KOZLOWSKI ARCHITECT

Halton Region Waste Management Services

Monday, January 27, 2025

re: **100 PLAINS ROAD EAST, ALDERSHOT, BURLINGTON**
WASTE MANAGEMENT REPORT

Project Address: 100 Plains Road East, Burlington
Description: Residential development consisting of 253 apartments and approximately 1,000 m² of ground-floor commercial space.

1. Introduction

This report outlines the waste management strategy for the proposed mixed-use development, aligning it with the waste management requirements of Halton Region's Official Plan Guidelines. The objective is to ensure efficient waste handling, disposal, and recycling processes to meet environmental sustainability goals and legal compliance.

2. Site Details

Residential Units: 253 apartments. The following is a break down of the units: 3- bachelors, 160- 1bedrooms, 46- 2bedrooms and 42- 3bedrooms.

Commercial Space (ground floor only): 1044 m² gross area. It is estimated that approximately 840m2 (1044x80%) is available as a net commercial area.

Total Occupancy Estimate:

Residential: 762 people. The occupant load is calculated using the formula of 2persons per bedroom as defined in the Ontario Building Code 3.1.17.1.(1).(b).

Commercial: 84 employees. The employee occupancy is calculated using the formula of 1 employee/10 m² assuming full employment occupancy.

3. Waste Generation Estimates

Residential Waste:

Residential Waste estimate is based on 1 pick-up a week as per Appendix 2 of Halton Region Garbage Collection Limits.

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The design uses 3 yard bins for garbage and recycling waste and 2 yard bins for organic waste. A 3 yard bin is 2.03m long by 1.12m wide by 1.22m high. A 2 yard bin is 2.03m long by 1.02m wide by 0.92m high.

The garbage room is designed to accommodate 6 3yard containers for garbage, 5 3 yard containers for recycling and 3 2 yard containers for organic waste. There is enough room to allow for more containers if a need arises.

Commercial Waste:

The commercial units are to contain their own waste within their individual units. The exact design of how to achieve it will be done once interior layouts are being considered. Collection of the commercial waste will be done at the same area but in different days as that for residential waste.

Dedicated waste storage area for commercial tenants will accommodate separate bins for garbage, recyclables, and organics. Sizes and types of the containers will be designed to handle peak waste generation periods.

Commercial tenants will be required to implement a source-separation program. Its regular monitoring will ensure compliance with Halton Region's waste diversion targets.

Collection:

The site accommodates all four types of waste trucks as specified in Appendix 1 of the Development Design Guidelines for Source Separation of Solid Waste, Regional Official Plan Guidelines.

4. Waste Collection System Design

The proposed design uses efficient waste management solutions that balance functionality, accessibility, and aesthetics. Residents will receive clear signage and educational materials on proper waste segregation.

A trisorter chute is centrally located on every above ground floor and separates waste into three categories (e.g., garbage, recyclables, and organics) at the source, reducing the need for manual sorting later. Each chute door has a user-friendly interface for residents to select waste types. The chute is located in a fire rated vertical service space and its every door is also fire-rated and equipped with an automatic damper for safety. The chute is designed with soundproof lining for noise reduction measures to prevent disturbances.

The bottom of the chute connects to a hopper that separates waste and directs it to appropriate containers. The garbage container is connected to a compactor. The following features are used: a) odor control systems (e.g., sealed containers, ventilation), b) automated alerts for when compactors reach capacity, and c) noise-dampened motors to reduce mechanical noise. The area of the garbage trisorter and compactor is secured and separated from the garbage room with a security barrier and a gate so that only maintenance stuff has access. The remaining garbage room area is accessible to the

residential owners to allow bulk items to be disposed off. A 10m2 area within the garbage room is dedicated to large items.

The garbage room is large enough not only to accommodate the required containers but to allow easy movements of them. It is also designed to ensure proper lighting, ventilation, and drainage for cleanliness and safety. It includes a washdown system for cleaning bins and floors. It is designed for odor control and pest management. A clear signage and designated zones for efficient organization are part of the garbage room design. The height of the room is 4.2m. There are two exterior doors: a man door 965wide and 2438 high and an overhead door 2438 wide and 2438 high. The overhead door connects the garbage room directly with an outdoor garbage staging area for bins to be placed before the collection. This area is 5.95m by 8.6m with a 4.2m headroom at the half of the area and the remaining half is without any headroom restrictions.

The collection is designed directly in front of the staging area and it is graded so as to prevent accidental rolling of bins onto the nearby parking spaces. There is no headroom restriction at the collection area. A flush curb along the 5.95m length is to facilite the bins' movement. The driveway is 6m wide, accommodates a minimum turning radius from the centre line of 13m, and its configuration allows for continuous forward movement of a garbage truck. The structure under the driveway is designed to support a minimum of 35 tonnes which is the weight of a fully loaded waste truck.

5. Compliance with Halton Region Official Plan

This waste management strategy aligns with Halton Region's guidelines by: promoting the 3Rs (Reduce, Reuse, Recycle), supporting the Region's waste diversion targets of 75%, and ensuring proper storage, collection, and transport of waste in an efficient and environmentally sound manner.

6. Conclusion

This waste management plan ensures effective and sustainable waste handling for the 100 Plains Road East development. By implementing the measures outlined, the project will meet Halton Region's standards and contribute to environmental sustainability.

6. Appendixes

A site plan showing waste management for this development is an integral part of this report.

Sincerely,

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