Solid Waste Management Plan

1010 Downsview Drive & 355 Plains Road East, City of Burlington

May 24, 2022

Introduction

This Waste Management Plan is developed in support of the proposed two mixed-use towers located at 1010 Downsview Drive & 355 Plains Road East in the City of Burlington. On the western site (1010 Downsview Drive), the proposed 8-storey development is to consist of 141 residential units, 56 townhouse-style units, and 2 commercial units. The eastern site (355 Plains Road East) proposes a mixed-use building that contains two "towers" of 11 and 9 storeys in height with 347 residential apartment-style units and 4 commercial units. There will also be a stacked townhouse block at the rear of the property providing 40 townhouse-style units. The Waste Management Plan has been prepared to address requirements from both the Halton Region's waste collection perspective and the City of Burlington's development application requirements in relation to the proposed development (layout and use).

The Waste Management Plan was prepared using Halton Region's (the Region's) Regional Official Plan Guideline that relates to waste management, titled Development Design Guidelines for Source Separation of Solid Waste (Guideline). The City of Burlington's comments from the development application pre-consultation and the pre-submission checklist were also considered while preparing this Waste Management Plan.

The following elements are discussed herein:

- Proposed Official Plan Amendment and Zoning By-law Amendment
- Anticipated residential waste types and amount
- Waste storage options
- Waste collection details
- Best management practices to address common waste-related issues
- Recommendations

Solid Waste Management Plan

ZBA/OPA

As stated above the proposed 8-storey development located at 1010 Downsview Drive consists of 141 residential units and 56 townhouse-style units. Two underground levels are dedicated to parking, mechanical systems and storage. The ground floor is proposed to common areas, bicycle storage, commercial units, residential amenities, residential units and waste storage, with exterior parking and loading areas.

The proposed development at 355 Plains Road East consists of 347 residential units and 40 townhouse-style units. Two underground levels are dedicated to parking, mechanical systems and storage. The ground floor is proposed to common areas, bicycle storage, commercial units, residential amenities, residential units and waste storage, with exterior parking and loading areas.

The waste management plan shows the proposed waste storage areas for each building, labeled as "Refuse Room". 1010 Downsview Drive is planned to have a waste storage room of 112 m^2 and 355 Plains Road East proposes two waste storage rooms with a total area of 149.20 m^2. In both buildings, the waste chutes will discharge into the three-waste stream sorting compaction systems will also have an adjacent bulk waste storage area. All waste storage areas have access to the waste pick-up point (loading area).

As the waste storage areas will house the tri-sorter and compactor, they will be restricted to building maintenance staff only for safety purposes. Residents will be able to access the bulk waste storage area.

Collection Vehicle Routing

As demonstrated in the truck turning diagrams provided in Figures 1 and 2, which show the anticipated movement of the waste collection vehicles, the geometrics of the proposed private drive aisle and loading area will facilitate the safe and unobstructed movement of the waste collection vehicle. The driveway on the Site that the waste collection vehicle will travel on has been designed to the requirements listed in Section 1.10 in the Region's Guideline.

1010 Downsview Drive - Waste collection vehicles will access the waste loading area by entering the western Site from Downsview Drive. The truck will turn left into the loading area, where the waste bins will be set out on collection day. Once the waste is collected, the waste collection vehicle will reverse northwest, and then travel forward eastward to the driveway, where the vehicle will exit back onto Downsview Drive.

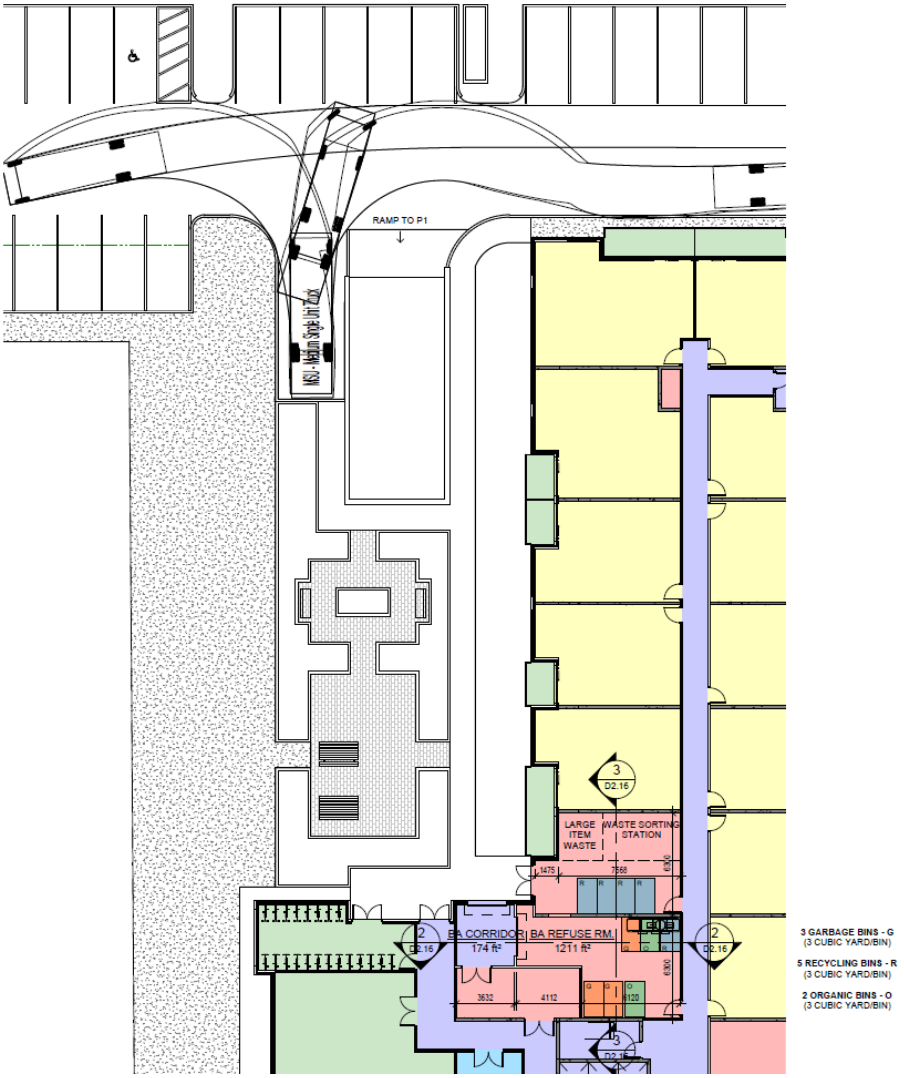


Figure 1 - 1010 Downsview Drive Loading Plan

355 Plains Road East - Waste collection vehicles will access the waste loading area by entering the eastern Site from the driveway on Downsview Drive. The truck will then then turn right into the loading area, where the waste bins will be set out on collection day. Once the waste is collected, the waste collection vehicle will reverse southwest, and then travel forward northward to the driveway, where the vehicle will exit back onto Downsview Drive.

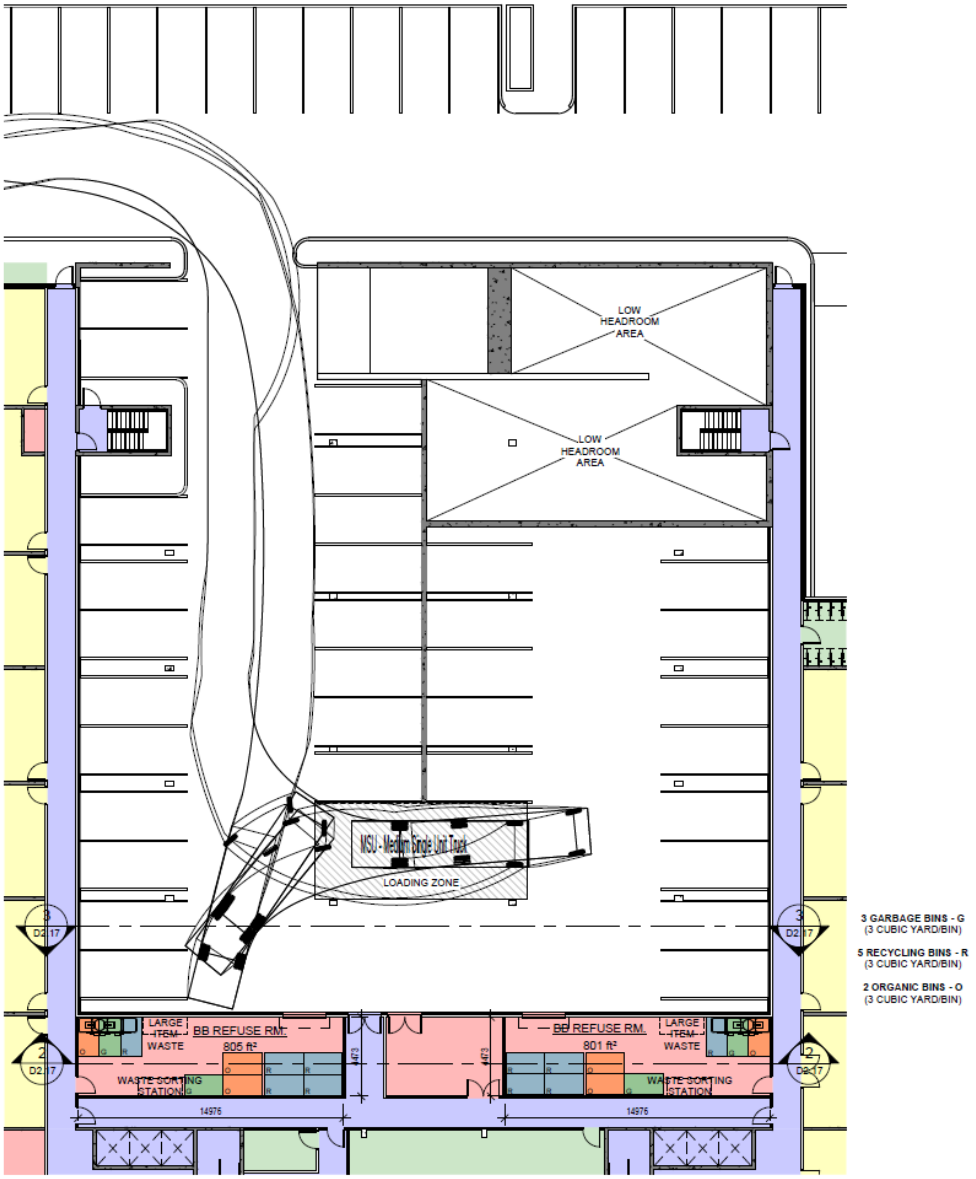


Figure 2 – 355 Plains Road East Loading Plan

Waste Volume

As per the waste management requirements in the Region's Guideline there will be:

- a dedicated storage area, with enough space to store waste for a minimum of one week;
- convenient garbage, recyclable and organic waste collection;
- collection point locations for waste that are accessible to all residents/occupants;
- a water hose connection and floor drain to allow storage areas and waste receptacles to be easily cleaned;
- adequate and well-maintained mechanical ventilation and cooling mechanism to suppress odor during periods of hot weather in the waste storage areas;
- a sprinkler and fire prevention system in the waste storage areas; and
- secure access to the compactor with no general access.

The Region's Guideline (Section 1.8 and Appendix 2) provides standards for volumes of waste and minimum required number of bins and containers based on the number of units in the proposed building. Table 1 shows the rates as required by the Region.

Waste Type	Required # of Bins and Containers
Garbage	1 3-cubic yard compacted bin for 81-200 units
	3 3-cubic yard compacted bin for 200 units +
Recyclable Material	1 semi-automated cart for every 7 residential units
Organic Waste	1 semi-automated cart for every 25 residential units

Table 1: Region of Halton required waste storage and capacity.

Based on the required rates:

Building A, with 141 residential units, will need at least one 3-cubic yard compacted bin for garbage, 21 semi-automated carts for recyclable materials, and six semi-automated carts for organic waste.

Building B, with 347 residential units, will need at least three 3-cubic yard compacted bin for garbage, 50 semi-automated carts for recyclable materials, and 14 semi-automated carts for organic waste.

Per Policy 1.8.1.3.3 and Appendix 2 of the Region's Guidelines, each 3-cubic yard compacted bin has dimensions of 2.03 m in width, 1.12 m in depth and 1.22 m in height. Each semi-automatic cart is 0.8 m wide and 1.0 m deep.

The dimensions of a three-waste stream sorting compaction system will be based on the compactor chosen and the provider. An example of a possible compactor system is shown in Figure 3.

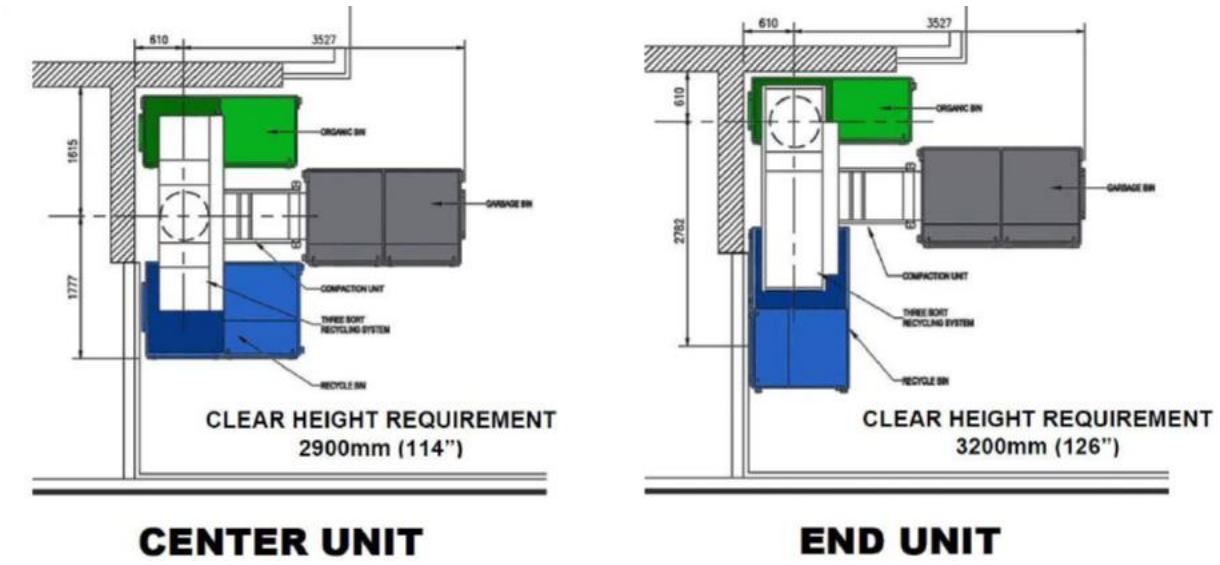


Figure 3 – Examples of three waste stream sorting compaction systems proposed to be used.

Bulk Waste

Per the Region's Guideline (Section 1.9.2.4), a clear and accessible area of 10.0 m^2 is required within the building for the storage of large, bulk waste items. As shown in Figure 1 and Figure 2, each building has a dedicated bulk waste storage area located in the Refuse Room, and is separate from the garbage storage room housing the three-waste stream sorting compaction system.

The temporary area within the property required by the Region's Guideline to accommodate a 20 cubic yard bin with a width of 2.44 m and a length of 5.18 m for collection of bulk waste will be provided within the loading area.

Waste Collection

As stated above waste collection will occur at the dedicated waste collection point (labeled in Figure 1 as "Loading Area / Refuse Pick up". Signs will be posted to indicate that the area is a waste collection point and that there shall be no parking or blocking of the waste collection containers.

Best Management Practices

In addition to the above, we have provided Best Management Practices (BMPs) that will mitigate any potential issues or complaints from residents as it relates to the management of waste on-site:

- Continuous communication with tenants/owners about the waste management system.
- The lids of the waste storage containers will be kept closed at all times, except when depositing waste / collection is to occur.
- Keeping the lids securely fashioned, (except when depositing waste/ waste collection),

will reduce nuisance related effects, such as odor, and attraction of vermin.
- Clean up litter from around waste collection point.
- Waste collection point will be checked for litter after waste has been collected each week.

We believe that by implementing the Waste Management Plan set out above, the City of Burlington and the Region of Halton's requirements for a development application as it relates to Waste Management should be satisfied.