 13493-0028
Proposed YORK1 Hazelhurst Recycling Facility at 580 Hazelhurst Road, Mississauga

Dear Sir/Madam:

This is to notify you that **YORK1 Environmental Waste Solutions Ltd. as General Partner for and on behalf of YORK1 Environmental Waste Solutions Depot LP**, is planning to commence the operation of the YORK1 Hazelhurst Recycling Facility at the following location: 580 Hazelhurst Road in Mississauga, Ontario.

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wasteproposalcomments@ontario.ca, or send written comments to Mohsen Keyvani, P.Eng., Director, Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, 135 St. Clair Avenue West, Toronto, ON M4V 1P5 within fifteen (15) days of the receipt of this notification letter to have your comments or concerns considered as part of the ECA application review process.

Sincerely,



George Kirchmair, P.Eng.
Executive Vice President, Strategic Development

July 21, 2025

Mr. Marino Kulas, Director
Concor Holdings Inc.
40 Bellini Avenue
Brampton, Ontario L6P 0E2

Re: **Notification to Concor Holdings Inc., the Owner of 584 Hazelhurst Road, Mississauga
PIN 13493-0030
Proposed YORK1 Hazelhurst Recycling Facility at 580 Hazelhurst Road, Mississauga**

Dear Mr. Kulas:

This is to notify you that **YORK1 Environmental Waste Solutions Ltd. as General Partner for and on behalf of YORK1 Environmental Waste Solutions Depot LP**, is planning to commence the operation of the YORK1 Hazelhurst Recycling Facility at the following location: 580 Hazelhurst Road in Mississauga, Ontario.

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You can also send your comments by e-mail to the Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, at the following e-mail address:

wasteproposalcomments@ontario.ca, or send written comments to Mohsen Keyvani, P.Eng., Director, Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, 135 St. Clair Avenue West, Toronto, ON M4V 1P5 within fifteen (15) days of the receipt of this notification letter to have your comments or concerns considered as part of the ECA application review process.

Sincerely,



George Kirchmair, P.Eng.
Executive Vice President, Strategic Development

July 21, 2025

Manager
U-Need Storage (Mississauga Terminal)
584 Hazelhurst Road
Mississauga, Ontario L5J 2Z7

Re: **Notification to U-Need Storage (Mississauga terminal), the Tenant of
584 Hazelhurst Road, Mississauga
PIN 13493-0030
Proposed YORK1 Hazelhurst Recycling Facility at 580 Hazelhurst Road, Mississauga**

Dear Sir/Madam:

This is to notify you that **YORK1 Environmental Waste Solutions Ltd. as General Partner for and on behalf of YORK1 Environmental Waste Solutions Depot LP**, is planning to commence the operation of the YORK1 Hazelhurst Recycling Facility at the following location: 580 Hazelhurst Road in Mississauga, Ontario.

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You can also send your comments by e-mail to the Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, at the following e-mail address:

wasteproposalcomments@ontario.ca, or send written comments to Mohsen Keyvani, P.Eng., Director, Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, 135 St. Clair Avenue West, Toronto, ON M4V 1P5 within fifteen (15) days of the receipt of this notification letter to have your comments or concerns considered as part of the ECA application review process.

Sincerely,



George Kirchmair, P.Eng.
Executive Vice President, Strategic Development

July 21, 2025

Director
CRH Canada Group Inc.
2300 Steeles Avenue West, 4th floor
Concord, Ontario, L4K 5X6

Re: **Notification to CRH Canada Group Inc., the Owner of Land to the East of
580 Hazelhurst Road, Mississauga
PIN 13493-0198
Proposed YORK1 Hazelhurst Recycling Facility at 580 Hazelhurst Road, Mississauga**

Dear Sir/Madam:

This is to notify you that **YORK1 Environmental Waste Solutions Ltd. as General Partner for and on behalf of YORK1 Environmental Waste Solutions Depot LP**, is planning to commence the operation of the YORK1 Hazelhurst Recycling Facility at the following location: 580 Hazelhurst Road in Mississauga, Ontario.

The YORK1 Hazelhurst Recycling Facility will be operating under Environmental Compliance Approval from the Ministry of the Environment, Conservation and Parks. The following waste will be accepted for processing into alternative low-carbon fuel (ALCF): solid non-hazardous waste from residential, industrial, commercial, and institutional sources, including construction and demolition waste, metal waste, asphalt shingles, drywall, plastics, tires, and blue box recyclable materials. In addition, excess soil and rock for beneficial reuse will be accepted, re-sampled if required, and hauled to final receivers. Mixed non-hazardous waste, including blue box recyclable materials, will be received and processed within the enclosed processing/transfer building with implemented measures to mitigate any potential environmental impact to the environment.

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If you have any questions/concerns/objections regarding the proposed YORK1 Hazelhurst Recycling Facility, please contact us at questions@the-recycling-depot.com.

You can also send your comments by e-mail to the Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, at the following e-mail address:

wasteproposalcomments@ontario.ca, or send written comments to Mohsen Keyvani, P.Eng., Director, Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, 135 St. Clair Avenue West, Toronto, ON M4V 1P5 within fifteen (15) days of the receipt of this notification letter to have your comments or concerns considered as part of the ECA application review process.

Sincerely,



George Kirchmair, P.Eng.
Executive Vice President, Strategic Development

July 21, 2025

Director
The Hydro-Electric Power Commission of Ontario
P.O. Box 5700,
Markham, Ontario, L3R 1C8

Re: **Notification to The Hydro-Electric Power Commission of Ontario, the Owner of Land adjacent to 580 Hazelhurst Road, Mississauga
PIN 13493-0182
Proposed YORK1 Hazelhurst Recycling Facility at 580 Hazelhurst Road, Mississauga**

Dear Sir/Madam:

This is to notify you that **YORK1 Environmental Waste Solutions Ltd. as General Partner for and on behalf of YORK1 Environmental Waste Solutions Depot LP**, is planning to commence the operation of the YORK1 Hazelhurst Recycling Facility at the following location: 580 Hazelhurst Road in Mississauga, Ontario.

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You can also send your comments by e-mail to the Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, at the following e-mail address:

wasteproposalcomments@ontario.ca, or send written comments to Mohsen Keyvani, P.Eng., Director, Environmental Assessment and Permission Branch, Ministry of Environment, Conservation and Parks, 135 St. Clair Avenue West, Toronto, ON M4V 1P5 within fifteen (15) days of the receipt of this notification letter to have your comments or concerns considered as part of the ECA application review process.

Sincerely,



George Kirchmair, P.Eng.
Executive Vice President, Strategic Development



5090 Commerce Boulevard
Mississauga, Ontario, L4W 5M4
905-669-2733

YORK1.com



APPENDIX B

TOR City Correspondance

Appendix A

Certification Form

Individuals submitting reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Mississauga's Official Plan, Transportation Master Plan, and Transportation Impact Study Guidelines.

By submitting the attached report (and any associated documents) and signing this document, I acknowledge that:

- I have reviewed and have a sound understanding of the objectives, needs, and requirements of the City of Mississauga's Official Plan, Transportation Master Plan, and the Transportation Impact Study Guidelines as they apply to this submission;
- I have sound knowledge of industry standard practices pertaining to the preparation of development-related transportation study reports;
- I have substantial experience (more than five years) in completing development-related transportation studies and strong background knowledge of the transportation planning and engineering principles underpinning these studies; and
- I am registered as a Professional Engineer (P.Eng.), Licensed Engineering Technologist (LET), Certified Engineering Technologist (C.E.T.), or Registered Professional Planner (RPP) in good standing in the Province of Ontario with specific training in transportation planning and engineering.

Dated at _____ this _____ day of _____, 20____.
(City) (Day) (Month) (Year)

Name: _____

Professional Title: _____

Signature:  _____

Office Contact Information (Please Print)

Address: 40 University Avenue, Suite 503

City/Postal Code: Toronto, ON | M5J 1T1

Telephone/Extension: 905-470-0015 ext. 379

E-mail Address: DChen@lea.ca

Appendix B

APPROVED

By Natalie Fan at 3:24 pm, Sep 04, 2025

Pre-Study Consultation Checklist

Description	Information	Section Reference
Development Information		
Development Description (land use, size, and number of phases of development)	<p>Phase 1:</p> <ul style="list-style-type: none"> - Proposed Recyclable Materials/Waste processing facility (628 m2) at 580 Hazelhurst Road, Miss. <p>Phase 2:</p> <p>Phase 3:</p>	2.3.6

Description	Information	Section Reference
Transportation Impact Assessment		
Step 1 – Screening		
Type of Application (attach a drawing)	<input checked="" type="checkbox"/> Official Plan Amendment <input checked="" type="checkbox"/> Zoning Amendment <input checked="" type="checkbox"/> Site Plan Control Application <input type="checkbox"/> Plan of Subdivision <input type="checkbox"/> Other _____	2.3.5
Screening Criteria	<input type="checkbox"/> Trip Generation Trigger Satisfied <input type="checkbox"/> Location Trigger Satisfied <input checked="" type="checkbox"/> Operational/Safety Trigger Satisfied	2.2.1
Type of Study	<input type="checkbox"/> Transportation Impact Study <input checked="" type="checkbox"/> Access Review <input type="checkbox"/> No Additional Study Required	2.2.1
Step 2 – Scoping		
Study Area (intersections to be analyzed) Note: The Transportation Consultant is responsible to identify any further intersections impacted as the study progresses.	- 580 Hazelhurst Road Site Access and Hazelhurst Road	2.3.8
Horizon Years	<input type="checkbox"/> 5 years from date of TIS <input type="checkbox"/> Interim years _____ <input checked="" type="checkbox"/> Other N/A; Trip generation only	2.3.9
Analysis Periods	<input checked="" type="checkbox"/> AM weekday peak hour of adjacent roadway <input checked="" type="checkbox"/> PM weekday peak hour of adjacent roadway <input type="checkbox"/> Saturday peak hour of adjacent roadway <input type="checkbox"/> AM weekday peak hour of development <input type="checkbox"/> PM weekday peak hour of development <input type="checkbox"/> Saturday peak hour of development <input type="checkbox"/> Other _____	2.3.10
Input Parameters and Assumptions (potential deviations)		2.3.13
Existing Transportation Conditions	<input checked="" type="checkbox"/> City data sources <input type="checkbox"/> New data collection _____ <input type="checkbox"/> Other _____	2.3.14

Description	Information	Section Reference
Planned Network Improvements (with timing)		2.3.16
Other Planned Developments (per City's Website)		2.3.17
Identification of Mitigation Improvement Measures	<input type="checkbox"/> Neighbourhood Traffic Management Plan <input checked="" type="checkbox"/> Other <u>Please describe mitigation improvement measures within the report</u>	2.3.23
Safety Analysis (any special issues)	Access Review of new proposed northerly access	2.3.25
Site Access and Circulation (design vehicles)	<input checked="" type="checkbox"/> Passenger Car (P) <input type="checkbox"/> Light Single Unit Truck (LSU) <input type="checkbox"/> Medium Single Unit Truck (MSU) <input type="checkbox"/> Heavy Single Unit Truck (HSU) <input type="checkbox"/> Pumper Fire Truck <input checked="" type="checkbox"/> WB-20 Tractor Semi-Trailer Truck <input type="checkbox"/> Peel Region Waste Collection Truck <input type="checkbox"/> Other: _____	2.3.26
Impacts During Construction (any special issues)	-	2.3.27
Step 3 – Forecasting		
Growth Rate	<input type="checkbox"/> Obtained from City <input type="checkbox"/> Historical Traffic Counts <input type="checkbox"/> Travel Demand Forecasts <input checked="" type="checkbox"/> Proposed Growth Rate: <u>N/A</u>	2.3.15
Site Trip Generation	<input checked="" type="checkbox"/> ITE Trip Generation Manual <input type="checkbox"/> "First Principles" <input checked="" type="checkbox"/> Observed Rates from Similar Developments in Area <input type="checkbox"/> Observed Rates from Subject Site <input type="checkbox"/> Other _____	2.3.19

Description	Information	Section Reference
Trip Reductions	<input type="checkbox"/> Internal Capture Reductions for Mixed Use Development <input type="checkbox"/> Non-Auto Mode Split <input type="checkbox"/> Pass-by Reductions <input checked="" type="checkbox"/> Other N/A	2.3.19
Trip Distribution	<input checked="" type="checkbox"/> Local Traffic Patterns <input checked="" type="checkbox"/> TTS <input type="checkbox"/> Travel Demand Model <input type="checkbox"/> Population and Employment Distribution <input type="checkbox"/> Market Analysis of Catchment Area <input type="checkbox"/> Other _____	2.3.20
Trip Assignment	<input type="checkbox"/> Local Traffic Patterns <input type="checkbox"/> Shortest distance <input checked="" type="checkbox"/> Site Layout, Access Design and Logical Routing <input type="checkbox"/> Existing Turning Movements <input type="checkbox"/> Other _____	2.3.21
Transportation Demand Management Plan		
Format	<input checked="" type="checkbox"/> Within a TIA Report <input type="checkbox"/> Standalone	3.2.1
Type of Transportation Demand Management Plan	<input checked="" type="checkbox"/> TDM Statement <input type="checkbox"/> TDM Scheme	3.2.2
Pedestrian Circulation Plan		
Format	<input checked="" type="checkbox"/> Within a TIA Report <input type="checkbox"/> Standalone	4.2.1
Additional Comments		
<p>- Related files: DARC 24-58 W2, PAM 25-117 W2</p> <p>- Applicant shall review removal of existing access and consolidation of proposed new northerly access. Please note DARC 24-58 W2 Comment #39, which reads:</p> <p>(a) To support the addition of the proposed wider northern access, the southerly access shall be removed in alignment with the City's Official Plan and TIS Guidelines.</p> <p>(b) The Owner shall ensure that the proposed access does not conflict with the existing access to the adjacent property to the north. To accomplish this, plans may need to be revised to shift the northerly access further south.</p> <p>(c) The Owner shall ensure the proposed access provides sufficient sight lines such that views are not obstructed at the intersection.</p> <p>- As per the Mississauga TIS Guidelines Version 5.1, Section 3.2, all proponents must prepare a TDMP as part of a complete application for all development proposals. In this case, a TDM Statement outlining TDM measures that will be incorporated into the proposed development is required.</p> <p>- As per the Mississauga TIS Guidelines Version 5.1, Section 4.2, all proponents are required to prepare a PCP as part of a complete application for all development proposals. (Reference DARC 24-58 W2 Comment #36 regarding sidewalk)</p>		



RE: 580 Hazelhurst Rd, Miss Terms of Reference

From Natalie Fan <Natalie.Fan@mississauga.ca>

Date Thu 9/4/2025 3:38 PM

To Harkarandeep Bains <HBains@lea.ca>

Cc Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>; Trans Projects <Trans.Projects@mississauga.ca>

 1 attachment (211 KB)

Appendix A Certification Form.pdf;

External Sender

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Harkarandeep,

Attaching the Certification Form.

Thank you,



Natalie Fan, P.Eng.

Traffic Planning Coordinator

905-615-3200 Ext. 5089

Natalie.Fan@mississauga.ca

[City of Mississauga](#) | Transportation & Works Department

300 City Centre Drive | Mississauga ON | L5B 3C1

From: Natalie Fan <Natalie.Fan@mississauga.ca>

Sent: Thursday, September 4, 2025 3:28 PM

To: Harkarandeep Bains <HBains@lea.ca>

Cc: Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>; Trans Projects <Trans.Projects@mississauga.ca>

Subject: RE: 580 Hazelhurst Rd, Miss Terms of Reference

Hi Harkarandeep,

Please find attached the revised and approved Pre-Study Consultation Checklist (ToR) for the proposed development, which encompasses City comments. Other items to note:

- **Certification Form** - The Transportation Consultant must complete, sign, and seal (if appropriate) the attached Certification Form from the City's TIS Guidelines (2022) and append the document to the report to ensure compliance with qualification requirements. The TIS Guidelines can be found at <https://www.mississauga.ca/wp-content/uploads/2023/03/CMississauga-TIS-Guidelines-Version-5.1-Dec-2022.pdf> . It must be ensured that the report conforms to the City's TIS Guidelines.
- **Growth Rates/Traffic Data** - Please contact Tyler Xuereb from the City's Transportation Planning Section (tyler.xuereb@mississauga.ca, Ext. 4783) to confirm growth rates and/or obtain traffic data for the study area roadways. Please include the correspondence with the city confirming the growth rates in the TIS appendices.
- **ToR Document and Correspondence** - Please include the ToR approved by the city in the TIS appendices as well as any relevant additional correspondence with Traffic Planning staff, if applicable.

Thank you,



Natalie Fan, P.Eng.

Traffic Planning Coordinator

905-615-3200 Ext. 5089

Natalie.Fan@mississauga.ca

[City of Mississauga](#) | Transportation & Works Department

300 City Centre Drive | Mississauga ON | L5B 3C1

From: Harkarandeep Bains <HBains@lea.ca>

Sent: Wednesday, September 3, 2025 1:33 PM

To: Trans Projects <Trans.Projects@mississauga.ca>; Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>

Cc: Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>

Subject: [EXTERNAL] Re: 580 Hazelhurst Rd, Miss Terms of Reference

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Cyrus,

Just following up on the below.

Sincerely,

Harkarandeep Bains, EIT

Project Coordinator

LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor | Markham, ON | L3R 9R9

T: 905-470-0015 ext. 243 E: hbains@lea.ca W: www.LEA.ca





RE: 580 Hazelhurst Rd, Miss Terms of Reference

From Natalie Fan <Natalie.Fan@mississauga.ca>

Date Fri 9/19/2025 4:52 PM

To Harkarandeep Bains <HBains@lea.ca>

Cc Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>; Trans Projects <Trans.Projects@mississauga.ca>

External Sender

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Hi Harkarandeep,

In consideration of the site context and proposed development, I understand that a Pedestrian Circulation Plan may not be applicable. Given that the TIS Guidelines does specify a requirement for a PCP, I would recommend noting in the report that the frontage of the site currently does not have a sidewalk, but that a CIL in place of sidewalk will be provided to enable realization of a future sidewalk consistent with the Pedestrian Master Plan. A similar approach could be applied to TDM measures as well, as the proposed scope is anticipated to have little impact or no impact to the adjacent transportation network.

Hope that clarifies things!

Thank you,



Natalie Fan, P.Eng.

Traffic Planning Coordinator

905-615-3200 Ext. 5089

Natalie.Fan@mississauga.ca

[City of Mississauga](#) | Planning & Building Department

300 City Centre Drive | Mississauga ON | L5B 3C1

From: Harkarandeep Bains <HBains@lea.ca>

Sent: Wednesday, September 17, 2025 10:24 AM

To: Natalie Fan <Natalie.Fan@mississauga.ca>

Cc: Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>; Trans Projects <Trans.Projects@mississauga.ca>

Subject: [EXTERNAL] Re: 580 Hazelhurst Rd, Miss Terms of Reference

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hey Natalie,

Thank you for these comments. I just wanted further clarification on the request for a Pedestrian Circulation Plan. Given the context of the site, could you please let me know if this is required? If so, could you please let me know what you are looking for as there is no existing sidewalk within this industrial area.

Sincerely,

Harkarandeep Bains, EIT

Project Coordinator

LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor | Markham, ON | L3R 9R9

T: 905-470-0015 ext. 243 E: hbains@lea.ca W: www.LEA.ca



From: Natalie Fan <Natalie.Fan@mississauga.ca>

Sent: Thursday, September 4, 2025 3:37 PM

To: Harkarandeep Bains <HBains@lea.ca>

Cc: Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>; Trans Projects <Trans.Projects@mississauga.ca>

Subject: RE: 580 Hazelhurst Rd, Miss Terms of Reference

External Sender

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Harkarandeep,

Attaching the Certification Form.

Thank you,



Natalie Fan, P.Eng.

Traffic Planning Coordinator

905-615-3200 Ext. 5089

Natalie.Fan@mississauga.ca

[City of Mississauga](http://CityofMississauga) | Transportation & Works Department

300 City Centre Drive | Mississauga ON | L5B 3C1

From: Natalie Fan <Natalie.Fan@mississauga.ca>

Sent: Thursday, September 4, 2025 3:28 PM

To: Harkarandeep Bains <HBains@lea.ca>
Cc: Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>; Trans Projects <Trans.Projects@mississauga.ca>
Subject: RE: 580 Hazelhurst Rd, Miss Terms of Reference

Hi Harkarandeep,

Please find attached the revised and approved Pre-Study Consultation Checklist (ToR) for the proposed development, which encompasses City comments. Other items to note:

- **Certification Form** - The Transportation Consultant must complete, sign, and seal (if appropriate) the attached Certification Form from the City's TIS Guidelines (2022) and append the document to the report to ensure compliance with qualification requirements. The TIS Guidelines can be found at <https://www.mississauga.ca/wp-content/uploads/2023/03/CMississauga-TIS-Guidelines-Version-5.1-Dec-2022.pdf>. It must be ensured that the report conforms to the City's TIS Guidelines.
- **Growth Rates/Traffic Data** - Please contact Tyler Xuereb from the City's Transportation Planning Section (tyler.xuereb@mississauga.ca, Ext. 4783) to confirm growth rates and/or obtain traffic data for the study area roadways. Please include the correspondence with the city confirming the growth rates in the TIS appendices.
- **ToR Document and Correspondence** - Please include the ToR approved by the city in the TIS appendices as well as any relevant additional correspondence with Traffic Planning staff, if applicable.

Thank you,



Natalie Fan, P.Eng.
Traffic Planning Coordinator
905-615-3200 Ext. 5089
Natalie.Fan@mississauga.ca

[City of Mississauga](#) | Transportation & Works Department
300 City Centre Drive | Mississauga ON | L5B 3C1

From: Harkarandeep Bains <HBains@lea.ca>
Sent: Wednesday, September 3, 2025 1:33 PM
To: Trans Projects <Trans.Projects@mississauga.ca>; Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>
Cc: Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>
Subject: [EXTERNAL] Re: 580 Hazelhurst Rd, Miss Terms of Reference

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Cyrus,

Just following up on the below.

Sincerely,
Harkarandeep Bains, EIT
Project Coordinator

LEA Consulting Ltd.625 Cochrane Drive, 5th Floor | Markham, ON | L3R 9R9T: 905-470-0015 ext. 243 E: hbains@lea.ca W: www.LEA.ca

From: Harkarandeep Bains <HBains@lea.ca>**Sent:** Tuesday, August 26, 2025 12:05 PM**To:** trans.projects@mississauga.ca <trans.projects@mississauga.ca>; Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>**Cc:** Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>**Subject:** Re: 580 Hazelhurst Rd, Miss Terms of Reference

Hey Cyrus,

Thank you for the correct contact information and helping with the process of approval.

I have filled out the attached TOR checklist as requested! Please let me know if you require anything else from my end!

Sincerely,

Harkarandeep Bains, EIT

Project Coordinator

LEA Consulting Ltd.625 Cochrane Drive, 5th Floor | Markham, ON | L3R 9R9T: 905-470-0015 ext. 243 E: hbains@lea.ca W: www.LEA.ca

From: Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>**Sent:** Friday, August 22, 2025 8:37 AM**To:** Harkarandeep Bains <HBains@lea.ca>**Cc:** Debang Chen <DChen@lea.ca>; Nancy Sun <Nancy.Sun@mississauga.ca>**Subject:** RE: 580 Hazelhurst Rd, Miss Terms of Reference

External Sender

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Good morning Harkarandeep,

I am no longer with traffic planning, so I would not be able to provide comments on your terms of reference. However, I'd be happy to help you in the process of approval. I have attached the City's TOR checklist (Appendix B of the TIS Guidelines). Please fill this out for your specific site and return it to trans.projects@mississauga.ca. From there, a traffic planner will review and provide comments if

necessary and approve the document. Please do not move forward with your review/study until you receive approval from City staff.

I hope this helps!

Thank you,



Cyrus Hiranandani, P.Eng.

Coordinator, Transportation Projects

T 905-615-3200 ext. 4363

cyrus.hiranandani@mississauga.ca

[City of Mississauga](#) | Transportation and Works,
Infrastructure Planning and Engineering Services Division

From: Harkarandeep Bains <HBains@lea.ca>
Sent: Thursday, August 21, 2025 4:03 PM
To: Cyrus Hiranandani <Cyrus.Hiranandani@mississauga.ca>
Cc: Debang Chen <DChen@lea.ca>
Subject: [EXTERNAL] 580 Hazelhurst Rd, Miss Terms of Reference

[CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.]

Hi Cyrus

Hope you are doing well. My name is Harkarandeep Bains and I am a Project Coordinator at LEA Consulting Ltd. I am reaching out to you in regards of the following Terms of Reference.

Detailed below is a work plan for the transportation work required in support of a proposed development at 580 Hazelhurst Road, Mississauga. A pre-application meeting has also been held to discuss this project (Project # DARC 24-58 W2). The proposed development consists of a recyclable materials/waste processing facility with a GFA of 6,765 sqft. Access to the subject site is proposed via a single driveway off Hazelhurst Road. The Transportation works for this development will be conducted in accordance with the city of Mississauga Transportation Impact Study Guidelines (December 2022). Detailed below are the study assumptions requiring confirmation from the City.

Note: Given the scale of the development (less than 5,000 m2), LEA will perform an access review which will highlight the following chapters:

1. Cover Letter or Signature Page (Ch.2.3.2)
2. Introduction (Ch.2.3.5)
3. Development Description (Ch.2.3.6)
4. Study Area (Ch 2.3.8)
5. Analysis Period (Ch. 2.3.10)
6. Existing Transportation Networks (Ch.2.3.11)
7. Existing Transportation Conditions (Ch.2.3.14)
8. Site Trip Generation and Mode Share (Ch.2.3.19)
9. Site Trip Distribution (Ch2.3.20)
10. Mitigation measure (if required)
11. Safety Analysis/Site Access Circulation (Ch2.3.26-27)

12. Conclusion and recommendations (Ch.2.3.29)

Please let me know if you have any questions or comments regarding this terms of reference.

Sincerely,

Harkarandeep Bains, EIT

Project Coordinator

LEA Consulting Ltd.

625 Cochrane Drive, 5th Floor | Markham, ON | L3R 9R9

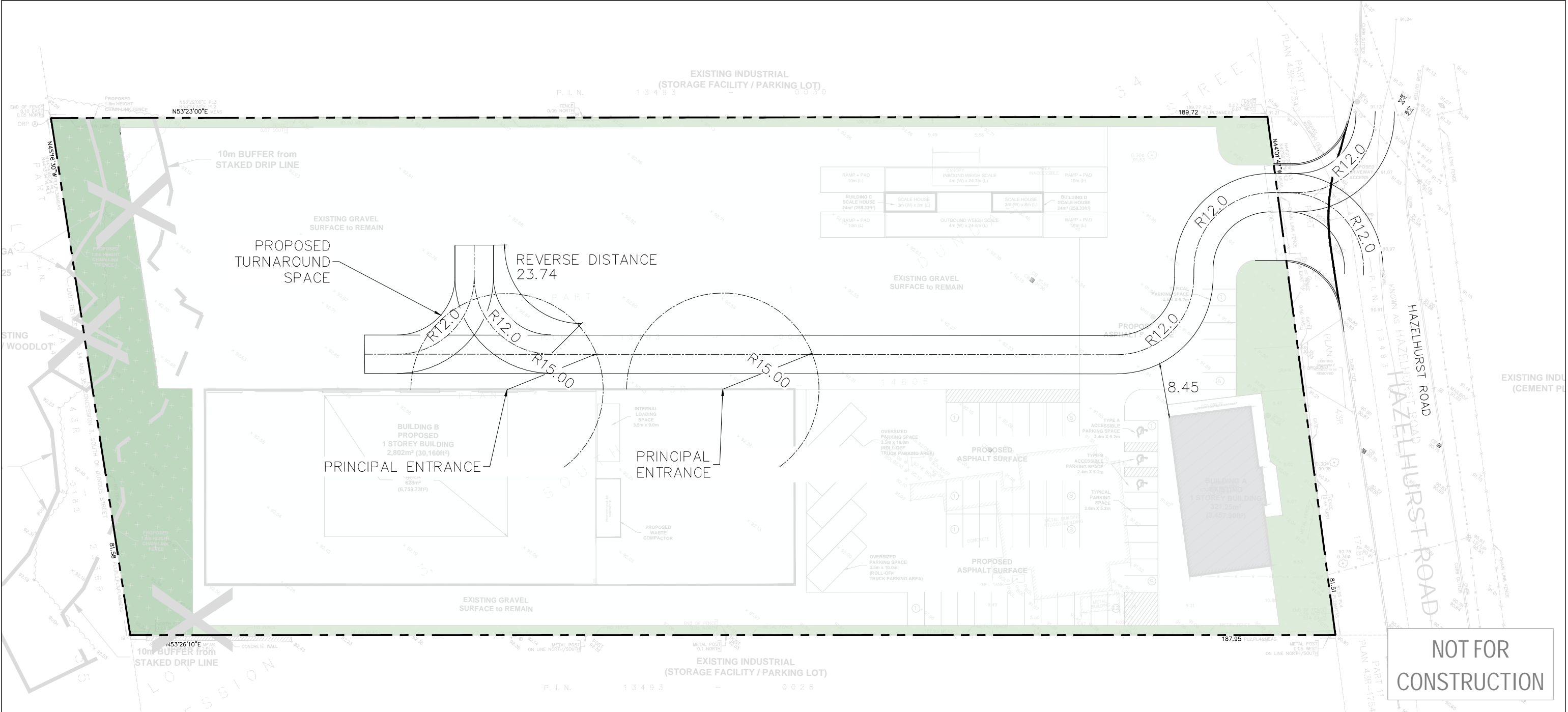
T: 905-470-0015 ext. 243 E: hbains@lea.ca W: www.LEA.ca





APPENDIX C


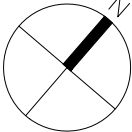

Functional Design Review

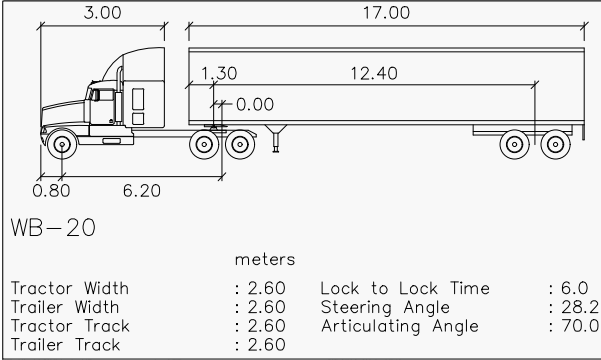


ONTARIO BUILDING CODE – FIRE ACCESS ROUTE:

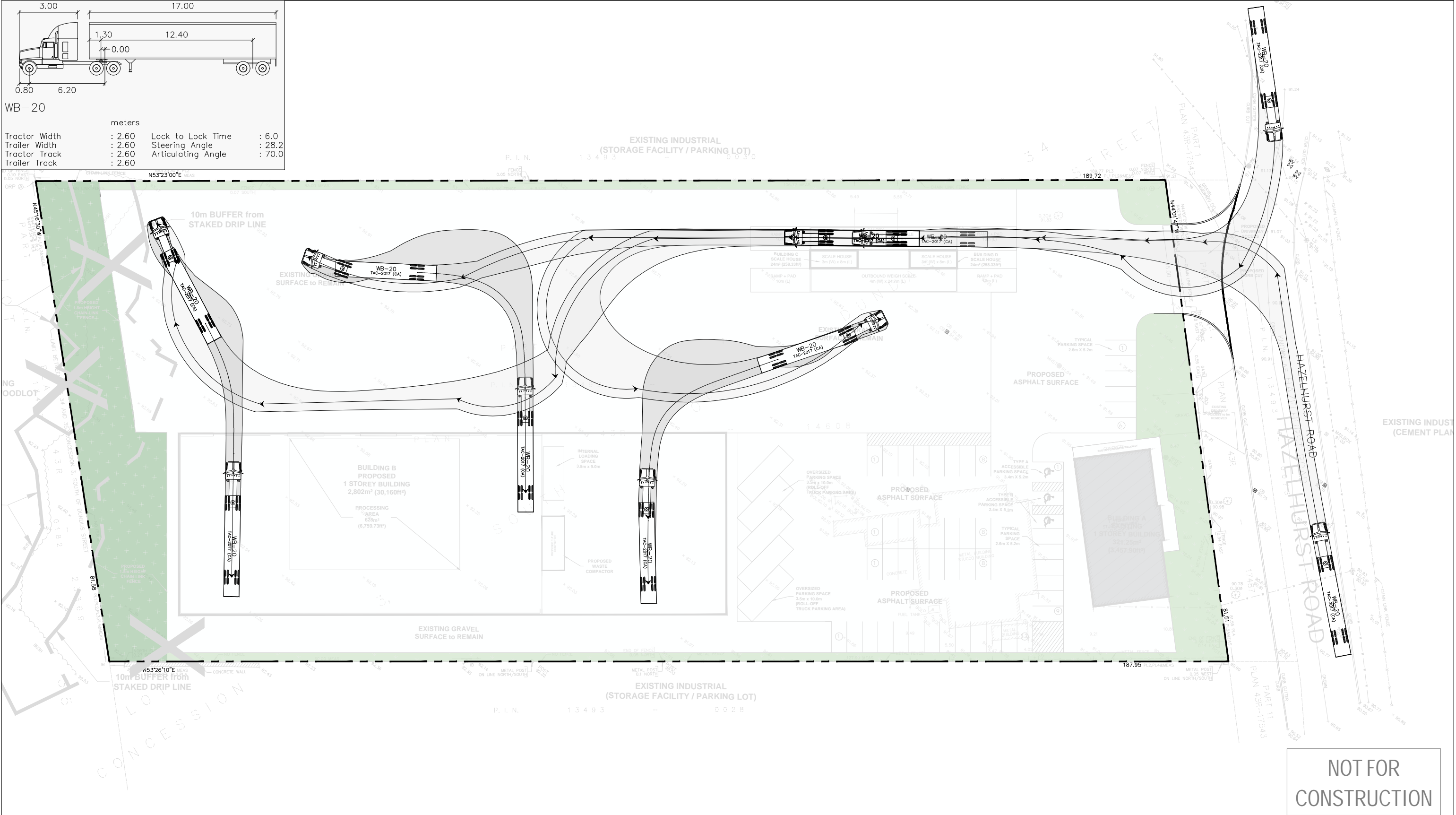
PER ONTARIO BUILDING CODE SECTION 3.2.5.6

1. A PORTION OF A ROADWAY OR YARD PROVIDED AS A REQUIRED ACCESS ROUTE FOR FIRE DEPARTMENT USE SHALL:
- a. HAVE A CLEAR WIDTH NOT LESS THAN 6m, UNLESS IT CAN BE SHOWN THAT LESSER WIDTHS ARE SATISFACTORY;
 - b. HAVE A CENTRELINE RADIUS NOT LESS THAN 12m;
 - c. HAVE AN OVERHEAD CLEARANCE NOT LESS THAN 5m;
 - d. HAVE A CHANGE OF GRADIENT NOT MORE THAN 1 IN 12.5 OVER A MINIMUM DISTANCE OF 15m;
 - e. BE DESIGNED TO SUPPORT THE EXPECTED LOADS IMPOSED BY FIREFIGHTING EQUIPMENT AND BE SURFACED WITH CONCRETE, ASPHALT OR OTHER MATERIAL DESIGNED TO PERMIT ACCESSIBILITY UNDER ALL CLIMATIC CONDITIONS;
 - f. HAVE TURNAROUND FACILITIES FOR ANY DEAD-END PORTION OF THE ACCESS ROUTE MORE THAN 90m LONG AND;
 - g. BE CONNECTED WITH A PUBLIC THROUGHFARE.

<div>LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca</div> 		Project No. 26160	<div>580 HAZELHURST RD MISSISSAUGA ONTARIO</div>  1:600	GROUND FLOOR – FIRE ROUTE	Drawing No. 002
		Date NOV 12, 2025			

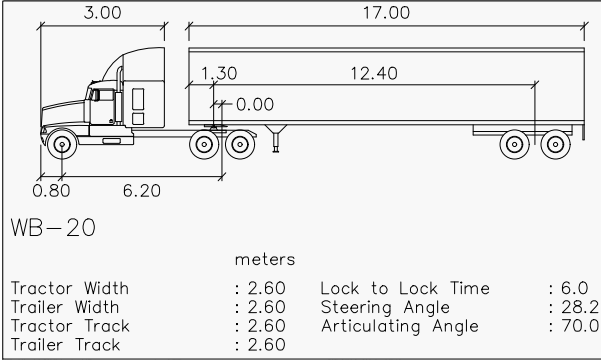


WB-20		
	meters	
Tractor Width	: 2.60	Lock to Lock Time : 6.0
Trailer Width	: 2.60	Steering Angle : 28.2
Tractor Track	: 2.60	Articulating Angle : 70.0
Trailer Track	: 2.60	

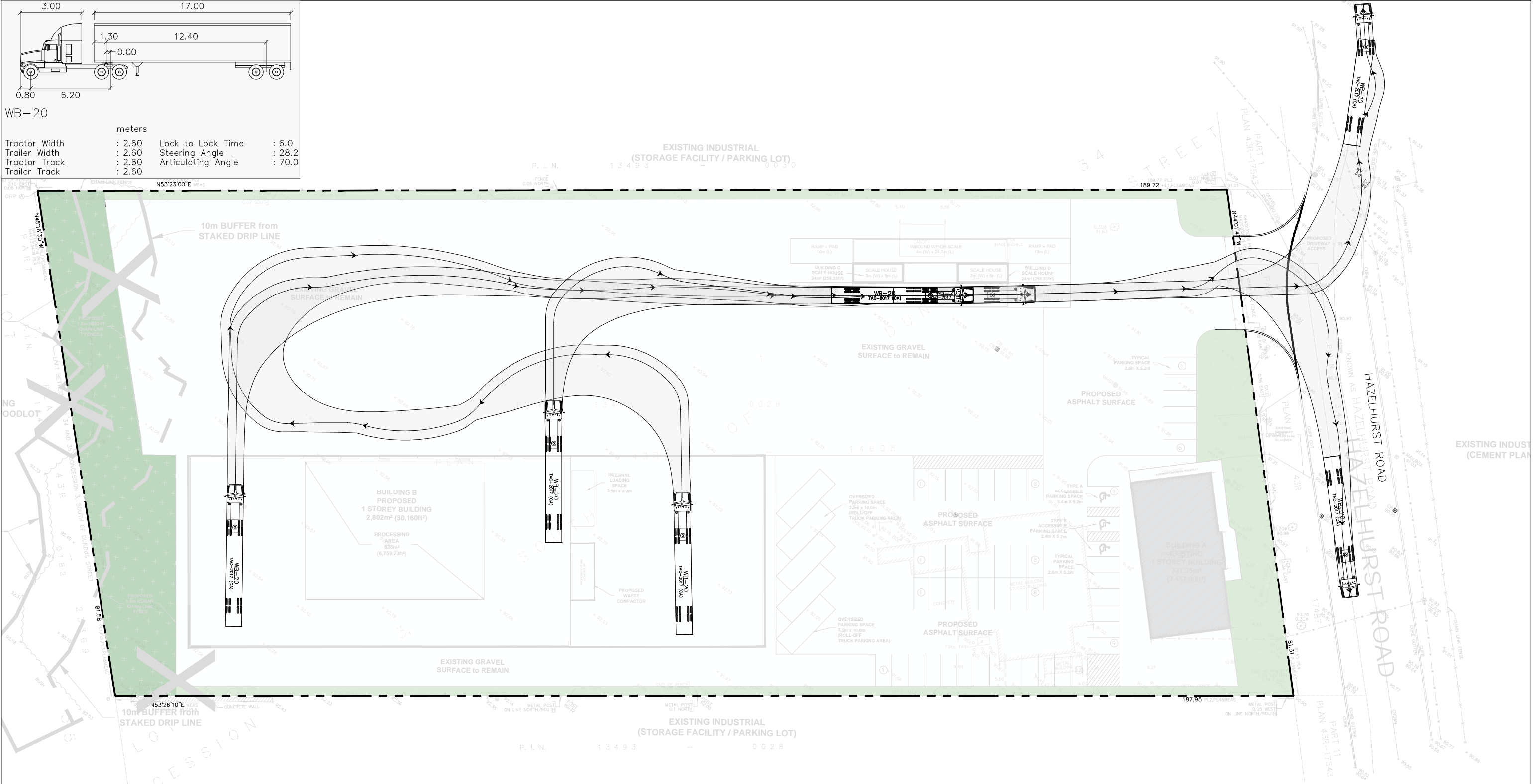


NOT FOR
CONSTRUCTION

<div>LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca</div> <div></div>	<div></div>	<div>Project No. 26160</div> <div>Date NOV 12, 2025</div>	<div>580 HAZELHURST RD MISSISSAUGA ONTARIO</div> <div> 1:600</div>	<div>LOADING REVIEW WB-20 TRUCK SWEEP PATH ENTRY PATHS</div>	<div>Drawing No. 003</div>
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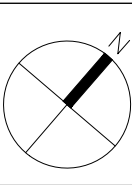


WB-20	meters			
Tractor Width	: 2.60	Lock to Lock Time	: 6.0	
Trailer Width	: 2.60	Steering Angle	: 28.2	
Tractor Track	: 2.60	Articulating Angle	: 70.0	
Trailer Track	: 2.60			



NOT FOR
CONSTRUCTION

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www.LEA.ca



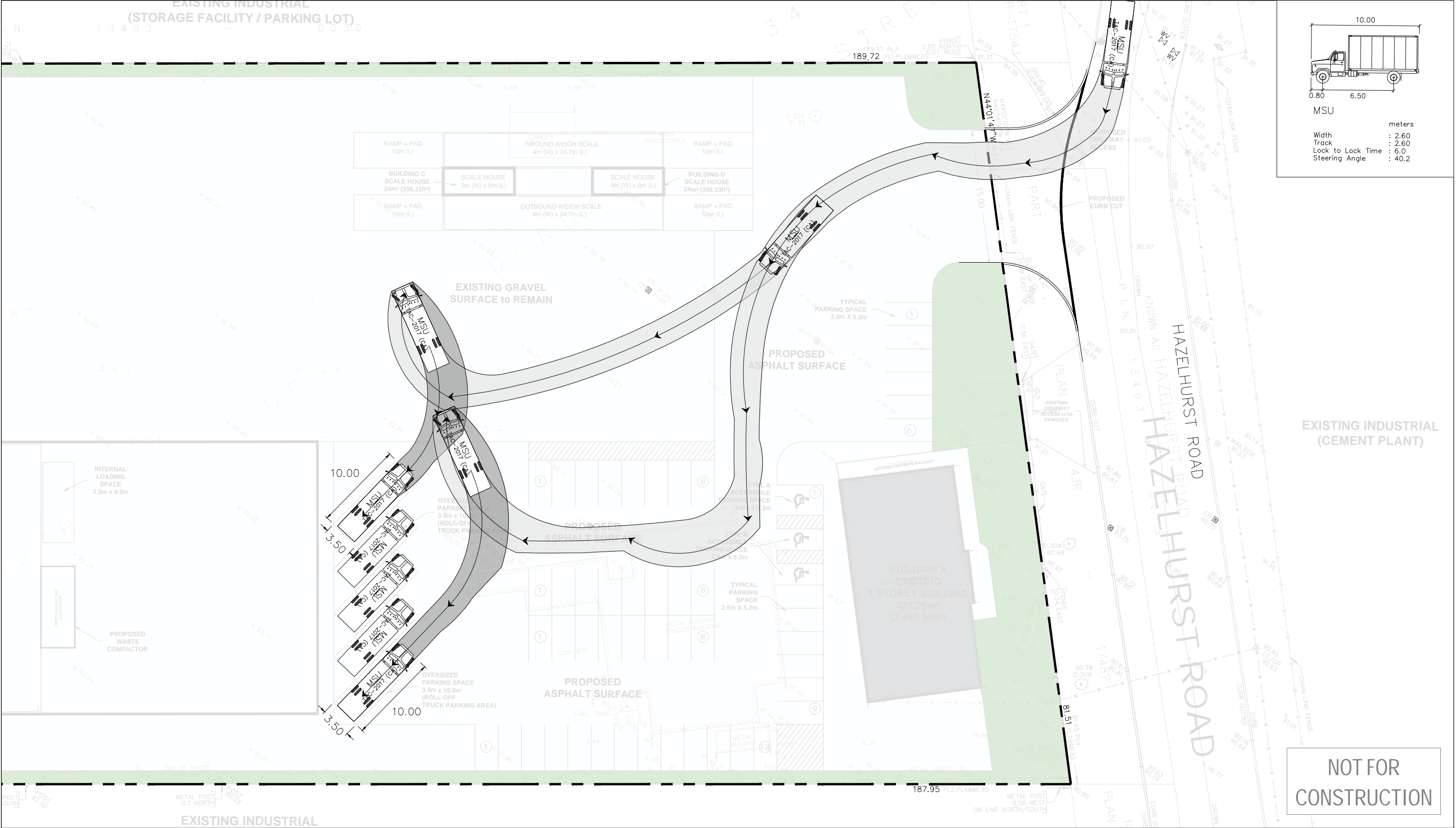
Project No.	26160
Date	NOV 12, 2025

580 HAZELHURST RD
MISSISSAUGA ONTARIO

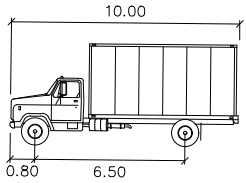
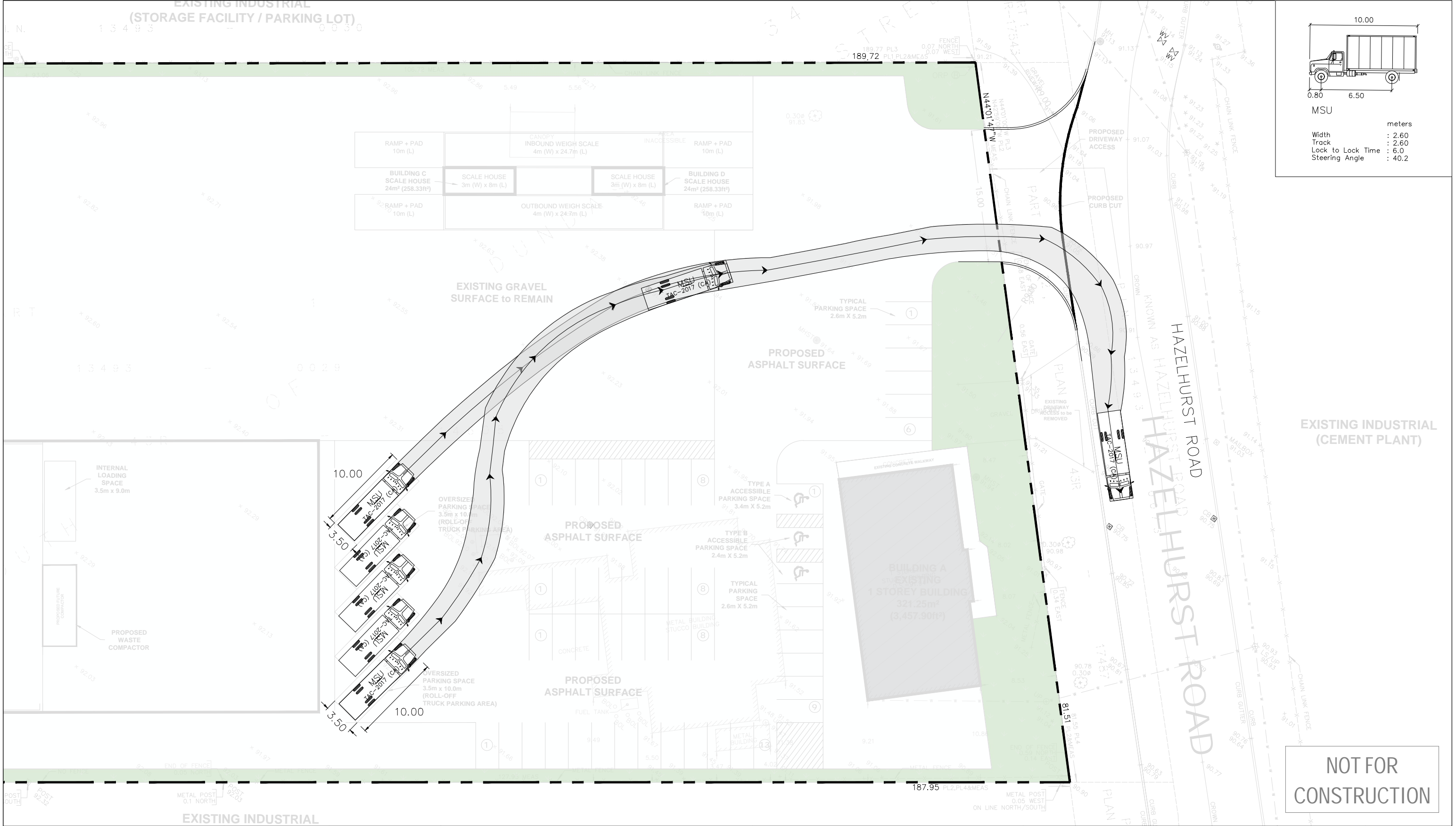
1:600

LOADING REVIEW
WB-20 TRUCK SWEEP PATH
EXIT PATHS

Drawing No.
004



LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca		Project No. 26160	580 HAZELHURST RD MISSISSAUGA ONTARIO	GROUND FLOOR LOADING REVIEW MSU ENTRY PATH	Drawing No. 005
		Date NOV 12, 2025			



MSU

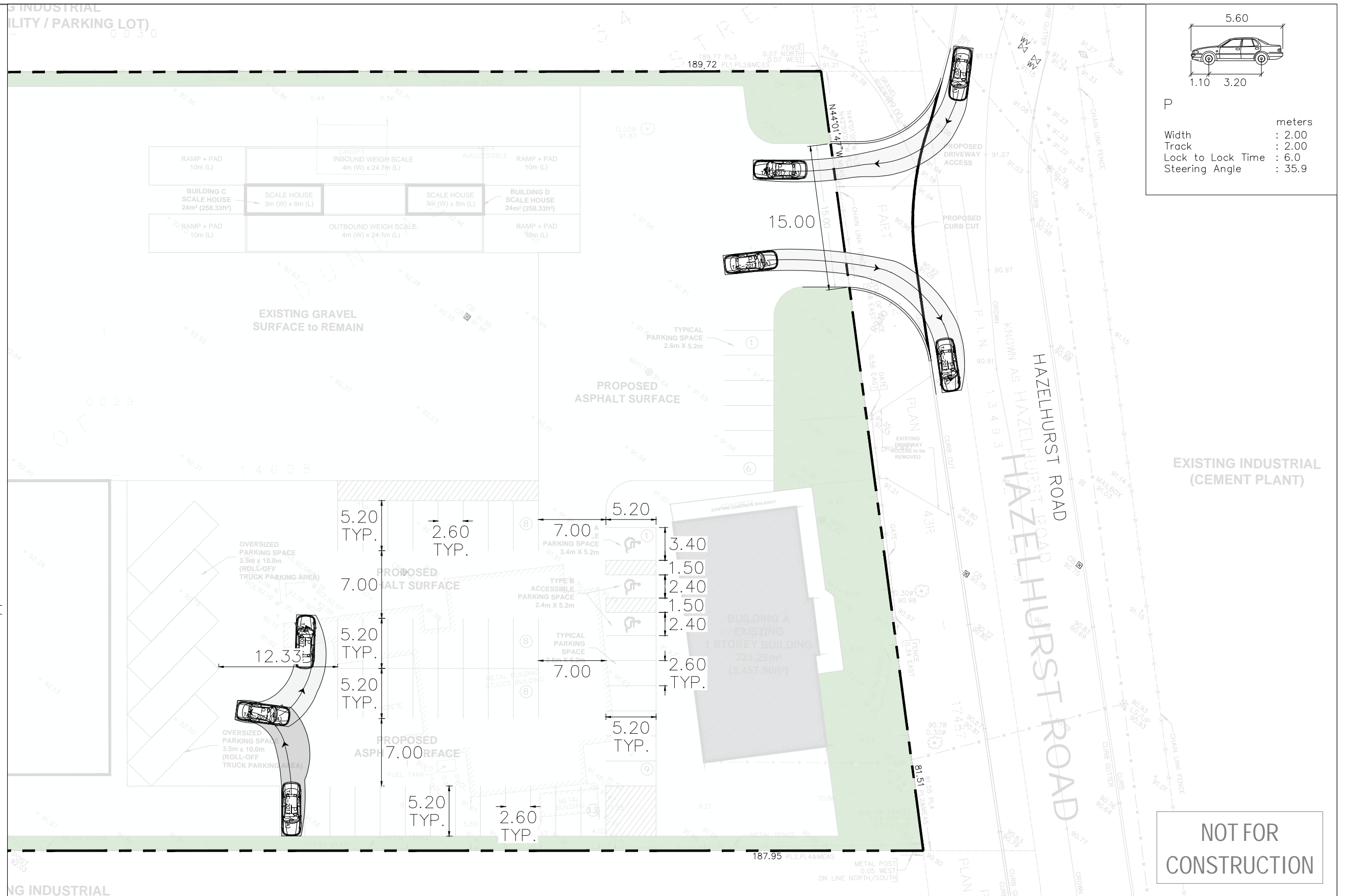
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Track	: 2.60
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Steering Angle	: 40.2

NOT FOR
CONSTRUCTION

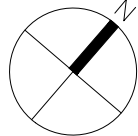
LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca			Project No. 26160	580 HAZELHURST RD MISSISSAUGA ONTARIO	GROUND FLOOR LOADING REVIEW MSU EXIT PATH	Drawing No. 006
			Date NOV 12, 2025			

PER CITY OF MISSISSAUGA
ZONING BY-LAW PART 3:
3.1.14 PARKING SPACE
DIMENSIONS

- (A) PARKING SPACES WITH A PARKING ANGLE EXCEEDING 15 DEGREE, EXCEPT THOSE DESIGNATED FOR PERSONS WITH DISABILITIES, SHALL HAVE AN UNOBSTRUCTED RECTANGULAR AREA WITH A MIN WIDTH OF 2.6m AND A MIN LENGTH OF 5.2m, EXCLUSIVE OF ANY AISLE OR DRIVEWAY.
- (B) THE MIN WIDTH OF A PARKING SPACE, OTHER THAN AN ACCESSIBLE PARKING SPACE OR PARALLEL PARKING SPACE, SHALL BE INCREASED TO 2.75m WHERE THE LENGTH OF ONE SIDE OF THE PARKING SPACE ABUTS A BUILDING, STRUCTURE OR PART THEREOF AND 2.9m WHERE THE OBSTRUCTION IS FROM BOTH SIDES OF THE PARKING SPACE, EXCEPT FOR A BUILDING, STRUCTURE OR PART THEREOF, THAT EXTENDS 1.0m OR LESS INTO THE FRONT AND/OR REAR OF THE PARKING SPACE.
- (C) ACCESSIBLE PARKING SPACES ARE TO BE PROVIDED IN TWO SIZES AND MAINTAIN A 1.5m WIDE ACCESS AISLE ABUTTING THE ENTIRE LENGTH OF EACH PARKING SPACE (0190-2014):
 - (1) TYPE A SHALL HAVE AN UNOBSTRUCTED RECTANGULAR AREA WITH A MIN WIDTH OF 3.4m AND A MIN LENGTH OF 5.2m.
 - (2) TYPE B SHALL HAVE AN UNOBSTRUCTED RECTANGULAR AREA WITH A MIN WIDTH OF 2.4m AND A MIN LENGTH OF 5.2m.

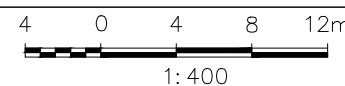


NOT FOR
CONSTRUCTION



Project No.	26160
Date	NOV 12, 2025

580 HAZELHURST RD
MISSISSAUGA ONTARIO



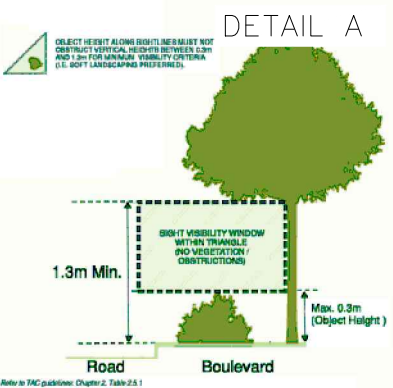
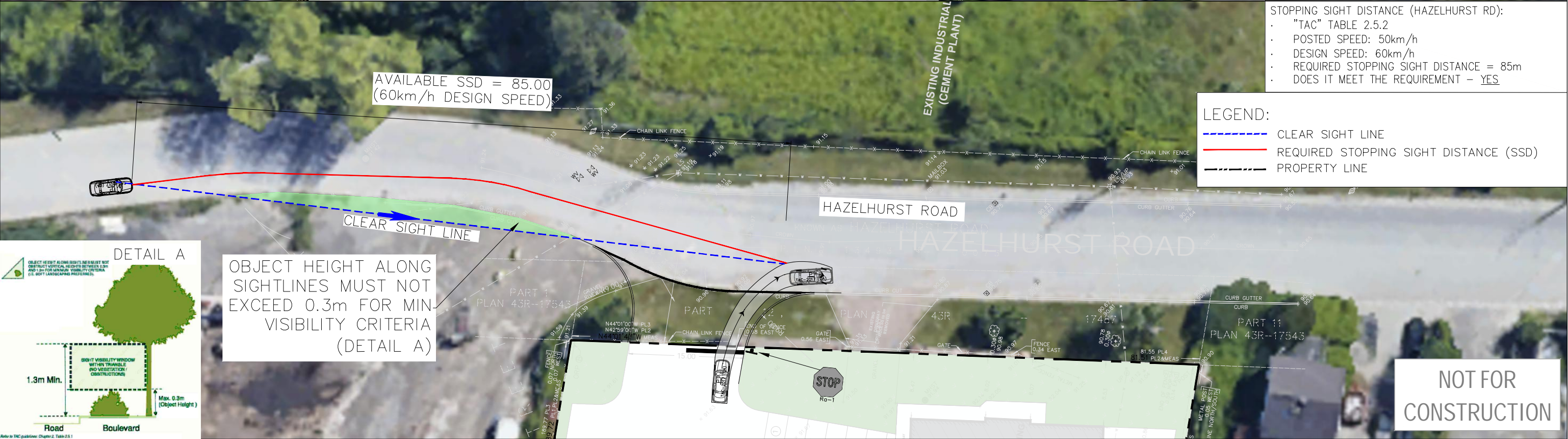
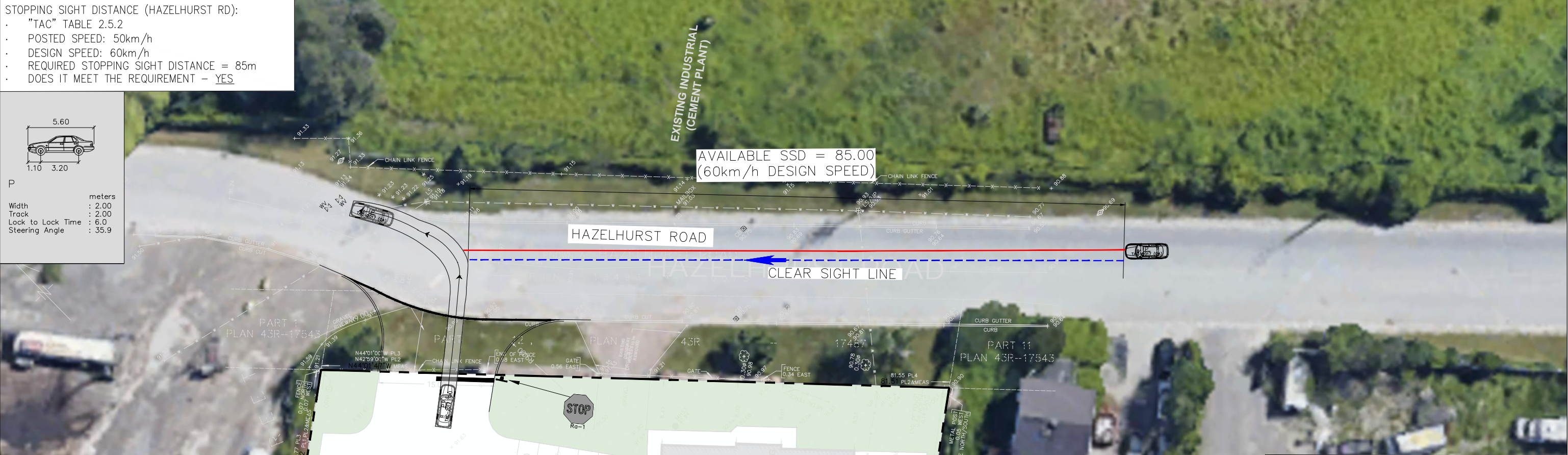
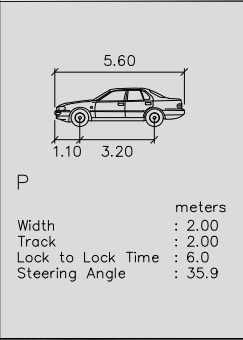
PARKING AND PTAC SWEPT PATH REVIEW

Drawing No.

007

STOPPING SIGHT DISTANCE (HAZELHURST RD):

- "TAC" TABLE 2.5.2
- POSTED SPEED: 50km/h
- DESIGN SPEED: 60km/h
- REQUIRED STOPPING SIGHT DISTANCE = 85m
- DOES IT MEET THE REQUIREMENT – YES



OBJECT HEIGHT ALONG SIGHTLINES MUST NOT EXCEED 0.3m FOR MIN VISIBILITY CRITERIA (DETAIL A)

LEGEND:

- CLEAR SIGHT LINE
- REQUIRED STOPPING SIGHT DISTANCE (SSD)
- PROPERTY LINE

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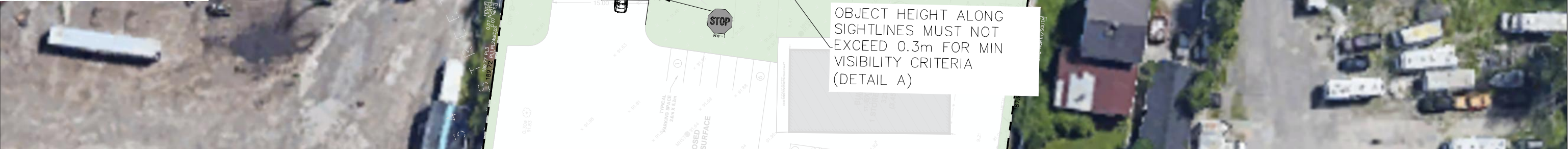
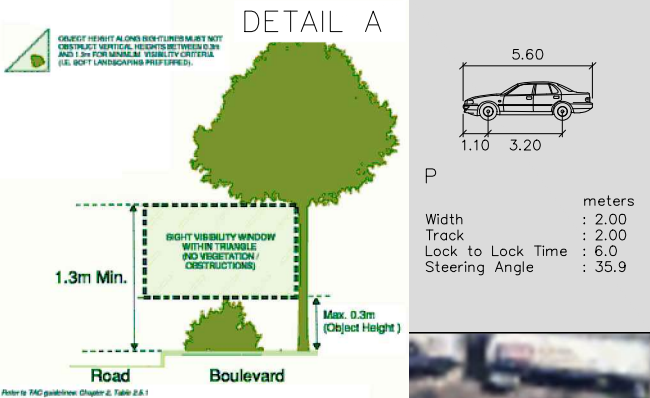
LEA Consulting Ltd. Consulting Engineers and Planners www.LEA.ca			Project No. 26160	580 HAZELHURST RD MISSISSAUGA ONTARIO	SIGHTLINE ANALYSIS STOPPING SIGHT DISTANCE (SSD) PROPOSED ACCESS	Drawing No. 008
			Date NOV 12, 2025			

INTERSECTION SIGHT DISTANCE (EAMONT ST):

- POSTED SPEED: 50km/h
- DESIGN SPEED: 60km/h

(CASE B1: LEFT TURN FROM STOP)

- "TAC" TABLE 9.9.4
- REQUIRED LEFT TURN SIGHT DISTANCE = 130m
- AVAILABLE LEFT TURN SIGHT DISTANCE = >130m
- DOES IT MEET THE REQUIREMENT: SEE NOTE 1 & DRAWING



INTERSECTION SIGHT DISTANCE (EAMONT ST):

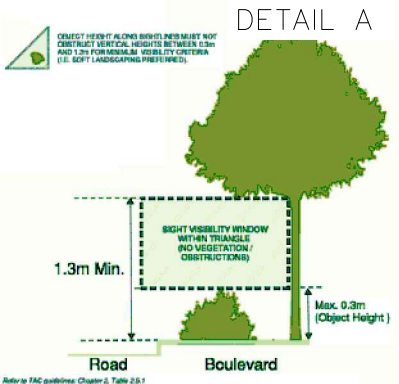
- POSTED SPEED: 50km/h
- DESIGN SPEED: 60km/h

(CASE B2: RIGHT TURN FROM STOP)

- PER "TAC" TABLE 9.9.6
- REQUIRED RIGHT TURN SIGHT DISTANCE = 110m
- AVAILABLE RIGHT TURN SIGHT DISTANCE => 110m
- DOES IT MEET THE REQUIREMENT - YES

LEGEND:

- CLEAR SIGHT LINE
- AVAILABLE INTERSECTION SIGHT DISTANCE (ISD)
- PROPERTY LINE
- OBJECT HEIGHT RESTRICTION ZONE



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			Date NOV 12, 2025			