



Solid Waste Collection Design Guidelines for Multi-Unit Residential Development

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1. Introduction & General Requirements

1.1 Purpose

The purpose of the **Solid Waste Collection Guidelines for Multi-Unit Residential Development** (“the guidelines”) is to ensure that designers, planners, developers, owners, and property managers of **multi-residential buildings** are familiar with proper waste collection and waste storage systems and further that the provision for these are considered in the design and development review of all new multi-unit residential projects.

These guidelines were prepared by Dillon Consulting Limited for the City of Ottawa.

1.2 Background

The City of Ottawa (“City”) has a mandate to provide solid waste management services to the residential sector of the City which includes collection services for properties that are accessed through private roadway systems. Ottawa’s Integrated Waste Management Master Plan provides direction for optimizing the current and future residential solid waste programs to best meet the financial, environmental and sustainability needs of the City over the next twenty years. This direction emphasizes the need to improve waste diversion from the multi-unit residential sector.

The City of Ottawa’s solid waste diversion programs include:

- Blue box (glass, metal, and plastic) recycling;

- Black box (paper and cardboard) recycling;
- Household hazardous waste depots;
- “Take It Back” – a voluntary stewardship program in which items such as oil, tires, computers, and other used products are returned to the manufacturers;
- Leaf, yard waste and Christmas tree;
- Green bin (organics); and,
- Battery return depots.

The guidelines are based on the following principles:

- The City has introduced aggressive waste reduction programs such as the recycling and the green bin programs in our communities, so it is imperative these types of collection programs be easy to use and readily accessible to all residents;
- The Provincial 3Rs Regulations require residential multi-unit developments to implement source separation programs for standard recyclable materials that are generated on-site;
- Building and site plans should provide adequate and efficient waste handling and storage facilities for all waste streams and be designed for convenient, safe, and barrier-free access by residents and collection vehicles; and,
- Building and site plans should have well-designed on-site solid waste collection and storage that supports the healthy, liveable, environmentally-responsible, and high-quality built form envisioned for Ottawa.

These guidelines are the minimum requirements only and the City reserves the right to enact additional site-specific requirements during its review of development projects. The City also reserves

the right to designate the type of collection to be provided, as well as access and storage required, on a case-by-case basis. If the City determines that a development does not meet the guidelines then City waste collection services will not be approved or provided.

In addition to the requirements set out in the guidelines, municipal site plan requirements, the Solid Waste Management By-law, Zoning By-law, Building Code, Fire Code, Property Standards By-law, and any other applicable guidelines or regulations must also be met.

These guidelines will be updated as necessary to keep them in conformance with the City of Ottawa Zoning By-law and Solid Waste Management By-law. Technical revisions to the guidelines may be made without the need for notification or approval from Council in the following cases:

- Correction of grammar, punctuation or typographical errors or revisions in a manner that does not change the intent of the guidelines;
- Adding or revising technical information in appendices.
- Changes to appendices, footnotes, headings, table of contents, illustrations or diagrams; or,
- Updating terminology to reflect changes in the Zoning By-law, Solid Waste Management By-law, Fire Code, Building Code, Property Standards By-law and any other applicable guideline or regulation in a manner that does not change the intent of the guidelines.

1.3 Definitions

Explanatory Note: The definitions for the different forms of multi-unit residential development used in these guidelines emanate from the *Solid Waste Management By-law*, rather than the *Zoning By-law*.

The following definitions apply to the guidelines:

“apartment building” means a residential use building of more than two storeys in height containing six (6) or more principal dwelling units;

“black box” means a recycling container used to collect recyclable paper and cardboard materials ;

“blue box” means a recycling container used to collect glass, metal, and plastic recyclable materials;

“building owner” means the registered owner of a multi-unit residential building or the building owner’s designate (i.e., property manager) in charge of a multi-unit residential building;

“bulky items” means large items including, but not limited to, bicycles, floor lamps, mattresses, furniture, microwaves, sinks, toilet bowls, barrels, pool pumps, pool covers and any other discarded materials, which would normally accumulate at a residential dwelling or multi-unit residential building and can easily be lifted up and into a collection vehicle;

“City” means the municipal corporation of the *City of Ottawa* or the geographic area of the *City of Ottawa*, as the context requires;

“collection area” means a location designated exclusively for collection of residential waste materials;

“common pad” means an external level-surface concrete pad used by two or more residential units as a collection area;

“common pad collection” means the system of collection of garbage, recyclable material, bulky items, yard waste and organic material placed at a shared collection area location;

“containerized collection” means the system of collection of garbage, recyclable material and organic material placed in approved containers, by means of a front end collection vehicle;

“curbside collection” means the system of collection of garbage, recyclable material, bulky items, yard waste and organic material placed in approved containers at a collection location, which is at or near the curb, but does not include common pad collection;

“front-end loading container” means a two, three, four, six or eight cubic yard container emptied by a front-end loading collection vehicle and used for the storage and collection of either garbage, recyclable material or organic material at multi-unit residential buildings;

“front-end loading compacting container” means a front-end loading garbage container used to compact waste;

“front-end collection” refers to the collection of garbage and/or recyclable materials by means of a front-end collection vehicle;

“green bin” means an organics container used to collect organic material;

“high-rise multi-unit residential building” means an apartment building containing six (6) or more dwelling units each of which:

- (a) has self-contained living, kitchen and sanitary facilities; and,
- (b) is owned or rented on not less than a monthly basis;

“low-rise multi-unit residential building” means a group of residential dwellings of six (6) units or more per property, usually attached by a common wall such as townhouses, garden homes, stacked town homes or other similar residential complexes which is owned or rented on not less than a monthly basis;

“multi-unit residential building” includes high-rise multi-unit residential buildings and low-rise multi-unit residential buildings;

“private property” means property, which is privately owned and is not the City’s property, or property of a local board, or property of the Crown in Right of Ontario, the Crown in Right of Canada or any emanations thereof;

“public property” means property, which is the City’s property, or property of a local board, or property of the *Crown in Right of Ontario*, the *Crown in Right of Canada* or any emanations thereof;

“recycling cart” means a 360L plastic wheeled cart designed to store and collect recyclable materials from multi-unit residential buildings;

“turning radius” means the area required for a vehicle to turn around.

2. Review and Approval Process

It is expected that appropriate design for on-site solid waste management will be integrated with the site plan review process. Development proponents should be aware of the following general process for review and approval:

- The on-site solid waste management details required by the guidelines should be submitted with the site plan application (**see Section 2.1**);
- City Planning staff will then review the application prior to circulation to ensure that the application is complete and contains all of the necessary information;
- The site plan drawings (and if applicable, the solid waste management brief [**see Section 6**]) will then be circulated to Solid Waste staff for their review;
- Solid Waste staff will advise if the on-site management of solid waste is acceptable or if it does not meet the guidelines;
- If the on-site management of solid waste is acceptable then the application will proceed forward through the site plan review process;
- If the on-site management of solid waste is deemed unacceptable then the development proponent will make revisions in consultation with Solid Waste staff and re-submit for approval; if, after revisions have been made, City staff are still not satisfied with the on-site waste management approach, then City services will not be provided and provisions for an alternative approach must be made (such as private waste management collection service); and,

- Specific conditions shall be included in the site plan agreement regarding the on-site design and provision of solid waste collection services.¹

2.1 Site Plan Drawing and Approval Requirements

To ensure site plans have incorporated all guidelines as they pertain to waste collection services, applicants must illustrate the following information, preferably on a separate drawing:

- The type of development / building;
- Number of dwelling units and number of storeys in the development;
- Proposed waste handling approach/system for recyclables, organics and garbage;
- Size/volume and number of garbage, recycling, and organic receptacles to be used (i.e., for multi-unit buildings receiving front-end and/or semi-automated waste collection services);
- Waste collection/storage enclosure or building's interior dimensions, interior vertical clearance, and size of access doors;
- Waste collection/storage enclosure or building's elevation and exterior building materials;

¹ For sites with an alternative solid waste management approach, the specific conditions may include the provision of private solid waste collection services (including no reduction in property taxes and no exemption from solid waste user fees) and a warning clause registered on title and in the original sale purchase agreement.

- Loading area dimensions, surface dimensions, and vertical clearance;
- Identification/delineation of access route(s) for waste collection vehicles on private property, route dimensions, and vertical clearance;
- Width of access route(s)²;
- If containers have to be moved through a ramp, then details of the ramp including surface material, grade/slope, and whether it is heated;
- If the storage and collection areas are not adjacent, then a diagram or description of how the bins are moved from the storage area to collection area; and,
- Features such as parking areas and pedestrian walkways in relation to the access route.

For an access route located above any portion of an underground parking structure, applicants must provide a letter from a Professional Engineer confirming that the structure can safely support a fully loaded collection vehicle.

As a condition of development approval, applicants will also be required to submit:

- A completed *“Application for Waste Collection Services on Private Property”*, a copy of which is attached as **Appendix G**, to the City’s Solid Waste Services Branch for review and

consideration before any collection of waste will commence; and,

- An *“Acknowledgement and Release Form”*, a copy of which is attached as **Appendix H**, to the City’s Solid Waste Services Branch for review and consideration before any collection of waste will commence.

² The minimum lane width in the Fire Code is the acceptable minimum access lane width for City waste collection vehicles.

3. General Requirements

The following are the general requirements for the collection of residential garbage, recyclables and organic materials. Applicants should refer to the applicable municipal By-laws for additional or specific collection requirements.

- The City will only collect residential waste materials and reserves the right to revoke collection services to any residential multi-unit development that does not meet the provisions outlined in these guidelines or the City's Solid Waste Management By-law;
- The property owners are responsible for the design and construction of proper and safe residential waste handling systems for their residents on private property, including access routes, storage facilities, and collection areas. Access routes must be designed in such a way that they do not require the collection vehicle to back onto a municipal street;
- The design of the collection area and the access route, as outlined in these guidelines, shall be provided exclusive of any on-site parking spaces;
- Sites shall be planned for on-site waste management to accommodate weekly garbage collection, *blue box* and *black box* collection on alternate weeks, and weekly organics collection;
- All residential waste materials must be securely stored inside an enclosed structure, so as to contain any litter, and be easily accessible by residents in a well-lit, secure and barrier free environment;
- All residential waste containers must be stored inside an enclosed structure until the scheduled collection day and, after collection, must be returned to the storage area immediately following collection;
- Residents must have convenient access to facilitate their participation in the recycling and organics programs;
- Property owners must implement the recycling and *green bin* programs, as a means of reducing waste;
- Waste information and collection procedure signs must be installed in appropriate locations to ensure a safe and clean environment around the waste collection areas and access routes;
- Access routes must be constructed of a suitable material such as asphalt or concrete and be structurally adequate to prevent damage by and to support a fully loaded waste collection vehicle;
- The property owner is exclusively responsible for any damage on private access roads from waste collection vehicles;
- The property owner is responsible for moving all waste containers to the designated collection area on the designated collection day or a handling fee will be charged to the property owner by the contractor; and,
- The property owner is responsible for collection, haulage and disposal of all waste from the property until such time as the site is approved for collection services.

4. Specific Requirements: Low-Rise Multi-Unit Residential Building

The following guidelines apply to low-rise multi-unit residential buildings, such as townhouses, garden homes, stacked town homes, or other similar residential complexes.

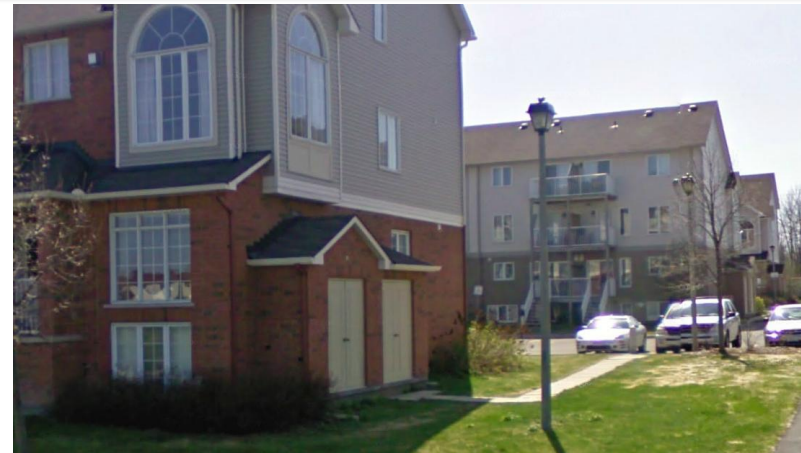
4.1 General Considerations

- Wherever possible, design sites so that all individual units can be served by individual curbside collection;
- Common pads for curbside collection will not be approved;
- If necessary, construct, design and maintain a private access route(s) whereby the City or its contractors can safely drive onto the property to an exterior ground level waste loading area, collect the waste, and safely return to a public road; and,
- Implement the City's recycling and *green bin* programs.

4.2 Storage/Collection Container Requirements

Individual Curbside Collection Service

- Allocate space for separate recyclables, organics, and garbage containers inside each dwelling unit;
- Provide *blue box* and *black box* for curbside collection;



- Avoid interim common storage areas for residents to store waste between collection periods (e.g., common areas where residents store their waste before taking it to the main collection area on the collection day, as shown in the above photo);
- For units with individual driveways, when implementing the City's *green bin* program, provide 80L containers for curbside collection; and,
- For units with shared parking, when implementing the City's *green bin* program, provide 47L containers for curbside collection.

Container Collection Service

- Provide collection containers in accordance with **Table 4-1**.

Table 4-1: Collection Container Guidelines for Low-Rise

Stream	Guideline
Garbage	<ul style="list-style-type: none">• Provide 0.231 cubic yards per unit, rounded up to the nearest yard
Recycling	<ul style="list-style-type: none">• For every 6 units, provide one 360L blue cart and one 360L black cart• For more than 18 units, provide front-end loading (FEL) containers<ul style="list-style-type: none">- Provide 0.018 cubic yards per unit for FEL glass-metal-plastic (GMP) containers- Provide 0.062 cubic yards per unit for FEL fibre containers
Organics	<ul style="list-style-type: none">• Provide one 47L green bin for each dwelling OR• Provide each dwelling unit with a “kitchen catcher” container and provide one communal 240L green container per 50 units

4.3 Container Storage/Collection Area Requirements

- Provide one storage/collection location for all streams within a maximum walking distance up to 100 metres (328 ft) from all residential building entrances³;

³ Although one location is preferred, multiple collection locations may be necessary for certain sites to comply with this requirement.

- Locate the storage/collection area at ground level adjacent to the curb or travelled roadway and where the curb forms part of the sidewalk;
- Provide a depressed curb if applicable;
- Locate the storage/collection area adjacent to the owner’s or building owner’s side of the sidewalk; and,
- Provide a 10 sq. m. (107 sq. ft.) area for bulk items (e.g., old furniture).

Collection Storage Enclosures or Accessory Buildings

- Provide a storage enclosure or accessory building sized to fit all solid waste containers;
- Match the design and materials of an accessory building to the aesthetics of the main building;
- Provide a hard surfaced and level location for the placement of carts/containers within the waste collection area;
- Ensure appropriate ventilation to permit reasonable air exchange;
- Ensure odour control is in place for organic waste storage;
- Ensure that the structure is animal-proof;
- Provide double doors at least 2.2m (7.2 ft) wide or an overhead door (**see Appendix D**);
- Ensure doors on enclosures/buildings can swing open at least 135 degrees;
- Ensure doors can be secured in an open position; and,
- Size the storage/collection areas in accordance with **Table 4-2**.

Table 4-2: Storage/Collection Area Guidelines for Low-Rise

Stream	Guideline
Garbage	<ul style="list-style-type: none"> • Provide 5 sq. m. (54 sq. ft.) of floor area for each container • Provide enough interior space to permit container movement • Provide an interior ceiling height of at least 2.75 metres (9 ft) in all parts of the enclosure that are accessible by collection staff
Recycling	<ul style="list-style-type: none"> • For each recycling cart provide 0.65 sq. m. (7 sq. ft.) of floor area for each cart • Provide 5 sq. m. (54 sq. ft.) for each FEL
Organics	<ul style="list-style-type: none"> • For 47L green containers provide 0.25 sq. m. (2.7 sq. ft.) of floor area for each container • For 240L green container provide 0.5 sq. m. (5.4 sq. ft.) of floor area for each container

4.4 Loading Area Requirements

Individual Curbside Collection Service

- Ensure each unit has a curbside collection area of 1.5 sq. m. (16 sq. ft.) in the boulevard to accommodate recycling, *green bin*, and garbage receptacles.

Container Collection Service

- Provide a dedicated concrete pad in front of the storage enclosure/accessory building to serve as the loading area and provide a depressed curb if applicable;
- Size the loading area to accommodate the total amount of containers and carts (see **Appendix A** for sizes);
- Size the collection area so that the containers and carts are accessible (i.e., solid waste collection vehicle operator must not have to manually move the containers);
- Provide a loading area of 4.0 metres (13.1 ft) wide and 13.0 metres (42.6 ft) long (add 2.5 metres [8.2 ft] for each additional container);
- Ensure the loading area is level (+/- 2% grade);
- Ensure the loading area is level with the storage/collection area;
- Ensure the loading area is not higher than 0.6m (2 ft) above the driveway levels; and,
- Provide a vertical loading clearance of 6.1 metres (20 ft).

4.5 Access Routes

- Design internal access routes with a minimum width of 6 metres (19.6 ft);
- Provide “no parking” signage for all internal access routes;
- Design and construct internal access routes with a hard surface material such as asphalt or concrete to support a minimum of 35,000 kilograms (the weight of a fully loaded waste collection vehicle);

- Provide a straight head-on approach to the loading area (this approach should be the same width as the loading area's width [see **Appendix D** and **Appendix E1**]);
- Provide a minimum 14 metres (46 ft) turning radius from the access route centre line;
- Provide 4.4 m (14.4 ft) vertical clearance throughout the access route;
- Provide the preferred grade of +/- 2% but no more than 8% grade for the access route;
- If drive-through access is not possible, provide a "T" type turnaround or cul-de-sac type turnaround (see **Appendix B** and **Appendix C**) to ensure that the collection vehicle does not have to back up through the site or back up onto a municipal road; and,
- Provide "no parking" signage on all cul-de-sacs to ensure that the collection vehicle can navigate the cul-de-sac in a forward direction.

4.6 Maintenance Requirements

- Provide a hose bib within 60 metres (197 ft) of the storage/collection area and loading area (so that a supply of water is readily available for cleaning these areas); and,
- Provide adequate on-site space to ensure that snow and snow storage does not impede the access route(s), the storage/collection area, or loading area.

5. Specific Requirements: High-Rise Multi-Unit Residential Building

The following guidelines apply to high-rise multi-unit residential buildings.

5.1 General Considerations

- Design an on-site system that accommodates all waste streams, makes it convenient for residents to dispose of their solid waste, provides efficient collection by vehicles, and is easy for property management to maintain;
- Wherever possible, design sites for optimum efficiency with a ground floor waste storage/collection room adjacent to the exterior loading area;
- Do not locate dwelling unit fresh air intakes or building fresh air intakes near any garbage storage or loading areas; and,
- Implement the City's recycling and *green bin* programs.

5.2 System and Storage/Collection Container Requirements

Implement one of the following possible system options:

1. Three separate chutes with organics collection in a central room;
2. Single chute with tri-sorter with organics collection in a central room;
3. Collection rooms on each floor with communal containers for each waste stream;

4. No chute, central room on the ground floor; or,
5. No chute, central room in the basement/underground parking.

Collection Room on Each Floor

- When implementing the City's *green bin* program, provide each dwelling unit with a "kitchen catcher" container;
- Provide collection containers generally in accordance with **Table 4-1**, adjusting the number/size of containers relative to the number of dwelling units per floor;
- Ensure appropriate ventilation to permit reasonable air exchange; and,
- Ensure odour control is in place for organic waste storage.

Chutes or Central Room on Ground Floor/Basement

- Provide collection containers in accordance with **Table 5-1** on the next page.

5.3 Central Storage Room Requirements

- Wherever possible, provide one storage/collection room for all streams;
- Ensure appropriate ventilation to permit reasonable air exchange;
- Ensure odour control and, if possible, temperature control, is in place for organic waste storage;
- For ground level storage/collection rooms with direct access to the exterior loading area:
 - match the design of the access doors to the aesthetics of the main building;

- provide double doors at least 2.2 metres (7.2 ft) wide or an overhead door;
- provide door stoppers and tie downs;
- For basement storage/collection rooms, locate the room adjacent to the service elevator or near to the access ramp for underground parking;
- For indoor storage/collection rooms, provide a vertical clearance of 3.1m (10 ft);
- For a site with multiple residential towers, one storage/collection room for each tower should be provided;
- Size the storage/collection room in accordance with **Table 4-2**;
- Provide a hose bib and floor drain within the storage/collection room for cleaning this space.

5.4 Loading Area Requirements

- Provide a loading area in accordance with **Section 4.4, Container Collection Service**; and,
- Provide a hose bib and floor drain within the storage/collection room for cleaning this space.

5.5 Access Routes

- Provide an access route(s) in accordance with **Section 4.5** of the guidelines; and,
- For a site that necessitates that the underground parking ramp be used to transport containers from a basement storage room to an at-grade loading area, the grade of the underground parking ramp must be no more than 8%.

5.6 Maintenance Requirements

- Provide a hose bib within 60 metres (197 ft) of the loading area (so that a supply of water is readily available for cleaning this area); and,
- Provide adequate on-site space to ensure that snow and snow storage does not impede the access route(s), the storage/collection area, or loading area.

Table 5-1: Collection Container Guidelines For High-Rise with a Central Garbage/Recycling Room

Stream	Guideline
Garbage	<ul style="list-style-type: none"> • Compacted: Provide 0.053 cubic yards per unit, rounded up to the nearest yard • Loose: Provide 0.110 cubic yards per unit, rounded up to the nearest yard
Recycling	<ul style="list-style-type: none"> • Provide 0.018 cubic yards per unit for FEL GMP containers • Provide 0.038 cubic yards per unit for FEL fibre containers
Organics	<ul style="list-style-type: none"> • For individual units provide one 47L green bin • In situations where individual units do not have their own bin, provide one 240L green container for every 50 units

6. Waste Management Brief Requirements

6.1 Trigger for Waste Management Brief

In situations where a development is unable to meet the guidelines, then a Waste Management Brief will be required with the site plan application, to the satisfaction of Solid Waste Services. The intention of the brief is to ensure that the development has been designed with due diligence for on-site solid waste management. Pre-consultation with Solid Waste Services is recommended if a Waste Management Brief will be submitted with the Site Plan application. The following describes some (but not all) situations in which a site design might be outside the realm of these guidelines and warrant a Waste Management Brief.

Example 1: The storage room is not large enough to accommodate the amount of waste generated between City pick up dates.

The Waste Management Brief could propose a compaction system that could allow smaller containers and a smaller storage room. The Waste Management Brief would have to describe the compaction system and demonstrate the feasibility of the smaller room through calculations showing the volumes of the uncompacted and compacted solid waste streams. Alternatively, the owner could propose arrangements for more frequent pick up of solid waste by a private contractor at the owner's expense.

Example 2: The proposed access route does not meet City standards.

The Waste Management Brief could propose that a private waste collection contractor using smaller vehicles collect the waste. The Waste Management Brief would have to describe the size of the smaller vehicle and its safe turning movements with a diagram to demonstrate the feasibility of the access route.

Example 3: The loading area is not large enough to accommodate all the required number of containers.

The Waste Management Brief could propose that a private waste contractor collect the waste using an alternative collection method or schedule than the City's. The Waste Management Brief would have to explain the alternative collection method (i.e., the collection operator taking responsibility for moving the containers) or the alternative schedule to demonstrate the feasibility of the smaller loading area.

6.2 Waste Management Brief Subject Matter

The following describes the details that may be required in a Waste Management Brief to satisfy the City that appropriate considerations have been made when a development requires an alternative to these guidelines and/or City waste collection services. The Waste Management Brief must be signed by a qualified professional (e.g., planner, engineer or architect).

- Describe all of the situations in which the proposed development does not meet these guidelines;
- Explain how the proposed solution will continue to provide adequate waste collection services to the residents;
- State all assumptions being made (sizes, schedule, etc.);
- Demonstrate all calculations performed (volumes, etc.);
- Provide all necessary diagrams to illustrate proposed solutions;
- Provide any further details that demonstrate due diligence in providing solid waste services to residents; and,
- If the development does not meet the access route requirements, a qualified Transportation Engineer is required to demonstrate how the proposed site layout will safely and adequately accommodate the private solid waste collection vehicle.

7. Approval Requirements

7.1 Alternative to City-Serviced Sites: Disclosure Requirement

As part of the approval for solid waste collection other than City-supplied service, the Owner, Developer, Property Manager, or their agent must disclose in writing the type of alternative solid waste management system and requirements of a prospective owner regarding storage and collection as part of the negotiations for purchase. The requirement for this disclosure will be established in the Site Plan Agreement.

7.2 City-Serviced Sites: Criteria to be Met before Services Commence

The Owner, Developer, Property Manager, or their agent will be responsible for garbage and recycling collection within the development or redevelopment until the following criteria, where applicable, have been met and the site has been approved by Solid Waste Management Services staff. Other criteria relating to access and safety issues may be reviewed, where applicable.

- The location is accessible and approved by the General Manager;
- All roads and access routes have been completed to at least base asphalt as per the approved plan with no obstructions related to construction and move-ins;
- Curbs to at least base construction must be completed;

- Loading areas and storage areas are complete;
- If the collection vehicle is required to drive onto or over a supported structure (such as an underground parking garage) the City must be provided with a letter certified by a qualified Engineer that the structure can safely support a fully loaded collection vehicle weighing 35,000 kilograms;
- Multiple household residence locations must have a minimum 75% occupancy per building or project;
- Boulevards must be rough graded;
- Access and collection points must be free and clear of debris and construction waste; and,
- The Application Form and Acknowledgement and Release Form (see **Appendix G** and **Appendix H**) have been received and approved by the City.

The requirements for interim private waste collection service and approval prior to City services commencing will be established in the Site Plan Agreement.

Appendix A – Waste Collection Container Dimensions

Garbage Container Specifications

2 yard Container: Height 44 inch (excluding castors), Width 84 inch, Length 36 inch



84 inch pocket to pocket



36 inch

44 inch (excluding castors)

2 Yard “Tall”

Height 56 inch
Width 84 inch
Length 25.5 inch

Photo Unavailable

3 Yard Container Compacted: Height 56 inch (excluding castors), Width 84 inch, Length 42 inch



84 inch pocket to pocket



42 inch

56 inch (excluding castors)

3 Yard “Tall”

Height 62 inch
Width 84 inch
Length 36.5 inch

Photo Unavailable

4-Yard Container: Height 48 inch (excluding castors), Width 84 inch, Length 54 inch



84 inch pocket to pocket



54 inch

56 inch (excluding castors)

4 Yard “Tall”

Height 66 inch
Width 84 inch
Length 40.5 inch

Photo Unavailable

6 Yard Container: Height 60 inch, Width 84 inch, Length 66 inch



84 inch pocket to pocket



66 inch

60 inch

- Please note: all bins are available with plastic lids and castors. The 6-yrd bin has no castors. The width of all bins includes side-lifting pockets.

Recycling Container Specifications

FEL Fibre Recycling Container Specifications

2 Cubic Yard: Height **38** inch (excluding castors), Width **84** inches, Length **35** inches



84 inch pocket to pocket



35 inch

38 inch (excluding castors)

2 Cubic Yard "Tall": Height **58 3/8** inch (excluding castors), Width **84** inches, Length **28.25** inches



84 inch pocket to pocket



28.25 inch

58 3/8 inch (excluding castors)

3 Cubic Yard: Height **48** inch (excluding castors), Width **84** inch, Length **42** inch

Photo Unavailable

4 Cubic Yard: Height **48** inch (excluding castors), Width **84** inch, Length **54** inch



84 inch pocket to pocket



54 inch

48 inch (excluding castors)

4 Cubic Yard " Tall": Height **58** inch (excluding castors), Width **84** inch, Length **45 1/2** inch



84 inch pocket to pocket



45-1/2 inch

58 inch (excluding castors)

6 Cubic Yard: Height **60** inch (excluding castors), Width **84** inch, Length **67** inch



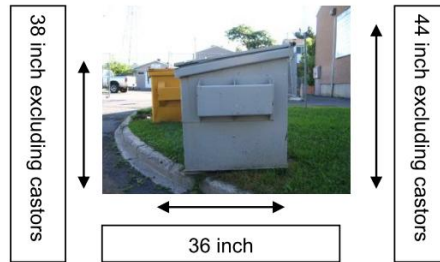
84 inch pocket to pocket



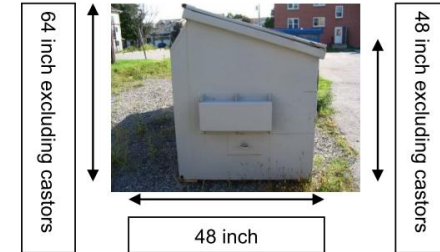
67 inch

60 inch (no castors on 6yds)

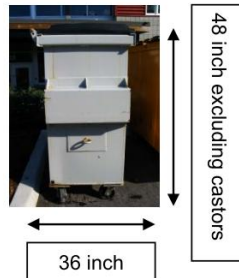
2 Cubic Yard (Slant Style): Height 38 inch/front 44 inch/rear (excluding castors), Width 84 inch, Length 36 inch



4 Cubic Yard Slant Style: Height 48 inch/front, 64 inch/rear (excluding castors), Width 84 inches, Length 48 inches



2 Cubic Yard (Flat Style) "Tall": Height 48 inches (excluding castors), Width 84 inches, Length 36 inches



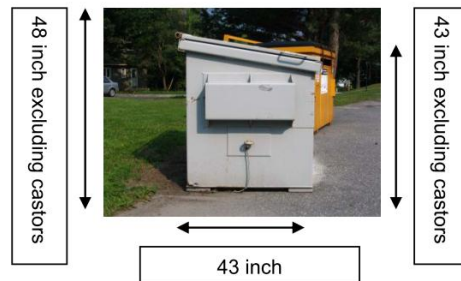
4 Cubic Yard "Tall": Height 58 inches (excluding castors), Width 84 inches, Length 45 1/2 inches



6 Cubic Yard: Height 60 inches (excluding castors), Width 84 inches, Length 67 inches

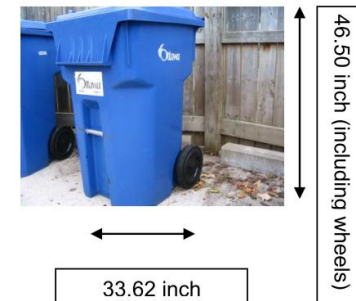


3 Cubic Yard: Height 43 inch/front 48 inch/rear (excluding castors), Width 84 inch, Length 43 inch

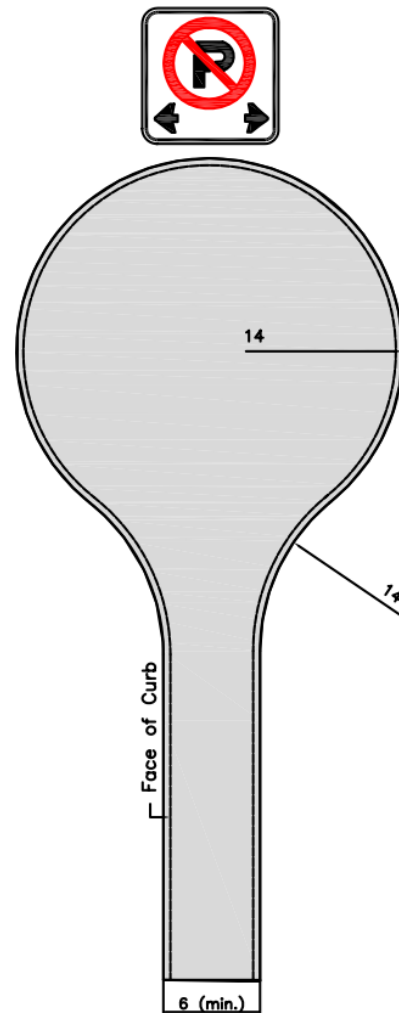


RECYCLING CART SPECIFICATIONS

Recycling Carts: Height 46.50 inch, Width 26.38 inch, Depth 33.62 inch

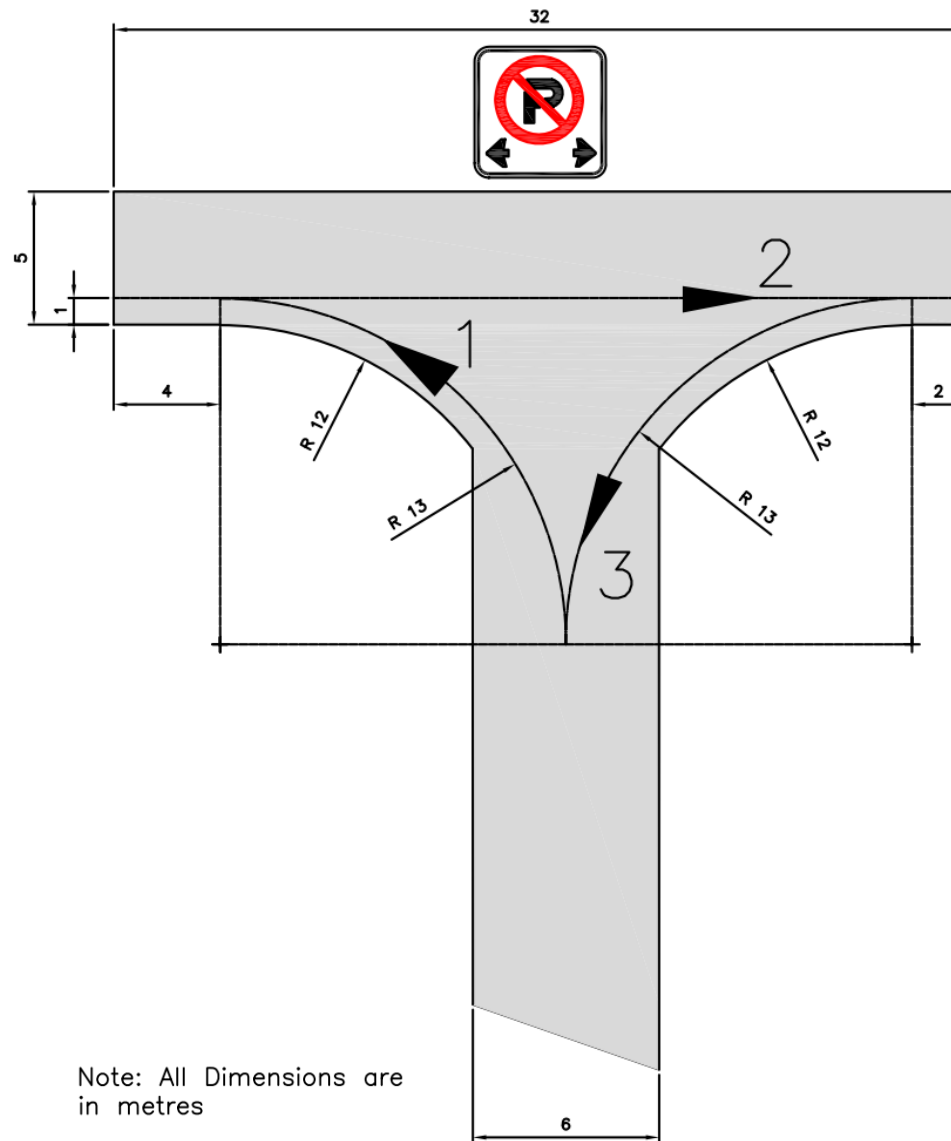


Appendix B – Cul-de-sac Specification



Note: All Dimensions are in metres

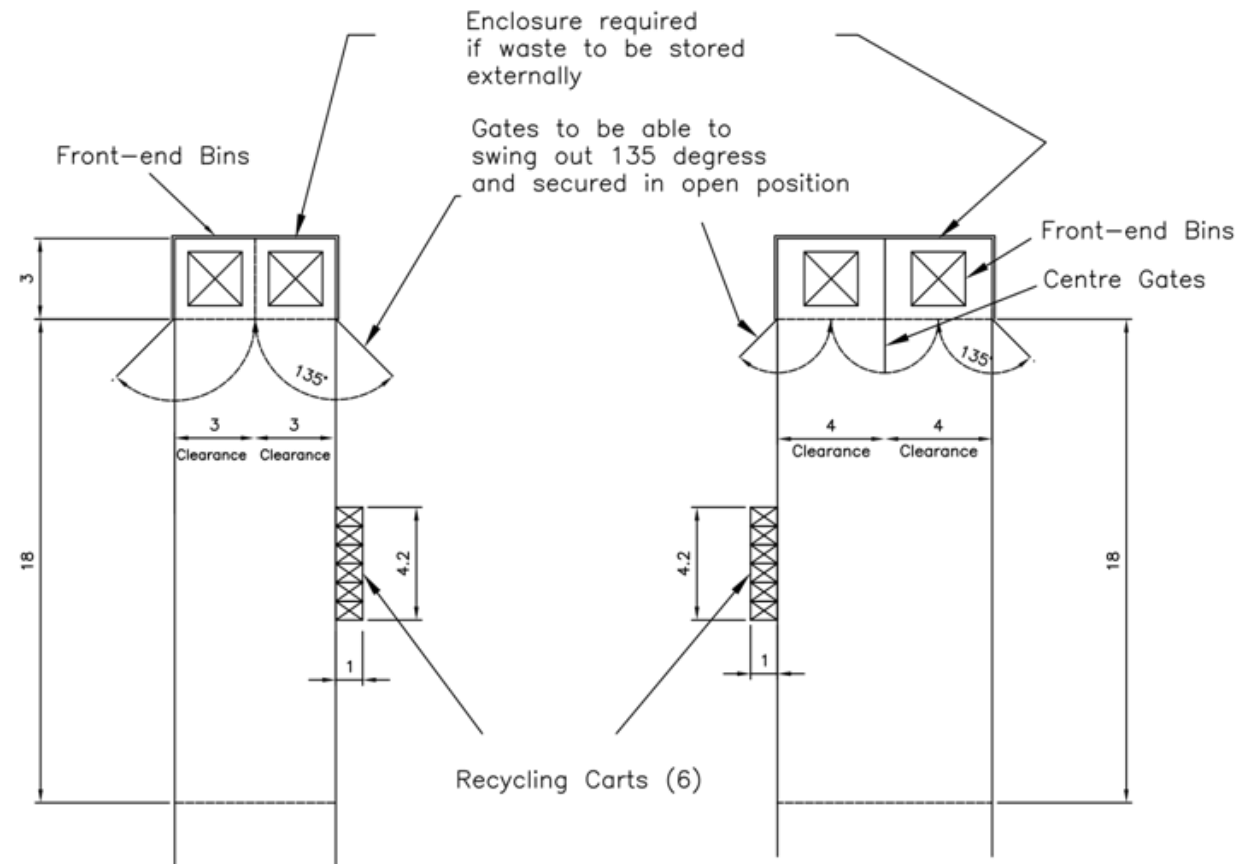
Appendix C – 'T'-Turnaround Specification



Appendix D – Example Outdoor Storage Enclosures or Accessory Buildings

ALTERNATIVE 1
(with two gates)

ALTERNATIVE 2
(with four gates)

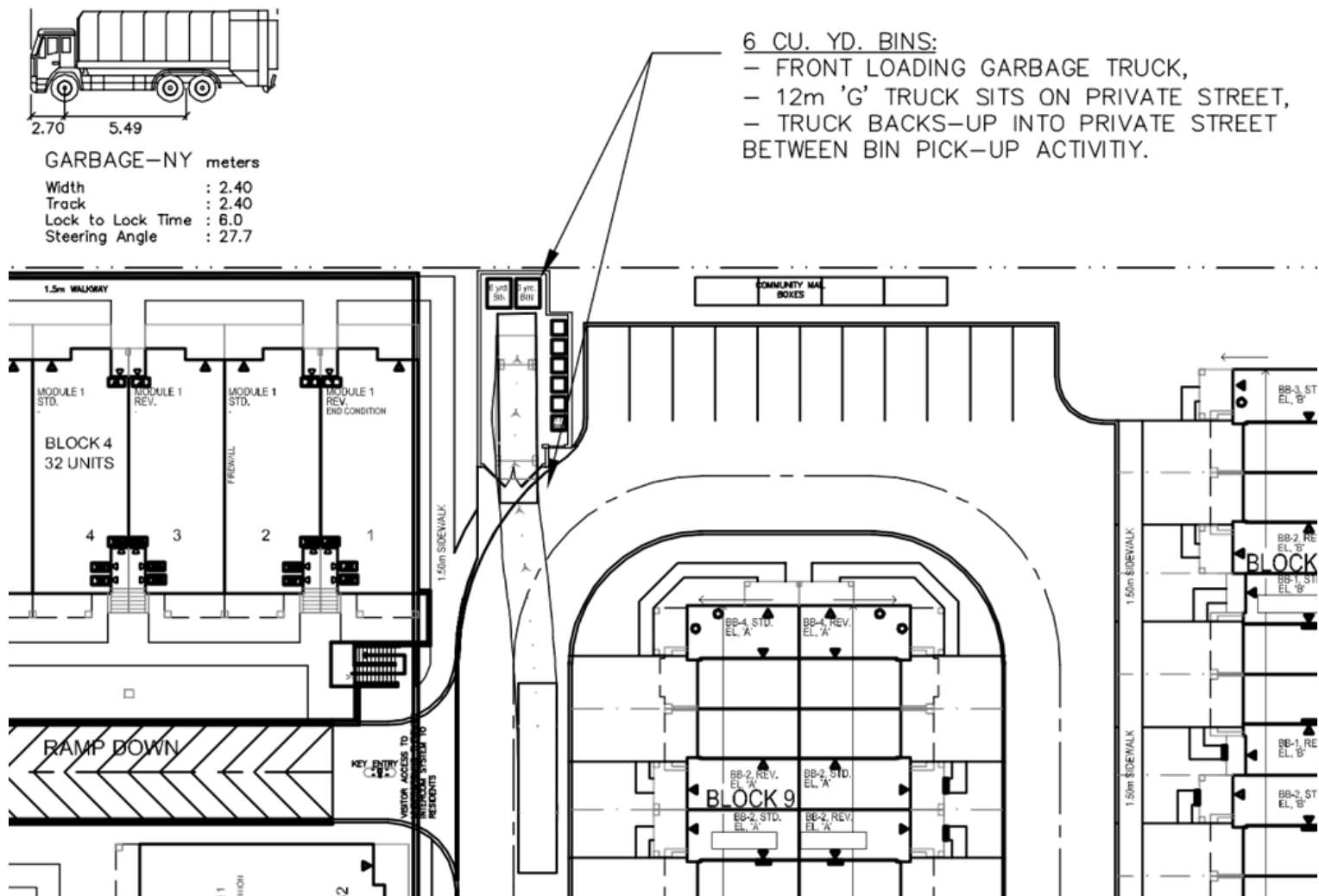


Note: Pads for Front-end Bins and Recycling Carts are to be at same elevation as driveway.

Note: All Dimensions are in metres

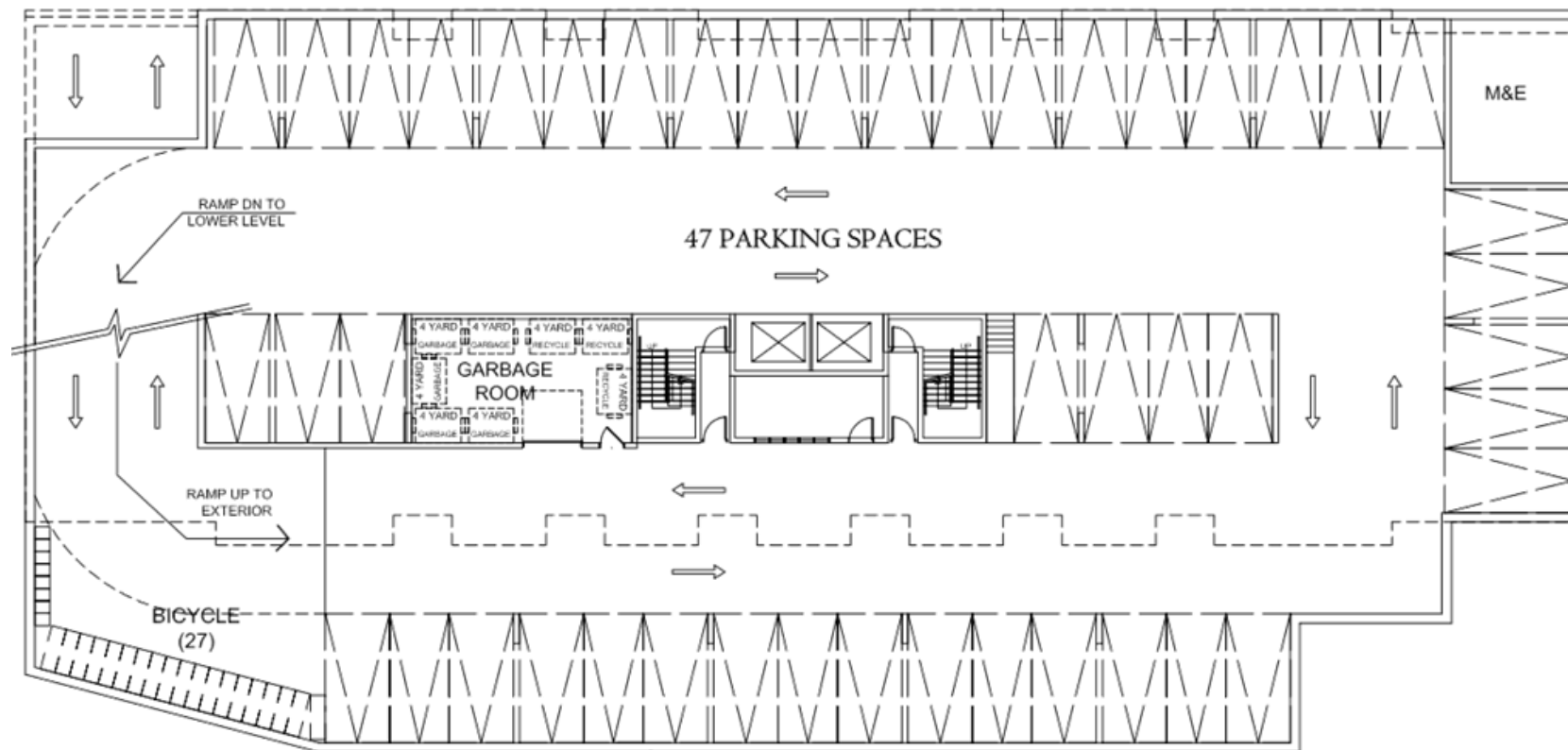
Appendix E1 – Low-Rise Site Plan Example Meeting Solid Waste Guideline Requirements

Example 1: This site plan is an example demonstrating how the **vehicle turning movements should be displayed on the site plan drawing**. The path and approach of the vehicle is clearly identified on the drawing as well as the vehicle assumptions.



Appendix E2 – High-Rise Site Plan Example Meeting Solid Waste Guideline Requirements

This site plan is an example demonstrating the **layout of the garbage/recycling room in the underground parking structure of a high rise development**. The layout and number of containers are clearly identified on the drawing, as well as an overhead door.



3 UPPER LEVEL PARKING GARAGE
ASRT BLOCK 12

Appendix F – Site Plan Checklist for Solid Waste Collection Design

Ensure that the following have been identified on the site plan drawing:	Check
Number of dwelling units and number of storeys in the development	<input type="checkbox"/>
Proposed waste handling system for recyclables, organics and garbage	<input type="checkbox"/>
Size and number of garbage and recycling receptacles to be used (i.e. for multi-unit buildings receiving front-end and/or semi-automated waste collection services)	<input type="checkbox"/>
Loading facilities	<input type="checkbox"/>
All waste storage facilities	<input type="checkbox"/>
All waste collection areas	<input type="checkbox"/>
Access routes and dimensions for waste collection vehicles on private property	<input type="checkbox"/>
Above ground features such as parking areas in relation to the access route	<input type="checkbox"/>
Pedestrian routes and building access(es) in relation to the access route	<input type="checkbox"/>
Waste Management Brief if applicable	<input type="checkbox"/>

Appendix G – Application Form for Solid Waste Collection

APPLICATION FOR PRIVATE PROPERTY WASTE COLLECTION SERVICES



Corporation
of the
City of Ottawa

City of Ottawa
3rd Floor, 150 Katimavik
Kanata, ON K2L 2N2

Application for Private Property
Waste Collection Services

Date: / /

The undersigned requests the waste collection service(s) as provided by the City of Ottawa, Public Works and Services.

Please indicate which service you require

<input type="checkbox"/> Front-End Container Service	<input type="checkbox"/> Curbside Drive-Through Service
<input type="checkbox"/> Apartment Recycling	<input type="checkbox"/> Curbside Recycling

Applicant _____ Property Owner _____

Address of Owner _____

City _____ Postal Code _____ Phone Number _____

Collection is requested at

Name of Property _____ Contact _____

Address _____ Phone Number _____

Building Type _____ Number of Containers _____

Site Plan Number _____ Size of Containers _____ Cu. Yd.

Number of Units _____ Number of Pick-Up Locations _____

Condominium? Yes No Is Garbage Compacted? Yes No

Size of Enclosures _____ Number Enclosures _____

Important Information

- Collection area to be signed and kept clear of parked vehicles
- Collection area must be fully plowed and salted during winter months
- Do not place scrap in front of bins
- Regularly clean and sanitize containers
- All waste must be set out for pick up before 7 am on your scheduled collection day

Note: Requests will not be processed unless the attached general release form is signed and sealed.
All applicants must provide a reduced site plan.

For Office Use Only

Application Inspected by _____	Date of Inspection: _____
--------------------------------	---------------------------

Service Start Date _____ Zone _____

Garbage Collection Days _____ Scrap Collection Day _____

Recycling Collection Days _____

Comments

City of Ottawa Solid Waste Services Branch, 3rd Floor 150 Katimavik, Kanata, ON K2L 2N2

Appendix H – Acknowledgement and Release Form



Corporation
of the
City of Ottawa

City of Ottawa
3rd Floor, 150 Katimavik
Kanata, ON K2L 2N2

**Acknowledgement
and Release**

ACKNOWLEDGEMENT AND RELEASE

- 1) In consideration of the Corporation of the City of Ottawa (hereinafter the "City") providing a waste collection service, _____ (hereinafter the "Owner") being the registered Owner of _____ (hereinafter the "lands") shall:
 - a) Permit the City and its authorized agents entry onto the land for purposes of waste collection; and
 - b) Release and agree to indemnify the City from all actions, causes of actions, damages, claims and demands arising as a result of the City and its agenda utilizing the driveway ramp, loading and parking areas of the lands for purposes of providing waste collection service, save and except any claims or damages attributable to the negligence of the City or those for whom it is in law responsible.
- 2) It is herein acknowledged by the Owner that the City's waste collection for the lands is conditional on:
 - a) The Owner providing free and clear access to a collection point determined satisfactory by the Public Works and Services for these purposes. The Owner's proposed route of access for collection purposes as set out on a plot plan of the building and parking lot which is attached hereto:

- b) The Owner utilizing waste containers approved by the City's Deputy City Manager of Public Works and Services
 - c) The Owner maintaining all compaction equipment containers in good and operable condition; and
 - d) All designated waste being set up for collection in approved containers no later than 7:00 a.m. on the designated date for collection.
- 3) The Owner further acknowledges the City's waste collection service is limited to:
 - a) Services as outlined in the City of Ottawa's Solid Waste Management By-law.
 - 4) The Owner further acknowledges that the City shall not collect garbage generated from building renovations, white goods and appliances, apartment fires, parking lot sweepings or appliances being replaced on a mass basis. All materials to be collected must be in accordance with the Solid Waste Management By-law.

DATED AT _____ this _____ day of _____

SIGNED SEALED AND DELIVERED)
)
) (Company Name)
)
) Per: _____
) Name:
) Title:
)
) Per: _____
) Name:
) Title:

Appendix I – Example Site Plan Agreement Conditions

The following are a sample of conditions that may be incorporated in the site plan agreement to address on-site solid waste. Additional or modified conditions may be incorporated into a site plan agreement to address specific solid waste management issues.

- The owner agrees to provide and maintain all on-site waste management facilities in accordance with the approved plans, to the satisfaction of the General Manager, Planning and Growth Management.
- The owner agrees to provide solid waste collection for the development until such time as the City commences collection of solid waste from the site.
- The owner agrees to submit and have approved an Application for Solid Waste Management for Private Property Waste Collection services prior to the City commencing the collection of solid waste from the site.
- The owner agrees to submit an Acknowledgement and Release for Solid Waste Collection Service prior to the City commencing the collection of solid waste from the site.
- The owner agrees to provide winching of containers to the collection area at its own expense.
- For mixed use development with commercial floor space:
 - Commercial Units: Waste collection and recycling collection will not be provided by the City and the owner/applicant will make appropriate arrangements with a private contractor for solid waste collection.
- For development with an alternative approach to on-site solid waste management approved through a Waste Management Brief:
 - The owner agrees to provide and maintain the on-site solid waste management solution for the development in accordance with the Waste Management Brief prepared by _____, dated _____, and revised _____], to the satisfaction of the General Manager, Environmental Services Department or their delegate.
- The owner agrees to register the following warning clause on title: “Warning: Solid waste collection will not be provided by the City of Ottawa and in no case shall there be a reduction in property taxes or exemption of user fees for solid waste.”
- The owner agrees to include in all agreements of Purchase and Sale the following: “The purchaser acknowledges that solid waste collection will not be provided by the City of Ottawa and in no case shall there be a reduction in property taxes or exemption of user fees for solid waste.”