

## **COMMITTEE OF THE WHOLE APRIL 30, 2007**

### **WASTE COLLECTION DESIGN STANDARDS POLICY**

#### **Recommendation**

The Commissioner of Engineering and Public Works recommends:

1. That the 'Waste Collection Design Standards Policy' be approved;
2. That the Waste Collection Design Standards Policy be applied to site development applications; and
3. That a Public Hearing be scheduled to consider possible amendments to the Zoning By-law 1-88 to incorporate the site development standards contained within the Waste Collection Design Standards Policy.

#### **Economic Impact**

There is no economic impact to the City to implement the Waste Collection Design Standards Policy.

#### **Communications Plan**

Developers applying for site plan approval will be informed by City staff at the point of site plan application of the requirements pursuant to the Waste Collection Design Standards Policy. Properties that are developed / re-developed under the building permit process will be advised of specific requirements via amendments to the zoning by-law

Copies of the document 'Waste Collection Design Standards Policy' will be available at the Engineering Department and made available on line via the City's website and the Greening Vaughan website, under 'Development Requirements'.

Applicants will be directed to contact the staff in the Public Works Waste Management Section should they have any questions concerning the contents of the document or related amendments to the zoning by-laws.

#### **Purpose**

The purpose of the 'Waste Collection Design Standards Policy' is to meet Council's direction with respect to establishing design standards pertaining to waste collection for development applications going through the site plan approval process, and ultimately, those going through the building permit process.

Typically, development applications going through the site plan approval or the building permit process will receive private collection, however there is a need to ensure that all of these developments meet the necessary requirements to ensure collections are unencumbered (i.e. designated access routes and loading areas). Additional requirements are intended to eliminate visual eyesores by ensuring all waste material is stored internally (or in some cases, in an external waste enclosure) and that the applicant (or designate), where applicable, employ the necessary tools to ensure compliance to mandatory source separation programs (i.e. recycling) pursuant to the Ministry of Environment's Regulation 103 / 94.

The requirements would apply to new developments only. Any existing properties that have previously developed and are not in compliance with the proposed standards would be deemed to be legal non-conforming.

## **Background - Analysis and Options**

The Waste Collection Design Standards Policy was developed to provide consistent design standards specific to waste collection for those applications going through the site plan approval process and ultimately through the building permit process.

### **a) Site Plan Approval Process**

The Site Plan Control By-law (228-2005) designates classes of development and re-development that require site plan approval.

Historically, development applications were silent on waste collection issues altogether. In recent years, staff have required developments going through the site plan approval process to have internal garbage storage areas, appropriate access and loading areas.

However, this document goes further, by stipulating the sphere of responsibility for collection services and ensuring multi-unit residential developments, such as condominiums, construct and make available a multiple-sort disposal system that permits the disposal of recycling and garbage on each floor. The vast majority of multi-unit residential developments go through the site plan approval process prior to the issuance of a building permit.

The Waste Collection Design Standards will be a prerequisite of acceptance of site plan development applications. The process to employ the conditions as so stipulated in the Waste Collection Design Standards Policy is that the developer be informed of these requirements when the applicant comes in for a site plan application (via reference and link to the Waste Collection Design Standards in the Site Plan Application form obtained in the Development Planning Department). The onus would be borne by the developer to ensure that they meet all the necessary requirements (similar to a 'certified submission') of this document. To this end, the developer is required to submit a Waste Collection Design Standards submission (Appendix B of Attachment 1), upon submission of site plan and other necessary documentation. In this submission, the "Owner" must substantiate compliance with the following main categories:

1. General Collection Requirements, including
  - A multiple-sort system for multi-unit residential developments that permits the disposal of garbage and recycling on every floor
  - Compliance with all existing and future government regulations pertaining to waste reduction and waste audit programs.
  - Submission of Waste Collection Design Standards Compliance submission
2. Designated Access (Collection) Route
3. Designated Loading (Collection) Area
4. Storage (Garbage / Recycling) Area

### **b. Building Permit Process - Amendments to City of Vaughan Zoning By-Law 1-88**

The large number of properties within the City are not developed / re-developed under the site plan approval process. These are mainly industrial properties that do not directly abut major arterial roads. Most development applications go through the building permit process and as such must comply with Zoning By-law 1-88, as amended, the Building Code and other 'applicable law' as defined in the Ontario Building Code Act. Policies, such as that identified in the 'Waste Collection Design Standards' document, are not defined as 'applicable law' and therefore cannot be incorporated as of condition of permit.

To implement the site development standards contained within the Waste Collection Design Standards Policy, it is being recommended that Council, through a zoning by-law amendment

process, consider appropriate amendments to the City's zoning by-law 1-88. This would ensure that all future developments in the City would be developed using the applicable development standards contained within the Waste Collection Design Standards Policy. As with any new zoning requirement, the requirements would apply to new developments only. Any existing properties that have been previously developed and are not in compliance with the proposed standards would be deemed to be legal non-conforming.

The zoning by-law cannot dictate or regulate development criteria for inside buildings, therefore only those conditions specific to outside the building envelope can be considered for inclusion in the City's zoning by-law. In instances albeit infrequent, where an applicant is applying through the building permit process for a multi-unit residential development, the City cannot require the applicant to construct a multi-sort disposal system on every floor, as it is a condition internal to the building..

Given the proposed amendments can only stipulate requirements for outside the building, the applicable zoning bylaw amendments specific to the Waste Collection Design Standard document would include development standards for:

1. Designated (Collection) Access Routes (eg. Width of road and centre line radius)
2. Location, size and screening of the Loading (Collection) Areas
3. Location, size and screening of the Storage (Garbage / Recycling) Area

### **Relationship to Vaughan Vision 2007**

This report is consistent with the priorities previously set by Council, specifically:

A-1 "Pursue Excellence in the Delivery of Core Services"

A-3 "Safeguard Our Environment"

A-5 "Plan & Manage Growth"

D-2 "Develop Internal/External Collaborative Solutions"

### **Regional Implications**

There are no Regional implications to implementing the 'Waste Collection Design Standards Policy'.

### **Conclusion**

The Waste Collection Design Standards Policy is a beneficial tool that will assist both City staff and developers. The document is intended to ensure collections services are unencumbered, regardless of who is providing the collection services and where applicable, to provide increased recycling opportunities for residents residing in multi-unit residential developments via a multiple sort system on every floor.

The document ensures that the requirements put forth by the City, specific to waste collection design standards, are consistent and that developers are informed from the outset of all necessary requirements as so stipulated in the Waste Collection Design Standards Policy or through the amendments of the the Zoning By-law..

### **Attachments**

Attachment 1: Waste Collection Design Standards Policy

**Report prepared by:**

Caroline Kirkpatrick, C.E.T., MC.I.P., Manager of Solid Waste Management

Respectfully submitted,

Bill Robinson, P. Eng.  
Commissioner of Engineering and Public Works

Brian T. Anthony  
Director of Public Works

ATTACHMENT 1: WASTE COLLECTION DESIGN STANDARDS POLICY



## City of Vaughan

# WASTE COLLECTION DESIGN STANDARDS POLICY

Prepared by: **City of Vaughan Public Works Department**

2800 Rutherford Rd., Vaughan, ON., L4K 2N9

Tel. 905-832-8562 Fax. 905-303-2005

Website: [www.vaughan.ca](http://www.vaughan.ca)

Last Revised: March 27, 2007

---

For any questions concerning the contents of this document, please contact the Public Works Department,  
Waste Management Section (tel. 905-832-8562)

---

## Waste Collection Design Standards Policy

### Table of Contents

<b>Part 1:</b>	<b>Introduction</b>
1.1	Municipal Collection Service Eligibility
1.2	General Information & Requirements
<b>Part 2:</b>	<b>Residential Development / Re-Development Requirements</b>
2.1	Residential Developments Fronting on Public Streets / Laneways
2.2	Residential Developments Fronting on Private Streets / Laneways
2.2.1	Small (2-5 units)
2.2.2	Mid-Size (6 – 29 units)
2.2.3	Large (over 30 units)
<b>Part 3:</b>	<b>Institutional, Commercial, Industrial and Mixed Use Development / Re-Development Requirements</b>
3.1	Overview of Requirements
<b>Part 4:</b>	<b>Collection (Design Standard) Requirements</b>
4.1	General Requirements
4.2	Collection Access Route
4.3	Designated Loading (Collection) Area
4.4	Storage Area for Garbage / Recycling

### Appendices

<b>Appendix A</b>	Ontario Regulation 103/94 (Environmental Protection Act): Source Separation Programs for Institutional, Commercial and Industrial Establishments
<b>Appendix B:</b>	Template for Waste Collection Design Standards Submission for Developments and Redevelopments
<b>Appendix C</b>	Garbage and Recycling Container Dimensions
<b>Appendix D</b>	Typical External Garbage Enclosure

---

## **PART 1: INTRODUCTION**

### **1.1 MUNICIPAL COLLECTION SERVICE ELIGIBILITY**

**1.1.1** Only residential developments solely used for the purpose of residential use and fronting on public streets and not part of a private development (i.e. condominium, apartment) will be eligible for municipal collection services. Residential developments eligible for collection are identified in more detail in section 2.1

**1.1.2** Municipal collection services are not provided to residential establishments that front onto private streets / laneways or have to be accessed via a private driveway or laneway or are part of a private development (i.e. multi-unit residential developments such as apartment, condominium and townhouse condominium developments). Residential developments / redevelopments not eligible for municipal collection services are required to seek private waste / recycling collection service providers.

**1.1.3** Institutional, Commercial, Industrial and Mixed Use (i.e. residential / commercial) developments and redevelopments are not eligible for municipal collection services and are required to seek private waste / recycling collection service providers.

**1.1.4** Specific to the City's waste collection design standards, new developments and re-developments must adhere to all applicable requirements outlined in this document and other applicable legislation.

### **1.2 GENERAL INFORMATION & REQUIREMENTS**

**1.2.1** The role of the City of Vaughan (Public Works Waste Management Section) within the development process is to provide comments on development applications as it pertains to design standards relating to the collection of waste materials. This may include all or some of the following waste stream categories: waste, recycling, household organics, leaf and yard waste and other acceptable materials.

This document sets out the City's requirements (design standards) for the collection of waste for each of the various categories of development and land uses.

**1.2.2** The Public Works Department (or designate) reviews development and re-development applications, rezoning applications and condominium applications along with some developments going to the Ontario Municipal Board and Committee of Adjustment. Developments that do not go through the processes above, including proposals to change collection points, method of collection or if there is a new building planned or a change of use and/or an existing building is being expanded by more than one-third its original size, must be reviewed by the Public Works Department (or designate).

**1.2.3** All development applications shall adhere to all applicable requirements in this document, regardless whether collection services are provided via private or municipal collection entities.

**1.2.4** This document shall be used with, not in place of, all applicable building codes, the City's Engineering Standards and other relevant legislation. Information concerning the site plan control process can be obtained from the City of Vaughan Development Planning Department. The City reserves the right to enact additional requirements during detailed review of specific projects. The City also reserves the right to designate the type and location of collection, access, storage and loading area required.

**1.2.5** Definitions in this document are consistent with, where applicable, the most current Waste and Recycling Collection By-law, as amended and the Consolidated Zoning By-law 1-88, as amended.

**1.2.6** All applicants submitting development and redevelopment applications must provide a "Waste Collection Design Standards" submission as identified in Part 4 (Collection Requirements) of this document with their site plan / development application.

*Continued...*



---

## **PART 2: RESIDENTIAL DEVELOPMENT / RE-DEVELOPMENT REQUIREMENTS**

### **2.1 RESIDENTIAL DEVELOPMENTS FRONTING ON PUBLIC STREETS / LANEWAYS**

Dwellings, typically Duplex, Single Family Detached, Semi-Detached, Townhouse and other eligible residential developments as defined in Vaughan's Consolidated Zoning By-law 1-88 that have appropriate on-site storage and facing a public street / laneway and are not part of private development such as condominiums and apartments and as approved by the City, will be eligible for municipal collection for garbage, recycling and other materials that may be part of the City's waste collection program. Certain conditions may apply prior to the commencement of municipal collection services for eligible new residential subdivision developments.

### **2.2 RESIDENTIAL DEVELOPMENTS THAT FRONT ON PRIVATE STREETS/LANEWAYS AND ARE A PART OF A PRIVATE DEVELOPMENT**

Municipal collection services are not provided to residential developments that are facing private streets / laneways and / or are a part of a private (i.e. condominium, apartment) development.

#### **2.2.1 SMALL (2 to 5 units) Multi-Unit Residential Development and Re-Development Collection Requirements**

The City, on an individual basis, reviews small residential developments / re-developments containing 2 – 5 dwelling units (i.e. Apartment, Block Townhouse, and Condominium Dwellings). The collection location and method of collection will be to the satisfaction of the Director of Public Works, or designate.

#### **2.2.2 MID-SIZE (6-29 UNITS) Multi-Unit Residential Development and Re-Development Collection Requirements**

The City reviews residential developments/re-developments containing 6-29 dwelling units on an individual basis (i.e. Apartment, Block Townhouse, and Condominium Dwellings). Mid-Size multi-unit developments will typically require bulk lift (front-end bin) collection of waste and cart (90-95 gallon) or bulk (front-end bin) collection of recycling, unless otherwise approved by the City. Collection requirements identified in Part 4 (Collection Requirements) of this document will apply.

In all cases, all garbage and recycling and other waste materials must be stored in the internal storage area (i.e. designated waste storage room) on private property between collection days. The internal storage area shall be attached to the main use of the building.

#### **2.2.3 LARGE (30+ units) Multi-Unit Residential Development and Re-Development Collection Requirements**

The collection method for large multi-unit residential developments / redevelopments will require bulk lift (front-end bin) collection of waste and recycling. Garbage must be mechanically compacted into regulation sized steel garbage containers. Collection requirements identified in Part 4 of this document will apply.

In all cases, all garbage, recycling and other waste materials must be stored internally (i.e. designated waste storage room) on private property between collection days. The internal storage area shall be attached to the main use of the building.

*Continued...*

---

## **PART 3: INSTITUTIONAL, COMMERCIAL, INDUSTRIAL AND MIXED USE DEVELOPMENT / RE-DEVELOPMENT REQUIREMENTS**

### **3.1 OVERVIEW OF REQUIREMENTS**

With the exception of those locations grand-parented by Council on December 12, 2005, the City does not provide municipal garbage / recycling collection services to institutional, commercial, industrial or mixed-use (i.e. residential / commercial) developments or re-developments. These types of developments / redevelopments are required to seek private waste / recycling collection service providers.

All Industrial, Institutional, Commercial and Mixed Used developments / redevelopments will require internal storage area(s) for waste materials. These internal garbage / recycling storage areas shall be attached to main use of building, unless otherwise approved by the City. In some circumstances, the City may permit an external garbage enclosure for the storage of waste and recycling material between collection days (refer to Part 4.4 for Storage Requirements).

In either case, the garbage room shall be fully situated on private property. No waste shall be stored outside the internal garbage room / external garbage enclosure between designated collection days.

The collection method for garbage shall be roll-off or bulk lift collection (front-end bin) and the collection method for recycling materials may be either cart (90-95 gallon) collection or bulk lift (front-end bin) collection, unless otherwise approved by the City..

All collection requirements, unless otherwise stated, shown in Part 4 of this document will apply. The requirements include, in part, the provision of a "Waste Collection Design Standards" submission showing, in part, the Access Route for the waste collection vehicles, the Loading Area and the garbage / recycling Storage Area. Refer to Part 4 of this document for full details on collection requirements.

Other developments or redevelopments that do not fall within the categories noted in this document will be reviewed on an individual basis.

*Continued...*

---

## **PART 4: COLLECTION REQUIREMENTS**

### **4.1 GENERAL REQUIREMENTS**

#### **4.1.1 Multiple Sort System on Every Floor**

For multi-unit residential developments, general access to recycling shall be equally convenient as access to garbage disposal. To this end, the “Owner” or designate shall construct and make available a multiple-sort disposal system (i.e. carousel, tri-sorter, multiple chutes, bi-sorter) that permits the disposal of recycling and garbage on each floor. It is also necessary to provide a separate yet attached recycling room for all owner / tenant access, especially in buildings incorporating compaction equipment.

The multiple-sort disposal system must be designed in such a way that permits for the increase or decrease of waste streams, if so required in the future. Refer to Appendix ‘C’ for Regulation 103-94 of the Environmental Protection Act for materials that must be recycled in multi-unit residential establishments.

For larger items that do not fit in the multiple-sort disposal system provided on each floor, the “Owner” or designate shall provide an internal storage room solely dedicated to this purpose (refer to section 4.4 ) to temporarily store white goods, bulky items and other waste materials that may be generated by occupants of the development. The internal storage room shall be clean, well marked and conveniently accessible to residents of the development. No waste materials shall be stored outside between collection days.

#### **4.1.2 Mandatory Recycling Programs**

The “Owner” or designate must comply with all existing and future government regulations pertaining to waste reduction and waste audit programs and requirements in commercial, institutional, industrial and multi-unit residential establishments. Refer to Appendix A for Regulation 103/94 of the Environmental Protection Act. This is to be used for reference only. The Owner is responsible for adhering to most current version(s) of applicable legislations.

#### **4.1.3 Waste Collection Design Standards Submission**

The “Owner” or designate must provide a Waste Collection Design Standards Submission to the City with the submission of development application. **PLEASE REFER TO APPENDIX B FOR A TEMPLATE FOR THE REQUIRED SUBMISSION**. In addition to general information requirements, a site plan of the development must accompany the submission and must clearly identify the following:

- a) COLLECTION ACCESS ROUTE and all applicable requirements therein (i.e. width of road, type of road construction, turning radius). Please refer to section 4.2 of this document for more information on ‘Access Routes’.
- b) DESIGNATED LOADING (COLLECTION) AREA and all applicable requirements therein (i.e. type of loading area construction, dimension of loading facility, how bins will be lined up etc.). Please refer to section 4.3 of this document for more information on “Loading Areas”.
- c) INTERNAL STORAGE AREA (or where approved, an external garbage enclosure) for garbage and recycling and other waste materials Site Plan shall show the size of the storage area and the number of requisite bins for garbage and recycling. Please refer to section 4.4 of this document for more details on “Storage Areas”.
- d) TYPE OF COLLECTION METHOD proposed for the collection of recycling, garbage and other applicable waste streams (i.e. front-end collection).
- e) DRAWINGS SIGNED OFF BY A PROFESSIONAL ENGINEER OF ONTARIO supporting that all requirements identified in this document have been met

**If the development is a multi-unit residential development, the following information shall also be provided:**

- f) TYPICAL FLOOR PLAN showing the multi-sort system on every floor
- g) DETAILS OF MULTI-SORT AND /OR COMPACTION SYSTEM USED
- h) NUMBER OF RESIDENTIAL DWELLING UNITS IN DEVELOPMENT

#### **4.1.4 Number and Size of Garbage Bins and Recycling Bins**

It is the responsibility of the "Owner" or designate to determine the requisite number of garbage bins and recycling bins (and their size) required for the development. Please refer to Appendix 'B' for typical garbage and recycling container dimensions. All necessary containers shall be provided and maintained by the Owner.

#### **4.1.5 Bin Access**

Bins shall be placed in the loading area in a manner acceptable to the collection service provider. Typically, the collection / staging area should not require the jockeying of bins by collection staff and should allow sufficient space to place and maneuver empty containers as to not interfere with the collection of other containers.

#### **4.1.6 Maintenance of Access Route and Loading Area**

It is the responsibility of the "Owner" or designate to ensure that the access route and loading area be maintained and free of obstructions on designated collection days. This shall include, but not be limited to, sightline obstructions, overhanging structures, snow, ice and parked vehicles.

#### **4.1.7 Support Structures**

If collection vehicles are required to drive onto or over a supported structure, such as an underground parking garage, the "Owner" or designate must ensure that the structure can safely support a fully loaded collection vehicle (approximately 28,000 kgs.) and conforms to the following:

- a) Design Code – Ontario Building Code
- b) Design Load – Bulk lift vehicle in addition to Building Code requirements
- c) Impact Factor - 5% maximum vehicular speeds to 15 km/h and 30% for higher speeds.

#### **4.1.8 Disclosure Requirements**

For multi-unit residential establishments, the "Owner" or designate must disclose in writing and as part of negotiations for purchase, to a prospective buyer of a unit within the development, the type of garbage and recycling collection system and requirements of the prospective owner/tenant regarding storage and collection. This shall include the fact that collection services are provided privately.

The "Owner" or designate of multi-unit residential developments / redevelopments will be required to ensure that all future owners / tenants are notified via the purchase and sale agreement of the need to provide and maintain private collection services.

#### **4.1.9 Time of Collection**

The time of collection operations must be in accordance to the City's applicable by-laws, including the Noise By-law 96-2006 (as amended).

## 4.2 COLLECTION ACCESS ROUTE

### 4.2.1 Ingress/Egress & Turnaround

The access route and loading platform must be designed in such a way to allow a collection vehicle to enter the site, collect the garbage / recycling and exit the site in a forward motion. Collection vehicles will not be permitted to backup onto a public road.

A turnaround area allowing for a three point turn of not less than one truck length or a drive-through access route are acceptable options for accommodating this requirement. The approximate dimensions of the collection vehicle that must be accommodated are presented in the table below:

Typical front-end garbage and recycling collection vehicle dimensions			
Wheelbase	5.49 m	Height of truck	4.1 m
Overall length of truck	12.0 m	Inside turning radius	10.0 m
Width of truck	2.4 m	Outside turning radius	12.5 m
Approximate weight fully loaded 28,000 kgs			
*These are approximate dimensions. Actuals may vary			

### 4.2.2 Location of Access Route

The access route shall be situated in a location that will minimize any interface with pedestrian traffic and public vehicular access to the building's main parking area, including underground garage and visitor parking areas.

### 4.2.3 Width of Access Driveway & Turning Radius Along Access Route

Access driveways must be a minimum of 6 m wide at the point of ingress or egress to the site and a minimum of 4.5 m though out the site. Should the collection vehicle be required to make any turns along the access route, the minimum turning radii noted above must be observed. A vertical clearance of 4.4 m (i.e. trees, balconies, wires) shall be observed throughout the entire access route.

### 4.2.4 Construction of Access Driveway

The access route shall be constructed of 50 mm compacted depth of HL-8 asphalt (base course) and 40 mm compacted depth of HL-3 asphalt for the top course (as per the City's Engineering Standards on Industrial, Collector and Arterial Roads).

## 4.3 DESIGNATED LOADING (COLLECTION) AREA

### 4.3.1 Grade

The loading area must be level (+/- 2%) grade. The loading area must be no higher than 0.6 m above driveway levels.

Where the loading area is not flat, a mechanism to prevent the containers from rolling off the loading area is required.

### 4.3.2 Location of Loading Area

The loading area shall be situated in a location that will minimize any interface with pedestrian traffic and public vehicular access to the building's main parking area including underground garage and visitor parking areas. Visual and odour considerations should be evaluated when determining the potential loading area location.

### **4.3.3 Loading Area Dimension**

The required number of garbage bins and recycling bins / carts set out for collection determines the length of the loading pad. The width of the loading area shall not be less than 6 m wide with an unencumbered vertical clearance of 7.5 m for entire loading area (i.e. trees, wires, balconies).

For multi-unit residential establishments, an additional area for special pick-up requests (i.e. bulky items and large appliances) must be incorporated into the loading area dimension.

### **4.3.4 Construction of Loading Pad**

The loading pad shall be constructed of 200 mm of reinforced concrete with a minimum base of 150 mm compacted depth of 20 mm diameter crusher run-limestone and a 300 mm compacted depth of 50 mm diameter crusher-run limestone (as per Engineering Standards E1 and 3.4.2(2)).

### **4.3.5 Ventilation**

Fresh air intakes shall not be located at or near any garbage storage and loading area.

## **4.4 STORAGE (GARBAGE/RECYCLING) AREA**

### **4.4.1 Internal Storage of Garbage, Recycling and other acceptable waste materials**

An internal storage room built in accordance with all applicable regulations (i.e. Ontario Building Code) must be provided in each building. The garbage room shall be ventilated, rodent proof and large enough to store all garbage, recycling and other acceptable waste materials between designated collection days. The room must be large enough to permit movement of the containers. All garbage / recycling storage rooms must be attached to main use of building. Refer to Appendix C for guidelines on garbage and recycling container dimensions.

In addition, for multi-unit residential developments, the 'Owner' shall provide additional internal storage space for the temporary storage of un-compacted garbage such as bulky items and large appliances.

All garbage and recycling containers must be stored inside until the designated day of collection and all containers returned to the garbage room immediately following collection. The time of collection operations must be in accordance to the City's applicable by-laws, including the Noise By-law 96-2006 (as amended).

For multi-unit residential developments, if compactor is used, an attached recycling room shall be provided for tenant / owner access for oversized recyclable material (i.e. corrugated cardboard etc.)

Under no circumstances shall waste materials be stored outside between designated collection days.

### **4.4.2 External Storage of Garbage, Recycling and other acceptable waste materials**

In some circumstances, the City may permit an external garbage enclosure to store waste materials. If permitted, the garbage enclosure shall be large enough to contain all waste materials generated from the proposed establishment. In the event of future increase in waste generation, the Owner or designate shall be required to enlarge the enclosure to accommodate the increase in waste material. Refer to Appendix C for guidelines on garbage and recycling container dimensions.

The enclosure shall be constructed of a material approved by the City and shall be a minimum of 2 metres in height. The overall dimension of the enclosure shall vary depending upon the size and number of waste / recycling containers required. Door stoppers shall be installed to hold the doors immobile while the truck is lifting the container. Refer to Appendix D for a Typical External Garbage Enclosure.

The enclosure shall be built on a flat surface and comply with all zoning and other municipal requirements.

All garbage and recycling containers must be stored inside the enclosure until the designated day of collection and must be returned to the garbage enclosure immediately following collection. The time of collection operations must be in accordance to the City's applicable by-laws, including the Noise By-law 96-2006 (as amended).

Under no circumstances shall waste materials be stored outside of garbage enclosure between designated collection days.

## **APPENDICES**



---

**APPENDIX A: REGULATION 103/94 (ENVIRONMENTAL PROTECTION ACT)**

***NOTE: It is the responsibility of the Applicant/Owner to access the most current version of Ontario Regulation 103/94***

**Environmental Protection Act  
ONTARIO REGULATION 103/94**

*No Amendments*

**INDUSTRIAL, COMMERCIAL AND INSTITUTIONAL SOURCE SEPARATION PROGRAMS**

**Source Separation Programs**

1. In this Regulation,

"Northern Ontario" means the territorial districts of Algoma, Cochrane, Kenora, Manitoulin, Nipissing, Parry Sound, Rainy River, Sudbury, Thunder Bay and Timiskaming and The Regional Municipality of Sudbury;

"source separation program" means a program to facilitate the source separation of waste for reuse or recycling. O. Reg. 103/94, s. 1.

2. (1) A source separation program required under this Regulation must include,

(a) the provision of facilities for the collection, handling and storage of source separated wastes described in subsection (2) adequate for the quantities of anticipated wastes;

(b) measures to ensure that the source separated wastes that are collected are removed;

(c) the provision of information to users and potential users of the program,

(i) describing the performance of the program,

(ii) encouraging effective source separation of waste and full use of the program;

(d) reasonable efforts to ensure that full use is made of the program and that the separated waste is reused or recycled.

(2) The source separated waste referred to in clause (1) (a) is waste that has been source separated from other kinds of waste and that consists solely of waste from one or more of the following categories:

1. The categories of waste set out in the part of the Schedule applicable to the person required to implement the source separation program.

2. The categories of waste set out in Schedule 1, 2 or 3 of Ontario Regulation 101/94 that the source separation program accepts.

(3) A source separation program required under this Regulation must provide for all the categories of waste set out in the part of the Schedule applicable to the person required to implement the program except for categories of waste that cannot be reasonably anticipated. O. Reg. 103/94, s. 2.

3. Source separation programs required by this Regulation are exempt from sections 27, 40 and 41 of the Act. O. Reg. 103/94, s. 3.

4. (1) A source separation program that is not required by this Regulation is exempt from sections 27, 40 and 41 of the Act if,

(a) the program is restricted to waste generated at a single site;

(b) the program only accepts waste that has been source separated from other kinds of waste and that consists solely of waste from one or more of the categories of waste set out in Schedule 1, 2 or 3 of Ontario Regulation 101/94;

(c) the program includes everything set out in subsection 2 (1).

(2) For the purposes of clause (1) (c), the reference to source separated waste in clause 2 (1) (a) shall be deemed to be a reference to the waste described in clause (1) (b). O. Reg. 103/94, s. 4.

**Continued...Appendix A (Ont. Reg. 103/94)**

**Retail Shopping Establishments**

5. (1) This section applies to the owner of an establishment that sells goods or services at retail to persons who come to the establishment if,
- (a) the establishment occupies premises with a floor area of at least 10,000 square metres; or
  - (b) the establishment occupies premises in a complex in respect of which section 6 applies and the owner of the establishment is solely responsible for the establishment's waste management.
- (2) The owner shall implement a source separation program for the wastes generated by the establishment or shall ensure that such a program is implemented.
- (3) This section applies only in respect of an establishment located within a local municipality that has a population of at least 5,000.
- (4) This section takes effect with respect to an establishment in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 5.

**Retail Shopping Complexes**

6. (1) This section applies to the owner of a complex that contains premises occupied by establishments that sell goods or services at retail to persons who come to the establishments if the total floor area of such premises is at least 10,000 square metres.
- (2) The owner shall implement a source separation program for the wastes generated at the complex or shall ensure that such a program is implemented.
- (3) The source separation program need not provide for the waste generated in the operation of an establishment in the complex if section 5 applies to the owner of the establishment.
- (4) This section applies only in respect of a complex located in a local municipality that has a population of at least 5,000.
- (5) This section takes effect with respect to a complex in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 6.

**Large Construction Projects**

7. (1) A person who undertakes, on their own behalf or on behalf of another person, a construction project consisting of the construction of one or more buildings with a total floor area of at least 2,000 square metres shall implement a source separation program for the waste that will be generated in the construction of the structure or shall ensure that such a program is implemented.
- (2) In addition to the requirements set out in section 2, the source separation program required under this section shall,
- (a) deal separately with each of the categories of waste set out in Part III of the Schedule that have been source separated from other kinds of waste and also from each other category of waste in Part III; or
  - (b) provide for removal from the building site of any commingled categories of waste set out in Part III of the Schedule and for the immediate separation of such waste from all other kinds of waste and also from each other category of waste in Part III, at,
    - (i) permanent premises of the person undertaking the construction project,
    - (ii) permanent premises of the person on whose behalf the construction project is undertaken, or
    - (iii) a waste disposal site operating under the authority of a certificate of approval or provisional certificate of approval.
- (3) The source separation program shall be implemented before construction work begins at the site. O. Reg. 103/94, s. 7.

**Large Demolition Projects**

8. (1) A person who undertakes, on their own behalf or on behalf of another person, a demolition project consisting of the demolition of one or more buildings with a total floor area of at least 2,000 square metres shall implement a source separation program for the waste that will be generated in the demolition of the structure or shall ensure that such a program is implemented.
- (2) In addition to the requirements set out in section 2, the source separation program required under this section shall,
- (a) deal separately with each of the categories of waste set out in Part IV of the Schedule that have been source separated from other kinds of waste and also from each other category of waste in Part IV; or
  - (b) provide for removal from the demolition site of any commingled categories of waste set out in Part IV of the Schedule and for the immediate separation of such waste from all other kinds of waste and also from each other category of waste in Part IV, at,
    - (i) permanent premises of the person undertaking the demolition project,
    - (ii) permanent premises of the person on whose behalf the demolition project is undertaken, or

**Continued...Appendix A (Ont. Reg. 103/94)**

- (iii) a waste disposal site operating under the authority of a certificate of approval or provisional certificate of approval.
- (3) The source separation program shall be implemented before demolition work begins at the site. O. Reg. 103/94, s. 8.

### **Office Buildings**

9. (1) The owner of a building or group of buildings that has at least 10,000 square metres of floor area for use as offices shall implement a source separation program for the waste generated at the building or shall ensure that such a program is implemented.
- (2) For purposes of subsection (1), "group of buildings" means two or more buildings where,
- (a) each of the buildings has the same ownership, and
- (b) each of the buildings is in proximity to at least one other of the buildings such that there is at most one building or other real property of different ownership located between the two.
- (3) For purposes of determining, under subsection (2), whether there is at most one building or other real property of different ownership located between two buildings, the following properties shall not be counted: public roads; public parks; and any land over which the public has a general right of access.
- (4) This section applies only in respect of a building located within a local municipality that has a population of at least 5,000.
- (5) This section takes effect with respect to a building in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 9.

### **Multi-Unit Residential Buildings**

10. (1) The owner of a building that contains six or more dwelling units shall implement a source separation program for the waste generated at the building.
- (2) In subsection (1), "owner" includes a condominium corporation created under the *Condominium Act*.
- (3) This section applies only in respect of a building located within a local municipality that has a population of at least 5,000.
- (4) This section takes effect with respect to a building in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 10.

### **Restaurants**

11. (1) This section applies to the owner of a restaurant, including a take-out restaurant.
- (2) The owner shall implement a source separation program for the waste generated by the operation of the restaurant or ensure that such a program is implemented.
- (3) This section does not apply with respect to a restaurant that occupies premises in,
- (a) an establishment in respect of which section 5 applies;
- (b) a complex in respect of which section 6 applies;
- (c) a building in respect of which section 9 applies;
- (d) a hotel or motel in respect of which section 12 applies;
- (e) a hospital in respect of which section 13 applies;
- (f) a location or campus of an educational institution in respect of which section 14 applies.
- (4) This section does not apply to an owner of a restaurant in a particular calendar year if,
- (a) during the two preceding calendar years there was no year in which the gross sales for all restaurants operated by the owner in Ontario equalled or exceeded \$3,000,000; and
- (b) the owner is able to demonstrate this fact, within seven days of a request from the Director, through evidence satisfactory to the Director.
- (5) Copies of the records related to purchase and sale maintained under subsection 5 (1) of Regulation 1013 of the Revised Regulations of Ontario, 1990 shall be deemed to be sufficient evidence of the gross sales of a restaurant if the copies are certified by the owner or the owner's representative as to the accuracy of the records.
- (6) This section applies only in respect of a restaurant located within a local municipality that has a population of at least 5,000.
- (7) This section takes effect with respect to a restaurant in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 11.

**Continued...Appendix A (Ont. Reg. 103/94)**

**Hotels and Motels**

12. (1) The owner of a hotel or motel that has more than seventy-five units shall implement a source separation program for the wastes generated by the operation of the hotel or motel or shall ensure that such a program is implemented.
- (2) This section applies only in respect of a hotel or motel located within a local municipality that has a population of at least 5,000.
- (3) This section takes effect with respect to a hotel or motel in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 12.

**Hospitals**

13. (1) The operator of a public hospital classified as a class A, B or F hospital in Regulation 964 of the Revised Regulations of Ontario, 1990 shall implement a source separation program for the wastes generated by the operation of the hospital or shall ensure that such a program is implemented.
- (2) This section applies only in respect of a public hospital located within a local municipality that has a population of at least 5,000.
- (3) This section takes effect with respect to a public hospital in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 13.

**Educational Institutions**

14. (1) This section applies to the operator of an educational institution in respect of a location or campus of the institution if, at the location or campus, at any time during the calendar year, more than 350 persons are enrolled.
- (2) The operator shall implement a source separation program for the waste generated by the operation of the institution at the location or campus or shall ensure that such a program is implemented.
- (3) This section continues to apply in respect of a location or campus for the two calendar years following the last year in which more than 350 persons were enrolled at the location or campus.
- (4) This section applies only in respect of a location or campus located within a local municipality that has a population of at least 5,000.
- (5) This section takes effect with respect to a location or campus in Northern Ontario on July 1, 1996. O. Reg. 103/94, s. 14.

**Large Manufacturing Establishments**

15. (1) This section applies to the owner or operator of a site that is a manufacturing establishment.
- (2) The owner shall implement a source separation program for the waste generated by the operation of the establishment at the site or shall ensure that such a program is implemented.
- (3) This section does not apply to an owner of a site in a particular calendar year if,
- (a) during the two preceding calendar years there was no calendar month in which the hours worked by the persons employed at the site exceeded 16,000 hours; and
- (b) the owner is able to demonstrate this fact, within seven days of a request from the Director, through evidence satisfactory to the Director.
- (4) Copies of the records related to hours of employment maintained under section 11 of the *Employment Standards Act* shall be deemed to be sufficient evidence of hours worked at a site if the copies are certified by the owner or the owner's representative as to the accuracy of the records.
- (5) In this section,
- "owner" includes the operator of a manufacturing establishment but does not include a landlord;
- "site" means one property and includes nearby properties owned or leased by the same person where passage from one property to another involves crossing, but not travelling along, a public highway. O. Reg. 103/94, s. 15.

**Continued...Appendix A (Ont. Reg. 103/94)**

**Transition**

16. Except as otherwise provided, a person who, upon the coming into force of this Regulation, or at any time within twelve months after the coming into force of this Regulation, becomes subject to an obligation with respect to the implementation of a source separation program shall fulfil the obligation within twelve months after the coming into force of this Regulation. O. Reg. 103/94, s. 16.

**SCHEDULE  
WASTES TO BE PROVIDED FOR IN SOURCE SEPARATION PROGRAMS**

**PART I  
RETAIL SHOPPING ESTABLISHMENTS**  
(referred to in section 5)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Steel food or beverage cans (including cans made primarily of steel).

**PART II  
RETAIL SHOPPING COMPLEXES**  
(referred to in section 6)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Steel food or beverage cans (including cans made primarily of steel).

**PART III  
LARGE CONSTRUCTION PROJECTS**  
(referred to in section 7)

1. Brick and Portland cement concrete.
2. Cardboard (corrugated).
3. Drywall (unpainted).
4. Steel.
5. Wood (not including painted or treated wood or laminated wood).

**PART IV  
LARGE DEMOLITION PROJECTS**  
(referred to in section 8)

1. Brick and Portland cement concrete.
2. Steel.
3. Wood (not including painted or treated wood or laminated wood).

**Continued...Appendix A (Ont. Reg. 103/94)**

**PART V  
OFFICE BUILDINGS**  
(referred to in section 9)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Steel food or beverage cans (including cans made primarily of steel).

**PART VI  
MULTI-UNIT RESIDENTIAL BUILDINGS**  
(referred to in section 10)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Glass bottles and jars for food or beverages.
3. Newsprint.
4. Polyethylene terephthalate bottles for food or beverages (including bottles made primarily of polyethylene terephthalate).
5. Steel food or beverage cans (including cans made primarily of steel).
6. The categories of waste that are collected or accepted by the blue box waste management system, if any, of the municipality where the building is located.

**PART VII  
RESTAURANTS**  
(referred to in section 11)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Polyethylene terephthalate bottles for food or beverages (including bottles made primarily of polyethylene terephthalate).
7. Steel food or beverage cans (including cans made primarily of steel).

**PART VIII  
HOTELS AND MOTELS**  
(referred to in section 12)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Polyethylene terephthalate bottles for food or beverages (including bottles made primarily of polyethylene terephthalate).
7. Steel food or beverage cans (including cans made primarily of steel).

**Continued...Appendix A (Ont. Reg. 103/94)**

**PART IX  
HOSPITALS**

(referred to in section 13)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Steel food or beverage cans (including cans made primarily of steel).

**PART X  
EDUCATIONAL INSTITUTIONS**

(referred to in section 14)

1. Aluminum food or beverage cans (including cans made primarily of aluminum).
2. Cardboard (corrugated).
3. Fine paper.
4. Glass bottles and jars for food or beverages.
5. Newsprint.
6. Steel food or beverage cans (including cans made primarily of steel).

**PART XI  
LARGE MANUFACTURING ESTABLISHMENTS**

(referred to in section 15)

1. Aluminum.
2. Cardboard (corrugated).
3. Fine paper.
4. Glass.
5. Newsprint.
6. Polyethylene (high density) jugs, pails, crates, totes and drums.
7. Polyethylene (linear low density and low density) film.
8. Polystyrene (expanded) foam.
9. Polystyrene trays, reels and spools.
10. Steel.
11. Wood (not including painted or treated wood or laminated wood).

**APPENDIX B: TEMPLATE FOR WASTE COLLECTION DESIGN STANDARDS  
SUBMISSION FOR DEVELOPMENTS AND REDEVELOPMENTS**

The following is a template that can be used for the submission of the Waste Collection Design Standards Submission. Please refer to Part 4 of this document for specific collection requirements.

**PART A: GENERAL INFORMATION**

Please provide the following general information.

<b>Building Standards Number or DA Number (Planning):</b>	
<b>Date:</b>	
<b>Agent:</b>	
<b>Applicant:</b>	
<b>Municipal address for development::</b>  <i>(Note: in some cases the applicant may have to obtain this information from the City's Planning Dept.)</i>	
<b>Proposal:</b>	
<b>Type of Collection Method for</b>	
<b>a. Garbage</b>	Identify the collection method for garbage: FRONT END (BIN) ROLL-OFF OTHER. If 'Other, please explain
<b>b. Recycling</b>	Identify the collection method for recycling: FRONT END CARTS (90 – 95 gallon) OTHER. If 'Other', please explain
<b>c. Other</b>	
<b>Number and Size of Garbage Bins</b>	<b>Size                  Number                  Compacted (Y/N)</b>
<b>Number and Size of Recycling Carts / Bins</b>	<b>Size                  Number                  Compacted (Y/N)</b>



**Continued... Appendix B (Template for Waste Collection Design Standards Submission)**

**PART B: MULTI-UNIT RESIDENTIAL DEVELOPMENTS**

Part B is specific to multi-unit residential developments.

<b>Typical Floor Plan (showing the multi-sort system on every floor. A separate drawing to be provided to detail this requirement)</b>	<b>Provide typical floor plan with site plan.</b>
<b>Details of Multi-Sort and/or compact system used (manufacturers brochures acceptable for this requirement)</b>	<b>Provide brief description:</b>
<b>Number of Residential Dwelling units</b>	<b>Indicate Number of Units:</b>

**PART C: SITE PLAN**

Provide a site plan showing the location and dimensions of the internal storage area, access route and loading area. Site plan must include:

<b>Description</b>	<b>Checklist</b>
<b>COLLECTION ACCESS ROUTE</b>	
Show access route driveway width at both the access driveway and throughout the access route	
Show turning radius along access route (both inside and outside)	
Show construction of access driveway	
<b>DESIGNATED LOADING (COLLECTION) AREA</b>	
Show grade of loading area	
Loading area dimension	
Construction of loading area	
Location of closest fresh air intakes to loading area	
How waste containers will be staged in loading area (including recycling carts / bins) and bulky items	
<b>STORAGE AREA</b>	
Show Internal Storage area dimension (if applicable, show plan of external garbage enclosure).	
Show how waste containers will be staged, including area for bulky items	
<b>OTHER</b>	
Drawings signed off by a P. Eng. Of Ontario supporting that all requirements identified in this document have been met	

---

## APPENDIX C: GARBAGE AND RECYCLING CONTAINER DIMENSIONS

The following is for guideline purposes only. The "Owner" or designate is responsible to design an internal storage room that will accommodate all garbage bins, recycling carts/bins and other waste materials such as appliances / bulky items based on the anticipated volume of waste generated from the residential population within the development.

The guidelines noted below are for estimates only and do not necessarily reflecting every situation.

### **GARBAGE CONTAINERS**

<b>BIN TYPE</b>	<b>WIDTH (metres)</b>	<b>HEIGHT (metres)</b>	<b>DEPTH (metres)</b>
2.29 m <sup>3</sup> (3 yd <sup>3</sup> )	2.03	1.07	1.07
3.06 m <sup>3</sup> (4 yd <sup>3</sup> )	2.03	1.07	2.01
4.50 m <sup>3</sup> (6 yd <sup>3</sup> )	2.03	1.36	2.03

<b>BIN TYPE</b>	<b>2.29 m3 (3 yd<sup>3</sup>)</b>	<b>3.06 m3 (4 yd<sup>3</sup>)</b>	<b>4.50 m3 (6 yd<sup>3</sup>)</b>
Compacted	36 units/bin	48 units/bin	72 units/bin
Uncompacted	12 units/bin	16 units/bin	24 units/bin

A minimum floor area of 3.0 metres by 3.0 metres is required for each bin.

### **RECYCLING CARTS / BINS**

<b>CART VOLUME</b>	<b>WIDTH (metres)</b>	<b>HEIGHT (metres)</b>	<b>DEPTH (metres)</b>
340 litre (90 gallon) cart	0.670	1.10	0.854
360 litre (95 gallon) cart	0.889	1.07	0.762

It is recommended that one cart for each 10 units are used as a guideline in determining the number of required carts.

<b>BIN TYPE</b>	<b>2.29 m3 (3 yd<sup>3</sup>)</b>	<b>3.06 m3 (4 yd<sup>3</sup>)</b>	<b>4.50 m3 (6 yd<sup>3</sup>)</b>
Uncompacted	12 units/bin	16 units/bin	24 units/bin

It is recommended that one bin for every 100 units are used as a guideline in determining the number of required bins.

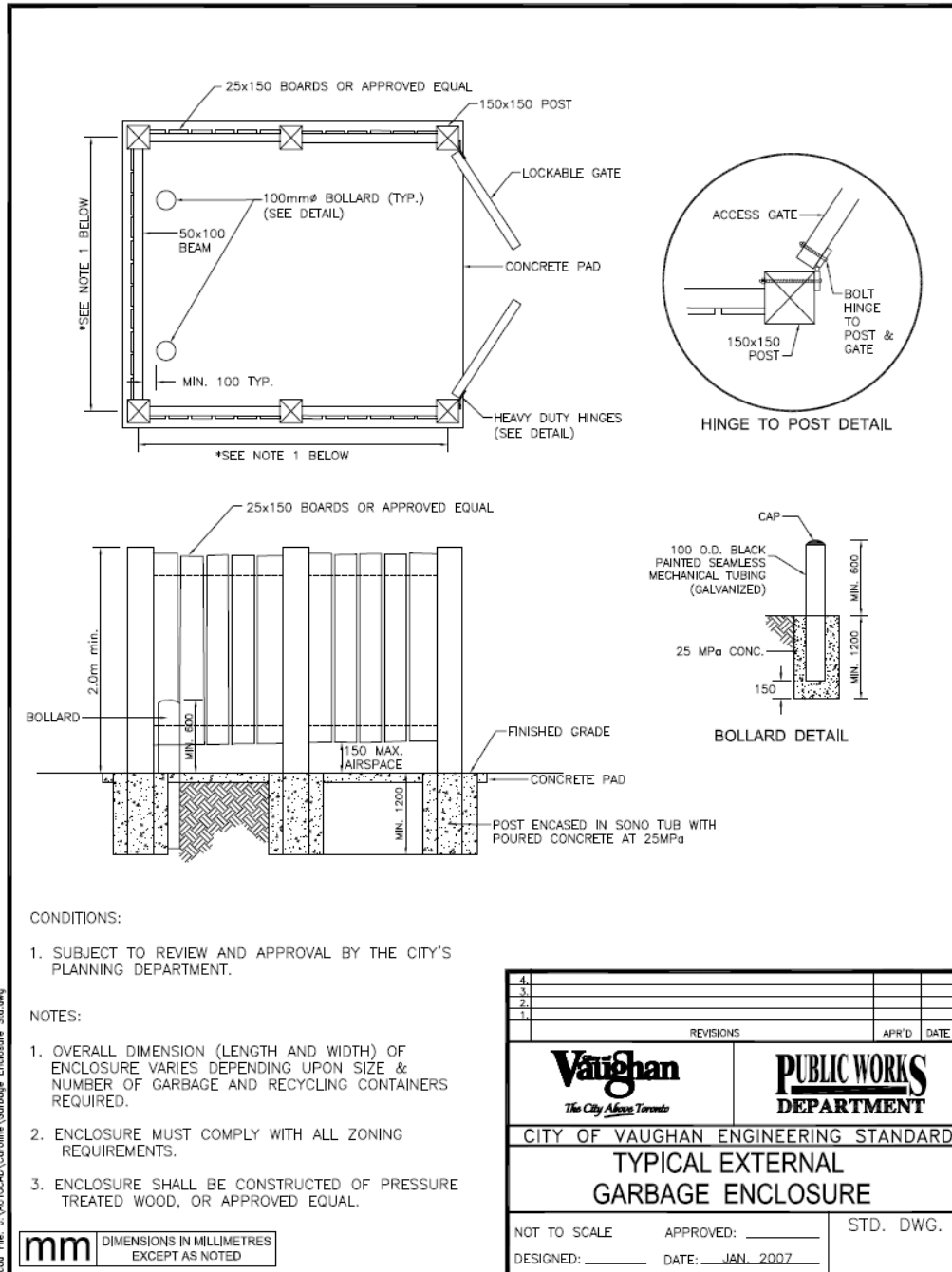
Compacted bins cannot be used for recycling

### **OTHER**

For multi-unit residential developments, it is recommended that a minimum of 10 m<sup>2</sup> of additional internal storage space be provided for the temporary storage of un-compacted garbage such as bulky items and large appliances.

## APPENDIX D: TYPICAL EXTERNAL GARBAGE ENCLOSURE

Use of an external garbage enclosure shall be approved by the City. The minimum standards for an External Garbage Enclosure are shown below. The City reserves the right to impose additional conditions and / or requirements for these structures



Local File: \\A:\PDCAD\Caroline\Garbage Enclosure - Std.dwg