

# **Waste Management Plan For Proposed Development at 4099 Erin Mills Parkway Mississauga, ON – Revision 1**



PRESENTED TO  
**Queenscorp Group**

OCTOBER 11, 2024  
ISSUED FOR USE  
FILE: 704-SWM.ONMB03202-02

---

This page intentionally left blank.

TABLE OF CONTENTS

1.0 INTRODUCTION ..... 1

1.1 Summary Description of Proposed Development..... 1

1.2 Objectives of the Waste Management Plan ..... 2

2.0 MATERIAL QUANTITIES, COMPOSITION AND VOLUME ..... 2

2.1 Material Quantities and Composition..... 2

2.2 Material Volume Calculations ..... 3

3.0 MATERIAL HANDLING-DESIGN CONSIDERATIONS ..... 5

3.1 Applicable Waste Collection Standards..... 5

3.2 Material Staging and Collection ..... 5

3.2.1 Staging..... 5

3.2.2 Collection ..... 6

4.0 CONCLUSIONS ..... 6

5.0 CLOSURE ..... 7

APPENDIX SECTIONS

APPENDICES

Appendix A     Recyclables and Mixed Waste Storage and Collection Plan

Appendix B     Limitations on the Use of this Document

## **LIMITATIONS OF REPORT**

This report and its contents are intended for the sole use of Queenscorp Group and their agents. Tetra Tech Canada Inc. (Tetra Tech) does not accept any responsibility for the accuracy of any of the data, the analysis, or the recommendations contained or referenced in the report when the report is used or relied upon by any Party other than Queenscorp Group, or for any Project other than the proposed development at the subject site. Any such unauthorized use of this report is at the sole risk of the user. Use of this document is subject to the Limitations on the Use of this Document attached in the Appendix or Contractual Terms and Conditions executed by both parties.

## 1.0 INTRODUCTION

Tetra Tech Canada Inc. (Tetra Tech) in association with RWDI Air Inc. (RWDI) was retained by Queenscorp Group (Queenscorp) to prepare a Waste Management Plan (WMP) to support the development at 4099 Erin Mills Parkway in the City of Mississauga, ON. Queenscorp intends to submit applications to amend the City of Mississauga's Official Plan (OPA) and Zoning By-Law (ZBA) to permit a mixed-use development located at the above-noted address.

Approval of these applications will require that the Region's Waste Management staff sign off on a WMP for the development which outlines how the system and infrastructure for the transfer, storage, staging and collection of Blue Box (BB) recyclables and mixed waste will be designed and operated in compliance with Peel's Waste Collection Design Standards Manual, 2020 (WCDSM). In accordance with the Standards Manual, the Region will provide front-end collection of recyclables and garbage subject to the following conditions:

- Identified vehicle access and egress routes. In a situation where a waste collection vehicle must reverse, the maximum straight back-up distance is 15 metres (m) at all the collection points.
- Minimum turning radius of 13 m from the centre line of turns in the internal laneways.
- Minimum internal roadway width of 6 m.
- Minimum straight head-on approach to the collection point of 18 m. This approach is to be level and solid (+/-2%) and the same width as the collection point.
- Minimum clear height of 7.5 m from the concrete pad comprising the floor of the collection point which must be clear of sprinkler systems and ducts and should be large enough to accommodate the set-out of the required number of bins without jockeying being required for collection. The clear height of 4.4 m is free of obstructions such as sprinkler systems, ducts, wires, trees, or balconies.
- Stacked townhouse drop-off points are convenient for residents (within 100 m walking distance of the furthest unit).
- Enough space for the storage of both BB recyclables and garbage bins.

The WMP, outlined herein, presents the calculated waste material quantity and characteristics that are anticipated to be generated from the development and presents a preliminary plan for the storage and collection of the generated waste materials in compliance with the Region's Waste Collection Design Standards.

### 1.1 Summary Description of Proposed Development

The development will consist of a high-density residential development that will ultimately be comprised of five multi-storey buildings housing 597 residential units together with an underground parking facility. The two buildings fronting onto Erin Mills Parkway will contain 408 m<sup>2</sup> and 382 m<sup>2</sup> respectively of commercial space. The complex will also consist of 112 staked townhouses extending along the southern and eastern parts of the site. The site will be developed in phases starting at the east facing Erin Mills Parkway. The subject WMP has been prepared to account for the solid waste management requirements for the development at full build out.

Development of a WMP at this stage of the land use approvals process is critical in ensuring that the preliminary design of the complex considers all the factors for the effective, safe development of infrastructure and transfer protocols for the management of residential solid waste which will be acceptable to the Region of Peel.

## 1.2 Objectives of the Waste Management Plan

The objectives of the WMP are as follows:

- To calculate the volume of BB recyclables and garbage that will be collected from residences in the complex once developed.
- To determine the number of bins required to provide for the storage and collection of wastes from the building.
- To calculate the quantity and composition of waste materials typically generated from commercial uses.
- To develop a plan, with an accompanying drawing in CAD format, for the receipt, transfer, set out and collection of wastes that provides for the efficient and effective storage, transfer and transport of these materials on each collection day. The drawing, in Appendix A to this report, illustrate the storage, set out and collection of BB recyclables and garbage at the ground floor facility together with the routing for the collection vehicle including direction and turning radii.

The quantity of waste material, in kg/hh/year, was obtained from the Region of Peel's Waste Management Department. Data on the composition of the waste generated from multi-residential households was obtained from Continuous Improvement Fund (CIF) Project No.872: "Multi-Residential Audits & Superintendent Training, City of Toronto, 2016". These data were used to calculate anticipated volumetric requirements for the storage of generated materials, as well as the requirements for set out prior to collection.

## 2.0 MATERIAL QUANTITIES, COMPOSITION AND VOLUME

As a first step in the design of the WMP for the development, the quantity of waste materials generated from the residential suites was calculated for BB recyclables and mixed waste. The Region does not require the collection of source separated organics (SSO) from multi residential developments. Our volumetric calculations, therefore, have been completed for just the BB recyclables and mixed waste (garbage) streams. The garbage stream can be compacted which significantly reduces the volume of these materials and, therefore, the number of bins needed for storage, transfer, and collection.

### 2.1 Material Quantities and Composition

The proposed development will create a high-density, residential community comprised of condominium, apartment residences. The quantity of waste generated by each household in a high-density multi-residential community has been identified by the Region in the most-recent year of its annual waste-generation monitoring program (2021) to be 681 kg/hh.

The Region's data has been broken down into total BB recyclables (fibers, containers, etc.) and mixed waste (garbage with co-mingled organics). Over the 10-year period provided by the Region's data, the composition of the materials has been comprised of about 20% BB recyclables and 80% mixed waste including organics. For the purposes of this Plan, we have projected that the diversion of recyclables from the waste stream will increase to 30%.

According to subsection 3.5 (c) of Peel's By-Law to regulate the collection of waste (By-Law 35-2015) the Region collects mixed waste twice per week from multi-residential complexes on the scheduled collection days and according to subsection 3.6 (a) BB recyclables are collected on a weekly basis. The amount of each material type that would be generated on a weekly basis from each apartment suite or household (hh) in the development was determined by multiplying the annual total (in kg.) by the projected % composition and dividing that by 52 weeks.

The calculations are as follows:

- BB recyclables,  $(681 \times 0.30)/52 =$  4 kg /hh/weekly collection.
- Mixed waste,  $(681 \times 0.70)/52 =$  9.2 kg/hh/weekly or about 5 kg / hh per twice-weekly collection.

The quantity of recyclables and mixed waste generated per collection day from each of the buildings is as follows:

**Building A:**

- BB recyclables: 4 kg/hh/week x 197 hh = 788 kg/weekly collection.
- Mixed waste: 5 kg/hh/collection x 197 hh = 985 kg/ twice-weekly collection.

**Building B:**

- BB recyclables: 4 kg/hh/week x 142 hh = 568 kg/weekly collection.
- Mixed waste: 5 kg/hh/collection x 142 hh = 710 kg/twice-weekly collection.

**Building C:**

- BB recyclables: 4 kg/hh/week x 80 hh = 320 kg/weekly collection.
- Mixed waste: 5 kg/hh/collection x 80 hh = 400 kg/twice-weekly collection.

**Building D:**

- BB recyclables: 4 kg/hh/week x 95 hh = 380 kg/weekly collection.
- Mixed waste: 5 kg/hh/collection x 95 hh = 475 kg/twice-weekly collection.

**Building E:**

- BB recyclables: 4 kg/hh/week x 77 hh = 308 kg/weekly collection.
- Mixed waste: 5 kg/hh/collection x 77 hh = 385 kg/twice-weekly collection.

**Stacked Townhouses:**

- BB recyclables: 4 kg/hh/week x 112 hh = 448 kg/weekly collection.
- Mixed waste: 5 kg/hh/collection x 112 hh = 560 kg/twice-weekly collection.

These calculations have been used in the volumetric analyses provided in the following section of this plan.

## 2.2 Material Volume Calculations

The volume requirements for BB recyclables and mixed waste were determined by dividing the weekly amount for recyclables by a density factor for these materials of 70 kg/m<sup>3</sup> and the twice-weekly amount for mixed waste by an uncompacted density factor of 130 kg/m<sup>3</sup> then multiplying by 1,000 to generate a volume in litres (L) then dividing this value by 765 to convert it to cubic yards (yd). Since recyclables and garbage collection will be provided by way of front-end loaders, bins are the container of choice for the development. The size of front-end loaded containers is typically expressed as “cubic yards” or “yd”. The density factors are based on recently published data. After having calculated the storage requirements for mixed waste, we concluded that compaction would not be required.

The calculations are as follows:

**Building A:**

- BB recyclables:  $(788/70) \times 1,000/765 = 15 \text{ yd}^3$  /weekly collection which requires four, 4-yd bins.
- Uncompacted mixed waste:  $(985/130) \times 1000/765 = 10 \text{ yd}^3$  /twice weekly collection which requires three, 4-yd bins.

**Building B:**

- BB recyclables:  $(568/70) \times 1,000/765 = 11 \text{ yd}^3$  /weekly collection which requires three, 4-yd bins.
- Uncompacted mixed waste:  $(710/130) \times 1000/765 = 7 \text{ yd}^3$  /twice weekly collection which requires two, 4-yd bins.

**Building C:**

- BB recyclables:  $(320/70) \times 1,000/765 = 6 \text{ yd}^3$  /weekly collection which requires two, 3-yd bins.
- Uncompacted mixed waste:  $(400/130) \times 1000/765 = 4 \text{ yd}^3$  /twice weekly collection which requires one, 4-yd bins.

**Building D:**

- BB recyclables:  $(380/70) \times 1,000/765 = 7 \text{ yd}^3$  /weekly collection which requires two, 4-yd bins.
- Uncompacted mixed waste:  $(475/130) \times 1000/765 = 5 \text{ yd}^3$  /twice weekly collection which requires two, 3-yd bins.

**Building E:**

- BB recyclables:  $(308/70) \times 1,000/765 = 6 \text{ yd}^3$  /weekly collection which requires two, 3-yd bins.
- Uncompacted mixed waste:  $(385/130) \times 1000/765 = 4 \text{ yd}^3$  /twice weekly collection which requires one, 4-yd bins.

**Stacked Townhouses:**

- BB recyclables:  $(448/70) \times 1,000/765 = 9 \text{ yd}^3$  /weekly collection which requires three, 4-yd bins.
- Uncompacted mixed waste:  $(560/130) \times 1000/765 = 6 \text{ yd}^3$  /twice weekly collection which requires three, 3-yd bins.

Space has also been identified in each waste room to accommodate for the storage of bulky or oversize items.



## 3.0 MATERIAL HANDLING-DESIGN CONSIDERATIONS

The waste material handling for the proposed development was evaluated based on the material volume calculations outlined in Section 2.2 of this report as well as the associated requirements set forth in the Region's WCDSM.

### 3.1 Applicable Waste Collection Standards

The design standards applicable to the subject development are outlined in Section 4 of the Region's input to the initial meeting with the Equity and as summarized in section 1 of this report. In addition, **Section 4** of the WCDSM, which applies to multi-residential complexes, states that:

- Solid waste from the apartments will be collected in dedicated room(s) and transferred to a designated garbage staging, loading and pickup area.
- BB recyclables will not be compacted after having been received via the materials chutes.
- Separate chutes will be provided for BB recyclables and garbage unless a single chute can be equipped with an automated mechanical separation system to direct materials into respective front-end bins. These materials will be received in front-end bins in the dedicated "garbage" room located on Level 1 in each tower of the development.
- A concealed collection area will be provided on the development property which will be designed and constructed in compliance with the following requirements:
  - A minimum width of 3 m for each front-end bin is required and a minimum depth of 3 m is required for 4 and 6 cubic yard bins.
  - A minimum of 10 m<sup>2</sup> is required for the set out of bulky items.

### 3.2 Material Staging and Collection

#### 3.2.1 Staging

Each of the apartment suites will dispose of their BB recyclables and garbage via a chute-based system. As the materials are received in the garbage room, located on the Ground Level of each building, they will be directed to either the recycling or mixed waste front-end bins. There is sufficient space provided for the storage of recyclables and uncompacted mixed waste between collections. The calculation of the number of bins needed in each building to store compacted mixed waste was not undertaken. However, should Queenscorp decide to include this process in the waste management system for each building, there would be more than enough space provided in the both the storage and staging/collection facilities. The bins will be moved to the storage/staging area in the garbage room as required between collection days. On each collection day, the bins will be transported, by building management staff, from the staging area to the collection area (refer to Figure 1 in Appendix A "Waste Materials Storage and Collection Plan").

The waste materials from the residences will be placed at the designated waste collection concrete pads as identified on the attached Plan (Figure 1, Appendix A) before 7:30 a.m. on the designated waste collection day. Waste materials will be set out in the staging area where the bins will have to be jockeyed for collection. The staging area identified on the attached Collection Plan provides enough space for the bins as well as room for jockeying the bins into position for collection. There is also enough space to accommodate the 10 m<sup>2</sup> area needed to set out bulky items as required by the Region for collection on a Thursday as required.

Residents in the stacked townhouses will carry their waste materials for placement in the designated bin located in one of the storage rooms located in the Level 1 parking facility. Upon full buildout of this part of the development complex, residents would go to the closest storage room to their townhouse. Building maintenance personnel would then transfer the bins to the respective Ground Level staging/collection facility.

Bulky or oversize materials will be transferred to the respective storage room by residents in the multi-storey buildings where maintenance staff will transfer the materials to the storage area in each building. Residents of the stacked townhouses will place their bulky items in the closest storage area to their residence where building maintenance personnel will transfer these materials to the respective ground floor staging/collection facility.

### **3.2.2 Collection**

The routing of the collection vehicle has been depicted on Figure 1, in Appendix A to the Plan. Once the “phase 1” component of the development is completed, the collection would enter this eastern portion of the site from Erin Mills Parkway to the 2 staging/collection facilities and then exist the area onto Folkway Drive. The routing for the collection vehicle upon full buildout of the development is depicted on Figure 1, Appendix A. The vehicle will enter the site from Folkway Drive and proceed along the internal roadway to service each of the 5 collection facilities and then exit back onto Folkway Drive. A similar pattern would be followed for the collection of bulky items.

## **4.0 CONCLUSIONS**

The subject Waste Management Plan supports the conclusion that the development at 4099 Erin Mills Parkway, as proposed, will provide enough space for the storage, staging and collection of Blue Box recyclables and uncompacted mixed waste from the residential suites. The Plan has not accommodated for the management of SSO from the residential suites since the Region does not require this for multi-unit residential developments.

## 5.0 CLOSURE

We trust this Waste Management Plan meets your present requirements. If you have any questions or comments, please contact the undersigned.

Respectfully submitted,  
Tetra Tech Canada Inc.

FILE: 704-SWM.ONMB03202-02  
FILE: 704-SWM.ONMB03202-02  
FILE: 704-SWM.ONMB03202-02

FILE: 704-SWM.ONMB03202-02  
FILE: 704-SWM.ONMB03202-02  
FILE: 704-SWM.ONMB03202-02

---

Prepared by:  
Rob Hegedus  
Project Manager  
Solid Waste Management Practice  
Direct Line: 226.343.4381  
Rob.Hegedus@tetrattech.com

---

Reviewed by:  
Peter Klaassen, P.Eng.  
Vice President – Ontario/Manitoba Division  
Solid Waste Management Practice  
Direct Line: 226.203.5209  
Peter.Klaassen@tetrattech.com

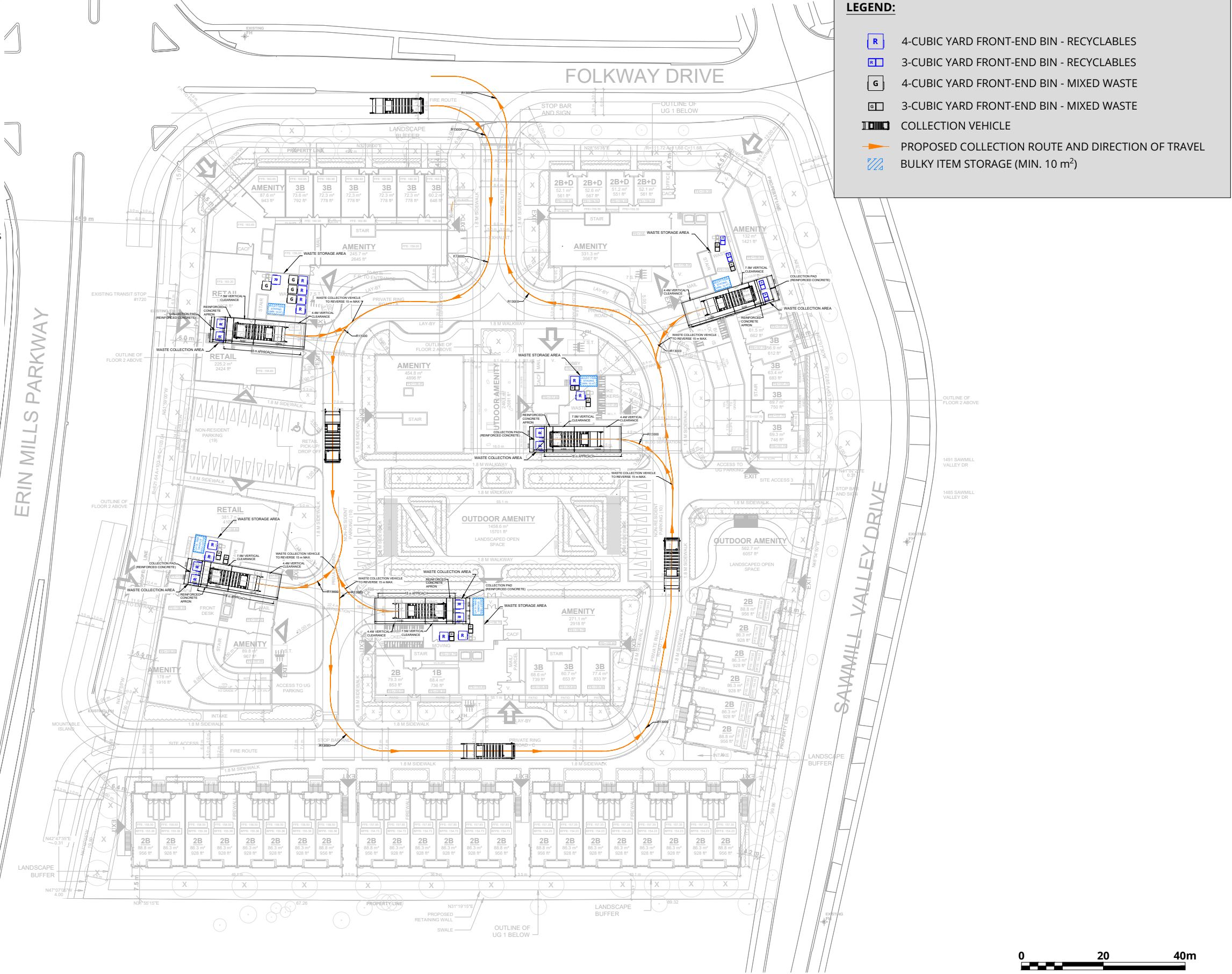
## APPENDIX A

### RECYCLABLES AND MIXED WASTE STORAGE AND COLLECTION PLAN

Figure 1 Waste Materials Storage and Collection Plan – Ground Floor

Figure 2 Waste Materials Storage Plan – Underground Level 01

- Notes:**
1. RESIDENTS IN BUILDINGS A THROUGH E TO BE RESPONSIBLE FOR TRANSPORTING WASTE MATERIALS TO THE DESIGNATED WASTE CHUTE AS REQUIRED.
  2. RESIDENTS IN TOWNHOUSES TO BE RESPONSIBLE FOR TRANSPORTING WASTE MATERIALS TO THE DESIGNATED WASTE STORAGE AREAS AS REQUIRED.
  3. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR MONITORING AVAILABLE CAPACITY WITHIN THE RESPECTIVE FRONT-END BINS, AND REPLACING FULL BINS WITH EMPTY BINS AS REQUIRED.
  4. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR JOCKEYING FRONT-END BINS FROM THE GARBAGE ROOMS TO THE DESIGNATED STAGING AND COLLECTION AREAS ON COLLECTION DAY.
  5. FRONT-END BINS TO BE PROPERLY POSITIONED IN THE COLLECTION AREA ON THE DAY OF COLLECTION BEFORE 7 AM.
  6. RECYCLABLES TO BE COLLECTED WEEKLY.
  7. MIXED WASTE TO BE COLLECTED TWICE-WEEKLY, ON SEPARATE DAYS AS RECYCLABLES.
  8. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR TRANSPORTING BULKY ITEMS WITHIN BUILDINGS A THROUGH E TO THE DESIGNATED STAGING AREAS WITHIN THE GARBAGE ROOMS AS REQUIRED.
  9. RESIDENTS TO BE RESPONSIBLE FOR TRANSPORTING BULKY ITEMS FROM EACH TOWNHOUSE RESIDENCE TO THE DESIGNATED STAGING AREAS WITHIN THE RESPECTIVE GARBAGE ROOM AS REQUIRED.
  10. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR TRANSPORTING BULKY ITEMS FROM THE STAGING AREAS TO THE DESIGNATED COLLECTION AREAS ON COLLECTION DAY.
  11. BULKY ITEMS TO BE COLLECTED ON THE SAME DAY AS GARBAGE-ONLY COLLECTION, SUCH THAT SUFFICIENT SPACE IS AVAILABLE WITHIN THE COLLECTION AREAS.
  12. ALL DOORS IN WASTE STORAGE/STAGING/COLLECTION AREAS TO BE 2.5 m WIDE MIN.
  13. BASE PLAN PROVIDED BY TURNER FLEISCHER ARCHITECTS Inc., 2024.



**Waste Materials Storage and Collection Plan - Ground Floor**  
Waste Management Plan  
4099 Erin Mills Parkway, Mississauga, ON

Queenscorp Inc.



Drawn by: TFB	Figure: 1
Approx. Scale: 1:950	
Date Revised: Oct. 10, 2024	



Project #2203667

- Notes:**
1. RESIDENTS IN BUILDINGS A THROUGH E TO BE RESPONSIBLE FOR TRANSPORTING WASTE MATERIALS TO THE DESIGNATED WASTE CHUTE AS REQUIRED.
  2. RESIDENTS IN TOWNHOUSES TO BE RESPONSIBLE FOR TRANSPORTING WASTE MATERIALS TO THE DESIGNATED WASTE STORAGE AREAS AS REQUIRED.
  3. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR MONITORING AVAILABLE CAPACITY WITHIN THE RESPECTIVE FRONT-END BINS, AND REPLACING FULL BINS WITH EMPTY BINS AS REQUIRED.
  4. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR JOCKEYING FRONT-END BINS FROM THE GARBAGE ROOMS TO THE DESIGNATED STAGING AND COLLECTION AREAS ON COLLECTION DAY.
  5. FRONT-END BINS TO BE PROPERLY POSITIONED IN THE COLLECTION AREA ON THE DAY OF COLLECTION BEFORE 7 AM.
  6. RECYCLABLES TO BE COLLECTED WEEKLY.
  7. MIXED WASTE TO BE COLLECTED TWICE-WEEKLY, ON SEPARATE DAYS AS RECYCLABLES.
  8. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR TRANSPORTING BULKY ITEMS WITHIN BUILDINGS A THROUGH E TO THE DESIGNATED STAGING AREAS WITHIN THE GARBAGE ROOMS AS REQUIRED.
  9. RESIDENTS TO BE RESPONSIBLE FOR TRANSPORTING BULKY ITEMS FROM EACH TOWNHOUSE RESIDENCE TO THE DESIGNATED STAGING AREAS WITHIN THE RESPECTIVE GARBAGE ROOM AS REQUIRED.
  10. PROPERTY MANAGEMENT TO BE RESPONSIBLE FOR TRANSPORTING BULKY ITEMS FROM THE STAGING AREAS TO THE DESIGNATED COLLECTION AREAS ON COLLECTION DAY.
  11. BULKY ITEMS TO BE COLLECTED ON THE SAME DAY AS GARBAGE-ONLY COLLECTION, SUCH THAT SUFFICIENT SPACE IS AVAILABLE WITHIN THE COLLECTION AREAS.
  12. ALL DOORS IN WASTE STORAGE/STAGING/COLLECTION AREAS TO BE 2.5 m WIDE MIN.
  13. BASE PLAN PROVIDED BY TURNER FLEISCHER ARCHITECTS Inc., 2024.



**Waste Materials Storage Plan - Underground Level 01**  
Waste Management Plan  
4099 Erin Mills Parkway, Mississauga, ON

Queenscorp Inc.



Drawn by: TFB	Figure: 2
Approx. Scale: 1:600	
Date Revised: Oct. 10, 2024	



Project #2203667

## APPENDIX B

### LIMITATIONS ON THE USE OF THIS DOCUMENT



# LIMITATIONS ON USE OF THIS DOCUMENT

## GEOENVIRONMENTAL

### 1.1 USE OF DOCUMENT AND OWNERSHIP

This document pertains to a specific site, a specific development, and a specific scope of work. The document may include plans, drawings, profiles and other supporting documents that collectively constitute the document (the "Professional Document").

The Professional Document is intended for the sole use of TETRA TECH's Client (the "Client") as specifically identified in the TETRA TECH Services Agreement or other Contractual Agreement entered into with the Client (either of which is termed the "Contract" herein). TETRA TECH does not accept any responsibility for the accuracy of any of the data, analyses, recommendations or other contents of the Professional Document when it is used or relied upon by any party other than the Client, unless authorized in writing by TETRA TECH.

Any unauthorized use of the Professional Document is at the sole risk of the user. TETRA TECH accepts no responsibility whatsoever for any loss or damage where such loss or damage is alleged to be or, is in fact, caused by the unauthorized use of the Professional Document.

Where TETRA TECH has expressly authorized the use of the Professional Document by a third party (an "Authorized Party"), consideration for such authorization is the Authorized Party's acceptance of these Limitations on Use of this Document as well as any limitations on liability contained in the Contract with the Client (all of which is collectively termed the "Limitations on Liability"). The Authorized Party should carefully review both these Limitations on Use of this Document and the Contract prior to making any use of the Professional Document. Any use made of the Professional Document by an Authorized Party constitutes the Authorized Party's express acceptance of, and agreement to, the Limitations on Liability.

The Professional Document and any other form or type of data or documents generated by TETRA TECH during the performance of the work are TETRA TECH's professional work product and shall remain the copyright property of TETRA TECH.

The Professional Document is subject to copyright and shall not be reproduced either wholly or in part without the prior, written permission of TETRA TECH. Additional copies of the Document, if required, may be obtained upon request.

### 1.2 ALTERNATIVE DOCUMENT FORMAT

Where TETRA TECH submits electronic file and/or hard copy versions of the Professional Document or any drawings or other project-related documents and deliverables (collectively termed TETRA TECH's "Instruments of Professional Service"), only the signed and/or sealed versions shall be considered final. The original signed and/or sealed electronic file and/or hard copy version archived by TETRA TECH shall be deemed to be the original. TETRA TECH will archive a protected digital copy of the original signed and/or sealed version for a period of 10 years.

Both electronic file and/or hard copy versions of TETRA TECH's Instruments of Professional Service shall not, under any circumstances, be altered by any party except TETRA TECH. TETRA TECH's Instruments of Professional Service will be used only and exactly as submitted by TETRA TECH.

Electronic files submitted by TETRA TECH have been prepared and submitted using specific software and hardware systems. TETRA TECH makes no representation about the compatibility of these files with the Client's current or future software and hardware systems.

### 1.3 STANDARD OF CARE

Services performed by TETRA TECH for the Professional Document have been conducted in accordance with the Contract, in a manner

consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions in the jurisdiction in which the services are provided. Professional judgment has been applied in developing the conclusions and/or recommendations provided in this Professional Document. No warranty or guarantee, express or implied, is made concerning the test results, comments, recommendations, or any other portion of the Professional Document.

If any error or omission is detected by the Client or an Authorized Party, the error or omission must be immediately brought to the attention of TETRA TECH.

### 1.4 DISCLOSURE OF INFORMATION BY CLIENT

The Client acknowledges that it has fully cooperated with TETRA TECH with respect to the provision of all available information on the past, present, and proposed conditions on the site, including historical information respecting the use of the site. The Client further acknowledges that in order for TETRA TECH to properly provide the services contracted for in the Contract, TETRA TECH has relied upon the Client with respect to both the full disclosure and accuracy of any such information.

### 1.5 INFORMATION PROVIDED TO TETRA TECH BY OTHERS

During the performance of the work and the preparation of this Professional Document, TETRA TECH may have relied on information provided by third parties other than the Client.

While TETRA TECH endeavours to verify the accuracy of such information, TETRA TECH accepts no responsibility for the accuracy or the reliability of such information even where inaccurate or unreliable information impacts any recommendations, design or other deliverables and causes the Client or an Authorized Party loss or damage.

### 1.6 GENERAL LIMITATIONS OF DOCUMENT

This Professional Document is based solely on the conditions presented and the data available to TETRA TECH at the time the data were collected in the field or gathered from available databases.

The Client, and any Authorized Party, acknowledges that the Professional Document is based on limited data and that the conclusions, opinions, and recommendations contained in the Professional Document are the result of the application of professional judgment to such limited data.

The Professional Document is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site conditions present, or variation in assumed conditions which might form the basis of design or recommendations as outlined in this report, at or on the development proposed as of the date of the Professional Document requires a supplementary exploration, investigation, and assessment.

TETRA TECH is neither qualified to, nor is it making, any recommendations with respect to the purchase, sale, investment or development of the property, the decisions on which are the sole responsibility of the Client.

### 1.7 NOTIFICATION OF AUTHORITIES

In certain instances, the discovery of hazardous substances or conditions and materials may require that regulatory agencies and other persons be informed and the client agrees that notification to such bodies or persons as required may be done by TETRA TECH in its reasonably exercised discretion.