

SERVICING REPORT GROUNDWATER SUMMARY

The form is to be completed by the Professional that prepared the Servicing Report.
 Use of the form by the City of Toronto is not to be construed as verification of engineering/hydrological content.

For City Staff Use Only:	
Name of ECS Case Manager (please print)	

A. SITE INFORMATION		Included in SR (reference page number)	Report Includes this information City staff (Check)
Date Servicing Report was prepared: December 16, 2019		Cover	
Title of Servicing Report: Stormwater Management and Servicing Report		Cover	
Name of Consulting Firm that prepared Servicing Report: LEA Consulting Ltd.		Cover	
Site Address	1637-1645 Bathurst Street Toronto, Ontario	p.1	
Postal Code	M5P 3J6		
Property Owner (identified on planning request for comments memo)	Starlight Investments	p.1	
Proposed description of the project (ex. number of point towers, number of podiums, etc.)	The proposed development consists of a 4-storey residential building and 2 levels of below-grade parking garage.	p.1	
Land Use (ex. commercial, residential, mixed, industrial, institutional) as defined by the Planning Act	Residential	p.1	
Number of below grade levels	Two levels of underground parking garage	p.3	

SERVICING REPORT GROUNDWATER SUMMARY

<p>Does the SR include a private water drainage system (PWDS)?</p> <p>PWDS: Private Water Drainage System: A subsurface drainage system which may consist of but is not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water on the surface of the ground or to a private sewer connection or drainage system for disposal in a municipal sewer.</p>	<p>The proposed building will be constructed watertight. Only short-term dewatering system.</p> <p>If Yes continue completing Section B (Information Relating to Groundwater) <u>ONLY</u></p> <p>If Yes, Number of PWDS?</p> <p><u>One</u></p> <p><i>(Each of these PWDS may require a separate Toronto Water agreement)</i></p> <p>If No skip to Sections C (On-site Groundwater Containment) and/or D (Water Tight Requirements) as applicable</p>	<p><input checked="" type="radio"/> YES</p> <p><input type="radio"/> NO</p>	
<p>B. INFORMATION RELATING TO GROUNDWATER</p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>
<p>A copy of the pump schedule(s) for ALL groundwater sump pump(s) for the development site has been included in the SR</p> <p style="text-align: center;"><u>or</u></p> <p>A letter written by a Mechanical Consultant (signed and stamped by a Professional Engineer of Ontario) shall be attached to the SR stating the peak flow rate of the groundwater discharge for the development site for all groundwater sump pump(s). This peak flow rate must be based on the pump schedule(s) that have been designed by the Mechanical Consultant. A template of this letter is attached in Schedule A.</p>	<p>A letter written by a Mechanical Consultant is included in the Stormwater Management and Servicing Report</p>	<p>Appendix A</p>	

SERVICING REPORT GROUNDWATER SUMMARY

<p>**If there is more than one groundwater sump they must ALL be included in the letters along with a combined flow**</p>			
<p>Is it proposed that the groundwater from the development site will be discharged to the sanitary, combined or storm sewer?</p>	<p><input type="radio"/> Sanitary Sewer</p> <p><input type="radio"/> Combined Sewer</p> <p><input checked="" type="radio"/> Storm Sewer</p>	<p>p.7</p>	
<p>Will the proposed PWDS discharge from the site go to the Western Beaches Tunnel (WBT)?</p> <p>*Reference attached WBT drainage map*</p>	<p><input type="radio"/> YES <input checked="" type="radio"/> NO</p> <p>If Yes, private water discharge fees will apply and site requires a sanitary discharge agreement.</p>		
<p>What is the street name where the receiving sewer is located?</p>	<p>Bathurst Street</p>	<p>p.7</p>	
<p>What is the diameter of the receiving sewer?</p>	<p>1350mm</p>	<p>p.7</p>	
<p>Is there capacity in the proposed local sewer system?</p> <p><input type="radio"/> YES <input checked="" type="radio"/> NO</p>	<p>Are there any improvements required to the sewer system? If yes, identify them below and refer to the section and page number of the SR where this information can be found.</p> <p>No, the surcharged condition is an existing condition. Moreover, the proposed storm discharge will be less than that in the existing condition. Therefore, the existing condition will not be aggravated and MOE Procedure F-5-5 will not be contravened</p> <p>If a sewer upgrade is required, the owner is required to enter into an Agreement with the City to improve the infrastructure?</p> <p style="text-align: right;"><input type="radio"/> YES</p>	<p>p.13</p>	

SERVICING REPORT GROUNDWATER SUMMARY

<p>Has Toronto Water-WIM confirmed that there is there capacity in the proposed infrastructure listed below?</p> <p>- Trunk System? <input type="radio"/> YES <input type="radio"/> NO</p> <p>-Pumping Station? <input type="radio"/> YES <input type="radio"/> NO</p> <p>-Wastewater treatment plant? <input type="radio"/> YES <input type="radio"/> NO</p> <p>-Outfall? <input type="radio"/> YES <input type="radio"/> NO</p> <p>-Combined Sewer Overflow? <input type="radio"/> YES <input type="radio"/> NO</p> <p>*If there is no capacity in any of the above then alternative options need to be considered by the Owner and site cannot discharge to City sewer system.</p>			
<p>Total allowable peak flow rate during a 100 year storm event (L/sec) to storm sewer</p> <p>When groundwater is to be discharged to the storm sewer the total groundwater and stormwater discharge shall not exceed the permissible peak flow rate during a 2 year pre development storm event, as per the City's Wet Weather Flow Management Guidelines, dated 2006</p>	<p><u>51.01</u> L/sec</p>	<p>p.3</p>	
<p>Short-Term Groundwater Discharge</p> <p>Provide proposed total flow rate to the sanitary/combined sewer in post-development scenario</p> <p>Total Flow (L/sec) = sanitary flow + peak short-term groundwater flow rate</p>	<p>192 m³/day = <u>2.22</u> L/sec</p>	<p>p.7</p>	

SERVICING REPORT GROUNDWATER SUMMARY

<p>Long-Term Groundwater Discharge Provide proposed total flow rate to the sanitary/combined sewer in post-development scenario</p> <p>Total Flow (L/sec) = sanitary flow + peak long-term groundwater flow rate</p>	<p>N/A.</p> <p>Proposed groundwater (Peak Discharge Rate: 3.15 L/s) will be discharged to the storm sewer system.</p> <p><u>3.93</u> L/sec (sanitary flow only)</p>	<p>p.12</p>	
<p>Does the water quality meet the receiving sewer Bylaw limits?</p> <p><input checked="" type="radio"/> YES</p> <p><input type="radio"/> NO</p>	<p>If the water quality does not meet the applicable receiving sewer Bylaw limits and the applicant is proposing a treatment system the applicant will need to include a letter stating that a treatment system will be installed and the details of the treatment system will be included in the private water discharge application that will be submitted to TW EM&P.</p>	<p>p.7</p>	
<p>C. ON-SITE GROUNDWATER CONTAINMENT</p>		<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>
<p>How is the site proposing to manage the groundwater discharge on site?</p>			
<p>Has the above proposal been approved by:</p>	<p><input type="radio"/> TW-WIM</p> <p>And</p> <p><input type="radio"/> TW-EM&P</p> <p>And</p> <p><input type="radio"/> ECS</p>		
<p>If the site is proposing a groundwater infiltration gallery, has it been stated that the groundwater infiltration gallery will not be connected to the municipal sewer? A connection between the infiltration</p>	<p><input type="radio"/> YES</p> <p><input type="radio"/> NO</p>		


SERVICING REPORT GROUNDWATER SUMMARY

<p>gallery/dry well and the municipal sewer is not permitted Please be advised if an infiltration gallery/dry well on site is not connected to the municipal sewer, the site must submit two letters using the templates in Schedule B and Schedule C.</p>			
<p>Confirm that the infiltration gallery can infiltrate 100% of the expected peak groundwater flow year round, ensure that the top of the infiltration trench is below the frost line (1.8m depth), not less than 5 m from the building foundation, bottom of the trench 1m above the seasonally high water table, and located so that the drainage is away from the building.</p>			
<p>D. WATER TIGHT REQUIREMENTS</p>	<p>Included in SR (reference page number)</p>	<p>Report Includes this information City Staff (Check)</p>	
<p>If the site is proposing a water tight structure:</p> <ol style="list-style-type: none"> 1. The owner must submit a letter using the template in Schedule D. 2. A Professional Engineer (Structural), licensed to practice in Ontario and qualified in the subject must submit a letter using the template in Schedule E. 3. A Professional Engineer (Mechanical), licensed to practice in Ontario and qualified in the subject must submit a letter using the template in Schedule F. 			

Provide a copy of the approved SR to Toronto Water Environmental Monitoring & Protection Unit at pwapplication@toronto.ca.

Consulting Firm that prepared Servicing Report: LEA Consulting Ltd.

Professional Engineer who completed the report summary: Dorothy Poon
Print Name

Professional Engineer who completed the report summary: 
Signature



Date & Stamp

SERVICING REPORT GROUNDWATER SUMMARY

Schedule A: Template Letter from Mechanical Consultant confirming peak groundwater flow rate

[Mechanical Consultant Company Letterhead]

[Company Name]

[Company Address and Contact Information]

[Date]

Attention: Executive Director, Engineering and Construction Services
c/o Manager, Development Engineering

[ADDRESS]

cc: General Manager, Toronto Water
c/o Manager, Environmental Monitoring and Protection Unit
30 Dee Ave, Toronto ON M9N 1S9

Dear Sir or Madam,

This letter is to confirm that groundwater from the Private Water Drainage System [Description] will be collected and discharged into the [SANITARY OR STORM] control manhole, at a maximum peak flow rate of [XX L/sec] (groundwater peak flow rate).

The groundwater sump pumps will be sized at [XX L/sec] and are expected to run approximately [XX hours per day].

This peak flow rate will be used for assessing capacity for the peak discharge flow into the City's [SANITARY OR STORM] sewer system.

Once the proposed groundwater peak flow rate of [XX L/sec] is approved by Engineering Construction Services (ECS), City of Toronto at the [ZONING/RE-ZONING] stage, the property owner will not be allowed to amend this flow rate in the future. Should there be any amendment to the peak flow rate of [XX L/sec] in future, the property owner shall re-submit either the updated pump schedule or a revised letter to ECS. In addition, the sewer capacity will need to be re-assessed.

Name (printed)

Signature

Stamp

December 2017

SERVICING REPORT GROUNDWATER SUMMARY

Schedule B: Template Letter from the Property Owner confirming that infiltration gallery/dry well is not connected to the municipal sewer

[Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

Attention: Executive Director, Engineering and Construction Services
c/o Manager, Development Engineering

[ADDRESS]

cc: General Manager, Toronto Water
c/o Manager, Environmental Monitoring and Protection Unit
30 Dee Ave, Toronto ON M9N 1S9

Dear Sir or Madam,

I _____, confirm and undertake that I will maintain all building(s) on the subject lands (MUNICIPAL ADDRESS) in a manner which will not discharge, directly or indirectly, any private water collected from subsurface drainage system consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer. All the water collected in the sub-drainage collection system will be managed onsite all time via infiltration gallery/dry well. There will be no direct or indirect discharge of private water to City's sewer.

I am aware of MOECC and OBC requirements regarding infiltration gallery/dry well.

Name (printed) and Title

Email

Signature

I, [PRINT NAME], have the authority to bind the corporation.

SERVICING REPORT GROUNDWATER SUMMARY

Schedule C: Template Letter from a Professional (P.Eng or P.Geo) confirming that infiltration gallery/dry well is not connected to the municipal sewer

[Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

Attention: Executive Director, Engineering and Construction Services
c/o Manager, Development Engineering

[ADDRESS]

Cc: General Manager, Toronto Water
c/o Manager, Environmental Monitoring and Protection Unit
30 Dee Ave, Toronto ON M9N 1S9

Dear Sir or Madam,

I _____, confirm that all building(s) on the subject lands (MUNICIPAL ADDRESS) has been constructed in a manner that will not discharge, directly or indirectly, any private water collected from subsurface drainage system consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer. All the water collected in the sub-drainage collection system will be managed onsite all time via infiltration gallery/dry well. There will be no direct or indirect discharge of private water to City's sewer.

I am aware of MOECC and OBC requirements regarding infiltration gallery/dry well.

Name (printed)

Professional Title [P.Geo or P.Eng (specify which discipline)]

Email

Signature

Stamp

SERVICING REPORT GROUNDWATER SUMMARY

Schedule D: Template Letter from the Property Owner confirming water tight structure

[Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

Attention: Executive Director, Engineering and Construction Services
c/o Manager, Development Engineering

[ADDRESS]

cc: General Manager, Toronto Water
c/o Manager, Environmental Monitoring and Protection Unit
30 Dee Ave, Toronto ON M9N 1S9

Dear Sir or Madam,

I _____, confirm and undertake that I will construct and maintain all building(s) on the subject lands (MUNICIPAL ADDRESS) in a manner which shall be completely water-tight below grade and resistant to hydrostatic pressure without any necessity for Private Water Drainage System (subsurface drainage system) consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water on the surface of the ground or to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer.

Name (printed) and Title

Email

Signature

I, [PRINT NAME], have the authority to bind the corporation.

December 2017

SERVICING REPORT GROUNDWATER SUMMARY

Schedule E: Template Letter from a Professional Engineer (Structural) confirming water tight structure

[Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

Attention: Executive Director, Engineering and Construction Services
c/o Manager, Development Engineering

[ADDRESS]

cc: General Manager, Toronto Water
c/o Manager, Environmental Monitoring and Protection Unit
30 Dee Ave, Toronto ON M9N 1S9

Dear Sir or Madam,

I _____, confirm that all buildings on the subject lands (MUNICIPAL ADDRESS) can be constructed completely water-tight below grade in a manner that will resist hydrostatic pressure without any necessity for Private Water Drainage System (subsurface drainage system) consisting of but not limited to weeping tile(s), foundation drain(s), private water collection sump(s), private water pump or any combination thereof for the disposal of private water on the surface of the ground or to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer.

Name (printed)

Professional Title [P.Eng (Structural)]

Email

December 2017

SERVICING REPORT GROUNDWATER SUMMARY

Schedule F: Template Letter from a Professional Engineer (Mechanical) confirming water tight structure

[Mechanical Consultant Company Letterhead]

[Company Name]

[Property Owner Name and Contact Information]

[Date DD/MMM/YYYY]

Attention: Executive Director, Engineering and Construction Services
c/o Manager, Development Engineering

[ADDRESS]

cc: General Manager, Toronto Water
c/o Manager, Environmental Monitoring and Protection Unit
30 Dee Ave, Toronto ON M9N 1S9

I _____, confirm that all building(s) on the subject lands (MUNICIPAL ADDRESS) will be designed and constructed below grade in a manner without any necessity for Private Water Drainage System (subsurface drainage system) consisting of but not limited to weeping tile(s), foundation drain(s), Private Water collection sump(s), Private Water pump or any combination thereof for the disposal of Private Water on the surface of the ground or to a private sewer connection directly or indirectly or drainage system for disposal directly or indirectly in a municipal sewer. Underground structure(s) of the proposed building(s) will be built completely watertight without any direct or indirect connection to the City sewer system for the discharge of Groundwater (from a PWDS or floor drain or other infrastructure).

I understand that a Private Water Drainage System as an emergency back-up system is not permitted, as part of this proposal

Name (printed)

Professional Title [P.Eng (Mechanical)]

Email

Signature

Stamp