



2800 High Point Drive | T. 905.875.0026
Suite 100, Milton, ON | F. 905.875.4915
L9T 6P4 | cfcrozier.ca

MEMO

DATE February 11, 2021 **PROJECT NO.** 1644-5564
RE 6333 Hurontario Street - Low Impact Development Design Considerations

TO Celeste Salvagna, B.U.R.PI (MHBC)
FROM Ashish Shukla, P.Eng.

Dear Celeste,

C.F. Crozier & Associates Inc. was retained by Dymon Group of Companies to prepare a Functional Servicing and Stormwater Management Report in support of a Zoning By-Law Amendment (ZBA) for the proposed multi-storey commercial self-storage development at 6333 Hurontario Street (Site) in the City of Mississauga. The ZBA package was first submitted on October 30, 2020.

Crozier has prepared this supplementary memo to describe the various Low Impact Development (LID) measures considered for the Site to demonstrate to the City of Mississauga our best efforts in implementing sustainable stormwater management strategies. It is recommended that this memo be regarded as an addendum to the first ZBA submission package.

Sustainable stormwater management measures were considered for the proposed self-storage building at 6333 Hurontario Street though subject lands provided limited opportunities for LID techniques. Crozier considered several LID techniques that included permeable pavement, infiltration systems, green roofs, rainwater reuse, and a number of other technologies with reference to the Low Impact Development Stormwater Management Planning and Design Guide (CVC/TRCA, 2010).

Low Impact Development Techniques

- Permeable pavements allow stormwater to filter through the pavement layers and into a stone reservoir where it is infiltrated into the underlying native soil. Permeable pavements allow for filtration, storage, or infiltration of runoff, and can reduce runoff compared to traditional impervious paving surfaces. Permeable pavers are not favoured on this Site given its proposed use since these systems are most efficient when accepting relatively clean runoff from low-traffic areas.
- Green roofs are beneficial to cities since they improve energy efficiency, reduce urban heat island effects, and offer many water resource benefits including water quality, water balance and peak flow control. Given that part of the Site is within MTO jurisdiction, green roofs cannot be implemented on Site.

The material in this memo reflects best judgment in light of the information available at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. C.F. Crozier & Associates Inc. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

- Grassed swales are typically used as a polishing technique for stormwater prior to discharge to an outlet. Water quality enhancements through grassed swales were considered to be negligible given limited proposed landscaped areas within the Site.
- Infiltration trenches are designed to capture, store and infiltrate runoff over time generally through a subsurface water storage reservoir lined with geotextile filters and filled with coarse aggregate material. Given that part of the Site is within MTO jurisdiction, infiltration trenches cannot be implemented on Site.
- Rainwater harvesting, or rainwater reuse, is commonly employed as part of satisfying water balance requirements and is well-suited for sites where infiltration is not feasible. For this Site, a concrete underground rainwater reuse chamber is proposed downstream of the stormwater treatment unit as shown on Drawing C 102 of the ZBA submission package, which provides up to 33 m³ of greywater that can be used for irrigation.

Through the implementation of rainwater reuse, we have provided best efforts in support of sustainable stormwater management strategies for the subject site. If you have any questions or concerns regarding the servicing strategies listed above, please do not hesitate to contact the undersigned.

Sincerely,

C.F. CROZIER & ASSOCIATES INC.



Ashish Shukla, P.Eng.
Associate

/jl

N:\1600\1644-Dymon Capital Corp\5564 - 6333 Hurontario St\Memos\2021.02.11_6333 Hurontario St LID Memo.docx