

December 23, 2021

Via: Email

Mr. Clarence Qian
Development Manager
Oakville Argus Cross LP
1-90 Wingold Avenue
Toronto Ontario M6B 1P5

Dear Mr. Qian:

Re: Argus Cross Development Design Requirements

Project No.: 300054098

1.0 Introduction

This letter provides recommendations for your architectural concept plans at your 217-227 Cross Avenue and 571-587 Argus Road mixed-use development in the Town of Oakville. The contents of this letter are based upon:

- BDP Quadrangle Architects "Pre-Con Architectural Presentation Package" dated October 5, 2021.
- Halton Region's 'Development Design Guidelines for Source Separation of Solid Waste' (2014).

Halton Region has indicated revisions to their Guidelines (requirements) are underway and expect to be issued early mid-2022. We are not certain as to the grandfathering of the 2014 requirements for designs that are submitted ahead of the updated version, but it was explained to Burnside that the Region will communicate to applicants that new guidelines are expected prior to replacing the current guidelines. It should be noted that the requirements below apply for each building, with the exception of shared staging and loading areas.

2.0 Requirements

- 1. Commercial (retail) wastes must be stored separate from residential wastes as they cannot utilize the Region's waste collection services. Private waste collection is required for your commercial tenants. To accommodate this, we recommend:
 - a) The commercial waste storage room should be located on the ground floor, or on an underground level (P1 for example), with easy access to the loading area. For the currently proposed commercial floor space, we recommend this room be large enough to store three 2 yd³ front-end bins with space to remove any-one at a time.

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- b) Commercial wastes may be temporarily stored in a closet within the respective units and transported when full, or at the end of the day.
- 2. Residential waste will need to be compacted for this development, due to the proposed number of units for each tower. Since the compactor poses health and safety risks to the public (residents), the residential waste storage room must be locked. Access to this room must be limited to facility maintenance staff who would be trained regarding the use of waste management equipment.
- 3. Since this letter is being provided at the conceptual stage to assist your team with incorporating waste management requirements early in the design, we cannot estimate the exact quantity and sizing of front-lift bins and carts will be needed for this development. Typically, Burnside would recommend a number of 3 yd³ compaction bins for garbage, 4 yd³ (uncompacted) bins for recycling, and 360 L carts for organic waste¹. Table 1 below provides general waste container requirements. These will be refined when the design proceeds to the Site Plan Approval phase.

Table 1: General Waste Quantity Requirements

| Waste Stream | Container | Units |
|---------------------|----------------------|------------------------------|
| Garbage (Compacted) | 2, 3 Cubic Yard Bins | For 81-200 Residential Units |
| | 3, 3 Cubic Yard Bins | For 200+ Residential Units |
| Recycling | 4 Cubic Yard Bin | Per 60 Residential Units |
| Organics | 360 L Cart | Per 25 Residential Units |

- 4. The minimum required 'head-on' approach for the collection truck to the collection point is 18 m. If this 18 m head-on approach is not possible, the collection area must be designed such that the collection truck does not need to back up more than 18 m (from front tire to front tire). A turnaround area allowing for a three-point turn of not more than one truck length is an acceptable option to the Region.
 - a) Your transportation consultant is best suited to confirm compliance with the Region's requirements.
- 5. The Region's collection truck has a turning radius of 13 m. The Region requires this be noted on the Site Plan and Collection Vehicle Turning Figures. (Simply showing AutoTurn paths is not accepted by the Region.)
- 6. The grade of the collection point must be level. The change of grade of the loading area must not be more than 2% any direction.

¹ Currently, the Region of Halton only collects organic waste from carts.

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- 7. The entire path travelled by the collection vehicle must also be certified to support a minimum of 35 tonnes. This must be shown on your drawings, with the load capacity certified by your (Structural) Engineer.
- 8. The Region's design guidelines state that the collection point must have a minimum 'all-clear' overhead clearance of 9.0 m. It should be noted that the 9.0 m value is a typo within the Guidelines, and the actual minimum overhead clearance height is **7.5 m**. This has been explained through discussion with Halton Region's Multi-Residential Waste Diversion Coordinator, Andrew Suprun. Anything below this must be approved by the Region in advance. Recent discussion with the Region led us to believe such approval is unlikely.
- 9. The waste staging area dimensions will depend on the number of waste containers required, which is based on the number of units (for each building). Should one staging and loading area be shared between the two buildings, the staging area should be large enough to stage the largest quantity of containers that will be collected at once (this is usually recycling bins).
- 10. Double doors (minimum 2.2 m width) must be provided to access the residential, retail, and bulky waste storage rooms, along any path which the bins must travel to reach the Loading Area.
- 11. A contiguous area of 10 m² for the storage of residential bulky wastes is required. This space can be accommodated within the residential waste storage room, or it may be a separate room. Double doors are required for this space and any corridors through which the bulky waste will travel to reach the Loading Area.
- 12. All waste storage rooms must have a hose bib and floor drain for washing and cleaning of the room and waste containers.
- 13. The air exchange rate for waste storage rooms must be a minimum of one-cubic foot per minute per square foot of floor space (1 CFM/ft²)². The height of the room should be at least 3.2 m, to allow flexibility for tri-sorter models.
- 14. Although not a design issue, we note that maintenance staff must move the bins from the waste storage room to the Loading Area prior to 7:00 a.m. on collection day (different days for each waste stream). Maintenance staff may use a bin-puller to move the bins to the Loading Area. Bin-pullers generally require 2 m² (1 m by 2 m) of space and a standard 120v outlet for charging in the location where they are stored (generally within the residential waste storage room).

3.0 Recommendations

While not required by Halton's (current) Guidelines, Burnside recommends the following to provide future waste management flexibility and follow current best practices.

1. Cabinet space be provided in all residential kitchen units for the segregated collection of recyclables, organics, and garbage.

² Per American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 62.

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- 2. A 2 m by 1 m space in the waste storage room, with appropriate shelving, be allocated for collection of Hazardous and Special Products (HSP) and electronic waste by appointment.
- 3. Chute Intake Room design(s) should be reviewed to ensure compliance with the Ontario Building Code, Ontario Fire Code and any other relevant codes or guidelines, including accessibility.

Yours truly,

R.J. Burnside & Associates Limited

Zack Moshonas Project Manager

ZM/JH:cv

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