

City of Barrie  
Sewage Collection System

2022 Annual Monitoring Report  
Environmental Compliance Approval 5921-ATUKKR

March 28, 2023

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## Review and Sign-Off

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## Overview

The City of Barrie owns and operates a wastewater collection system which terminates at the Wastewater Treatment Facility (WwTF) located at 249 Bradford Street. In 2022, the collection system operated under Ministry of the Environment, Conservation and Parks (MECP) Amended Environmental Compliance Approval (ECA) No. 5921-ATUKKR dated January 10, 2018. The City was directed by the MECP to apply for a new Consolidated Linear Infrastructure ECA on January 12, 2022. A recent history of collection system ECA approvals is as follows:

**Table 1 System-Wide ECA Approvals History**

System-Wide ECA Number	Date of Issue	Reason for Issue
7639-ACYHUF	October 5, 2016	All individual pump station approvals transferred to system-wide approval
2883-AKUJQZ	August 16, 2017	Approved Holly PS upgrade
7160-AQWSAX	September 11, 2017	Corrected error re: Minet's Point PS flow capacity
5921-ATUKKR	January 10, 2018	Decommissioning of Huronia Pump Station PS-3

This report is prepared in accordance with the requirements of section 2.6(3) of ECA 5921-ATUKKR.

Each section of this report shall be discussed in terms of the following:

- Pump Stations and Force Mains
- Gravity Collection System

Appendix A contains a copy of the ECA that was relevant in 2022. Appendix B contains a copy of all Notices of Modification that were relevant in 2022.

## Reporting section 2.6 (3) (a): Summary and Interpretation of Monitoring Data

This section discusses all monitoring data and includes an overview of the success and adequacy of the works. The City uses computerized work order management systems to track work orders, inspections, repairs, repair costs and internal and external service requests. These systems are the source of data presented in this report.

### Pump Stations and Force Mains

Normal pump station operation is unmanned and automated by use of electronics, electro-mechanical devices and programmable logic controllers. Real-time condition data is monitored by a Supervisory Control and Data Acquisition (SCADA) system and recorded on a data server ("Historian") located at the WwTF. Five (5) pump stations have flow meters and, in general, smaller pump stations have less complex control and metering systems.

Station alarms will call out via telephone line or wireless network to an on-call operator 24/7/365. Alarms are annunciated at the WwTF.

The following alarms are provided for all pump stations and will appear on a SCADA system until cleared. The following alarms are "high priority" and, as a result, call-out to an on-call operator:

- 
- Wet well HI Level
  - Wet well HI HI Level
  - Wet well LO Level
  - Building or Panel Intrusion
  - AC Fail, LO Temp
  - Communication Failure
  - Pumps Not in Auto
  - Pump Fault

Each station can also have additional alarms and some of these may include the following:

- Generator Running
- Generator Fault
- Generator Not in Auto
- Generator Louver Fault
- Load Transfer Switch Not in Auto

All alarms are logged as well as operations actions and acknowledgments. There is one alarm file per day and daily reports are available upon request.

In addition to automated monitoring, inspections are routinely conducted by wastewater operations staff. Pump station inspections are performed 2-3x week and generally consist of:

- Testing, cleaning, if necessary, inspect floats for proper operation and alarms once weekly
- Check intrusion alarm
- Pumping down the well to clean the well (weekly)
- Inspecting and recording pump hours for each pump in a logbook
- Inspecting pump house or cabinet condition (as the case may be)
- Recording backup generator hours (if present) and inspect condition (oil levels, coolant, etc.)
- Record all findings in the station logbook and sign operator's name
- Snow clearing (as needed)

Less frequent maintenance will generally consist of (depends on station):

- Bi-weekly generator inspection and exercise
- Quarterly entry into the wet well and inspection/cleaning
- Annual generator/transfer switch inspection at load, replenish fluid levels
- Safety inspections conducted twice yearly

Maintenance, repairs, service requests and inspections are tracked through work orders on a computerized maintenance management system.

Annual flow meter verification on pump stations is contracted out and was conducted in October and November as per Reporting section 2.6 (3) (d). Verification certificates are available upon request.

Five-year flow summaries are shown below except for two small stations; Perry Street and Innisfil Street.



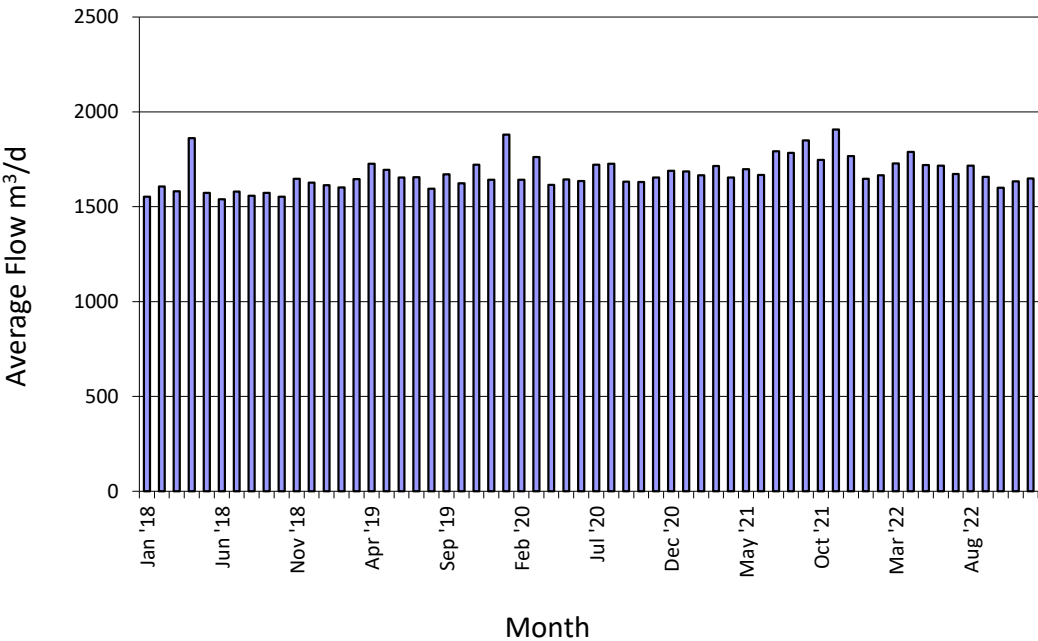


Figure 1 Grove Street SPS Monthly Average Daily Flows

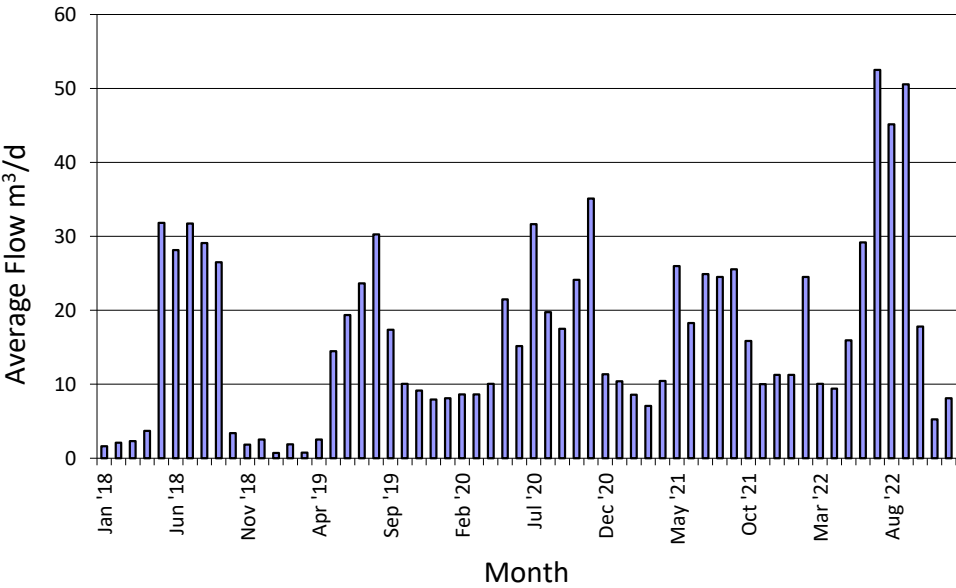


Figure 2 Heritage Park SPS Monthly Average Daily Flows

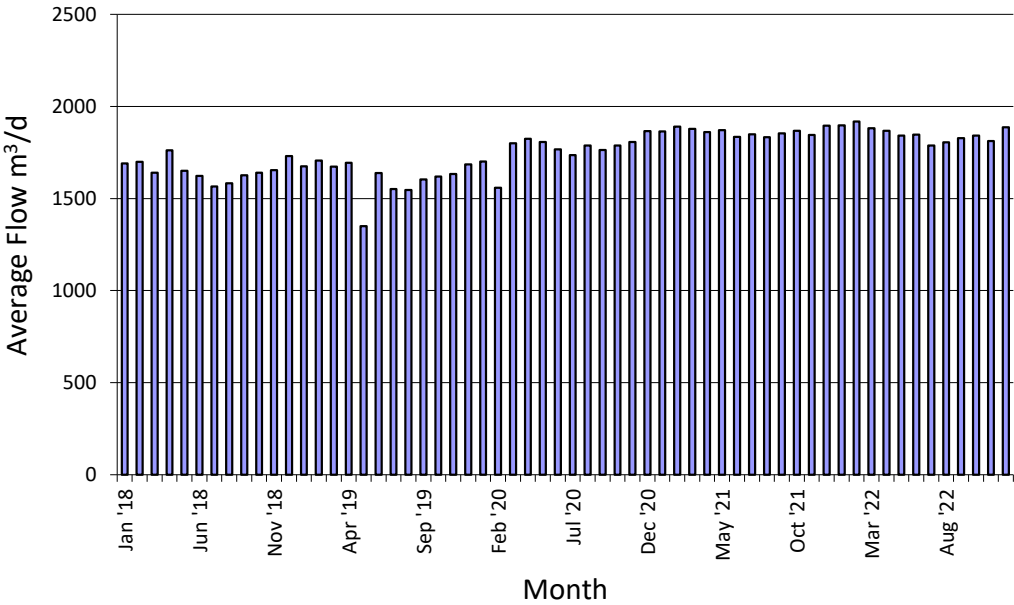


Figure 3 Holly SPS Monthly Average Daily Flows

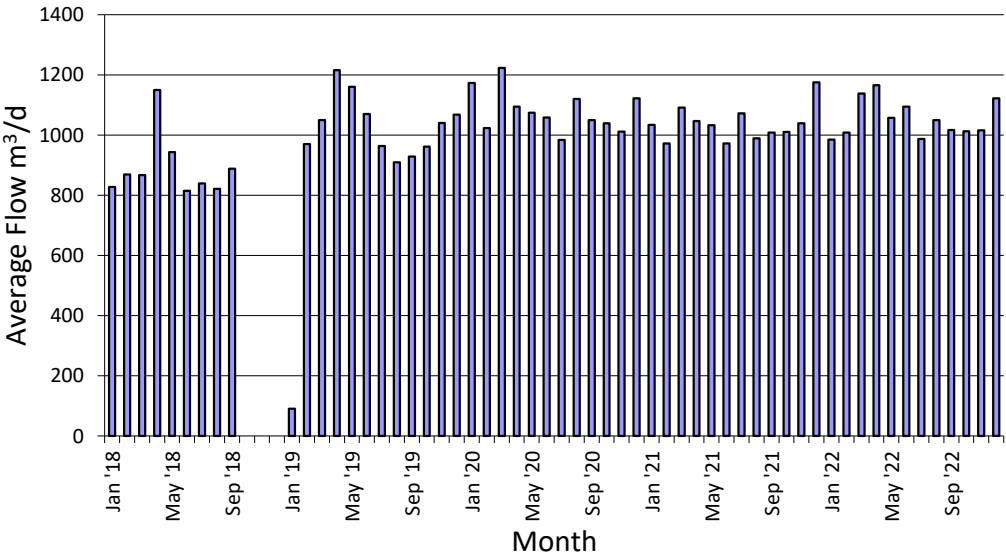


Figure 4 Little Lake SPS Monthly Average Daily Flows

\*Note that flows prior to September 2018 were calculated before the installation and commissioning of a flowmeter. Flows in January 2019 and onward are measured.

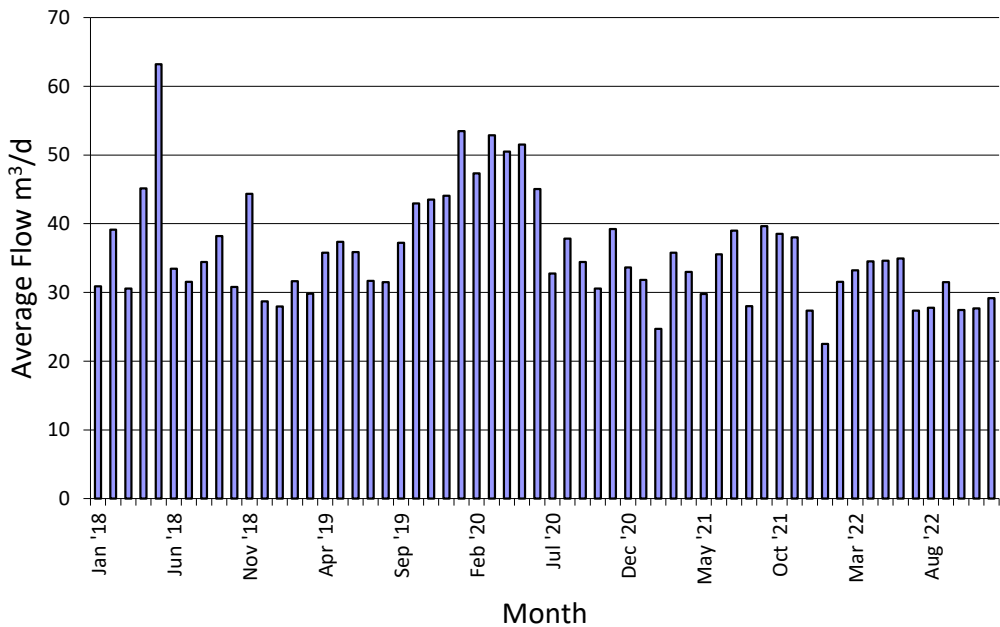


Figure 5 Lockhart SPS Monthly Average Daily Flows

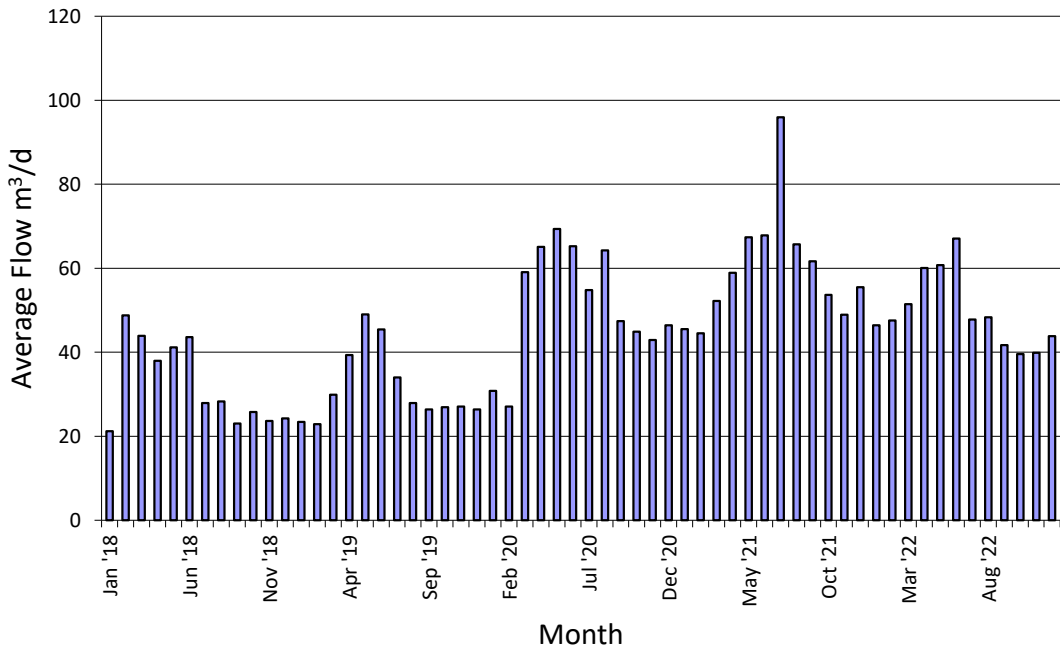


Figure 6 Minet's Point SPS Monthly Average Daily Flows

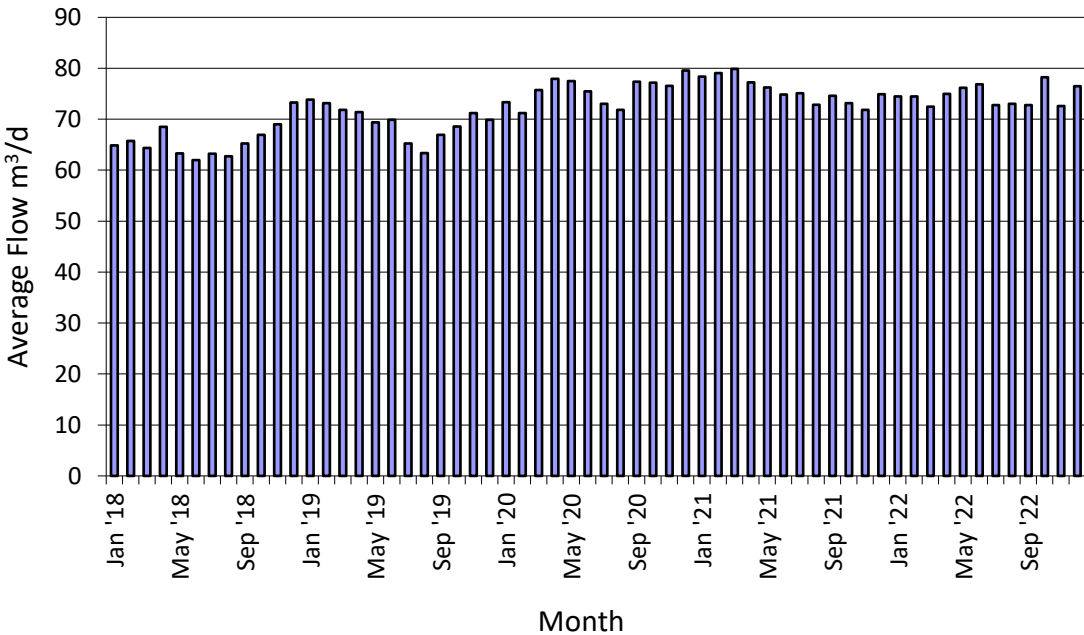


Figure 7 Mooregate SPS Monthly Average Daily Flows

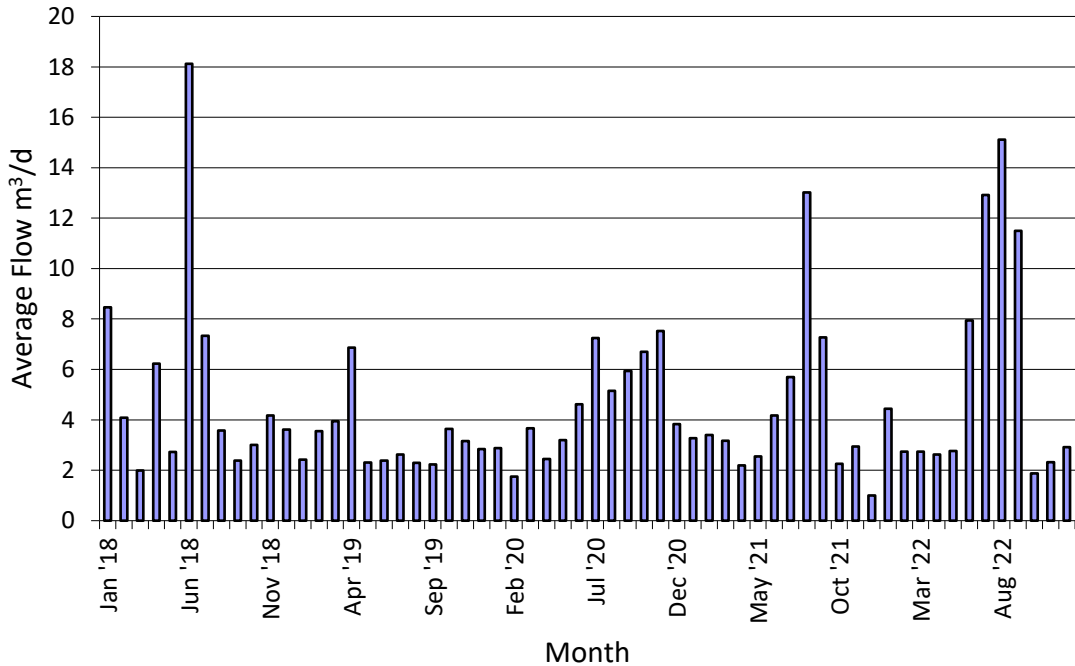


Figure 8 Splash Pond SPS Monthly Average Daily Flows

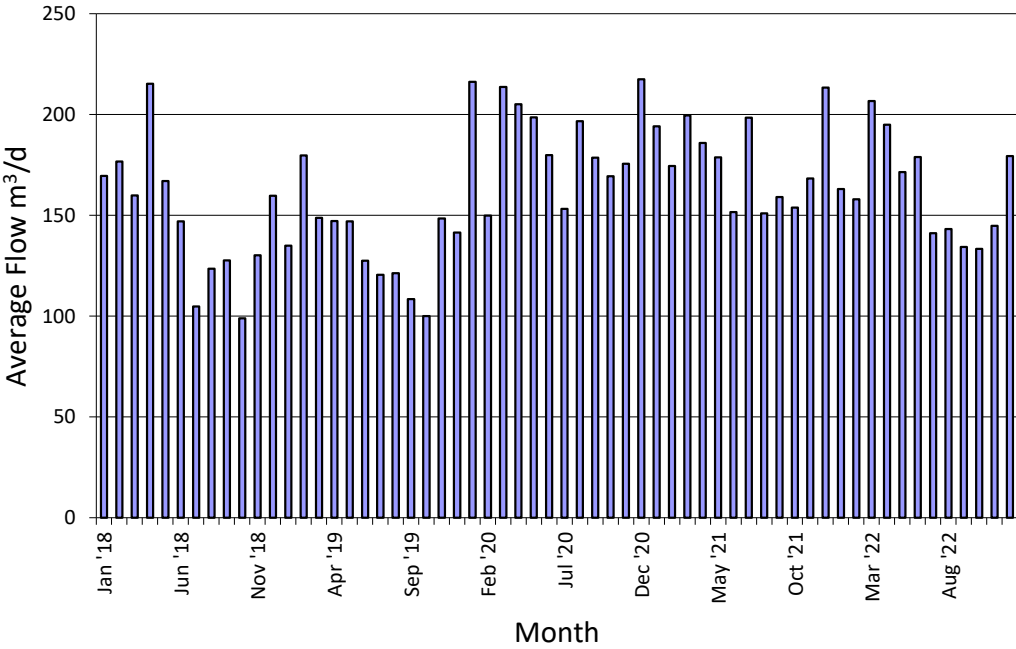


Figure 9 Tyndale Park SPS Monthly Average Daily Flows

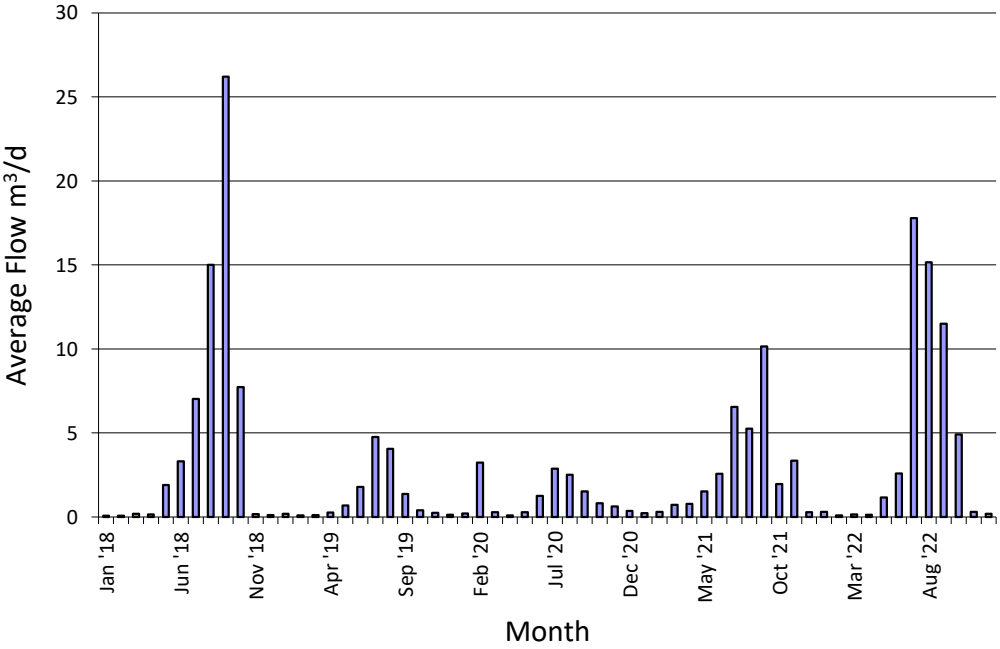


Figure 10 Johnson's Beach SPS Monthly Average Daily Flows

Average daily flows for pump stations based on yearly average are as follows:

Table 2 Pump Station Average Daily Flow (m<sup>3</sup>/d)

Pump Station	Average Flow (m <sup>3</sup> /d)				
	2018	2019	2020	2021	2022
Holly SPS	1654	1612	1768	1862	1851
Tyndale Park SPS	148	135	188	177	162
Splash Pond SPS	5	3	5	4	6
Mooregate SPS	66	69	76	76	75
Lockhart SPS	37	36	42	33	30
Minet's Point SPS	32	32	52	60	50
Heritage Park SPS	14	12	18	16	23
Johnson's Beach SPS	5	1	1	3	5
Grove Street SPS	1604	1654	1687	1745	1683
Little Lake SPS	891	963	1082	1038	1054
<b>Total</b>	<b>4424</b>	<b>4481</b>	<b>4881</b>	<b>5014</b>	<b>4939</b>

The adequacy of the existing system is sufficient from a compliance standpoint. No major projects were undertaken at pump stations or on forcemains. The City intends to equip all stations with flow meters with larger stations being the priority. Where there is no flow meter, flows are calculated based on volume change in the well when a pump is running.

## Gravity Collection System

### *CCTV Inspection*

The City administers a closed-circuit television (CCTV) sewer inspection program for sanitary sewers. In 2022, the City's contractor conducted inspections on approximately 51 km of sanitary sewers. The streets and number of sections imaged were as follows:

Table 3 CCTV Locations in 2022

Street	No. Locations	Street	No. Locations	Street	No. Locations
Arbour-Tr	2	Henry St.	2	Reid-Dr	1
Balmoral-Pl	8	Hickory-Ln	6	River-Ridge-Rd	7
Bayshore-Blvd	3	Hill-Ct	1	Royal-Park-Blvd	13
Beatrice-Lane	2	Hurst-Dr	12	Royal-Parkside-Dr	4
Bellevue Cres.	3	Imperial-Crown-Ln	3	Sandalwood-Ct	2
Bluewater-Tr	4	Janice-Dr	9	Saxon-Rd	6
Brock-St	11	Jewel-House-Ln	7	Shamrock-Lane	1
Bruce-Cres	8	John St.	2	Sinclair-Ct	4
Brushwood-Cres	6	Kearsey-Ct	1	Snelgrove-Cres	5
Buman-Ct	3	Kempfenfelt-Dr	4	Snowden-Ave	4
Burke-Dr	4	Kingsridge-Rd	14	Sovereign's-Gate	9
Camelot-Sq	13	Kozlov-St	9	Spruce-Cres	10
Capps-Dr	9	Laidlaw-Dr	3	Spruce-Cres-Ease	2
Castle-Dr	6	Lancaster-Ct	2	Stuart-Ave	4
Cedar-Cres	10	Lay St.	1	Succession-Cres	20
Chamboro-Ct	3	Lillian-Cres	17	Tamarack-Tr	2
Charlemagne-Ave	2	Little-Ave	12	Taylor-Dr	22
Cherry-Crt	4	Loyalist-Crt	5	The-Queensway	20
Clearwater-Ct	2	Magna-Carta-Rd	3	Tiffin-St	5
Collete Cres.	4	Manor-Gt	1	Tollendal-Mill-Rd	4
Connaught-Lane	3	Maple-Crown-Terr	7	Touchette-Dr	1
Coulter-St	9	Mapleton-Ave	3	Tudor-Cres	7
Counsellor-Terr	7	Mapleview-Dr	16	Turner-Dr	7
Cox-Mill-Rd	11	Marwendy Dr.	2	Tyndale-Rd	3
Crimson-Ridge-Rd	7	Mary-Anne-Dr	4	Unicorn-Ln	2
Cundles-Rd	1	Nina-Rd	1	Valley-Dr	7
Deborah-Way	7	Noam-Dr	5	Versailles-Cres	7
Diana-Way	12	Norman-Dr	3	Veteran's-Dr	30
Dock-Rd	4	Oren-Blvd	13	Vine-Cres	4
Dodson-Rd	11	Orleans-Ave	2	Vine-St	2
Duckworth-St	1	Parker-Ct	3	Walnut-Cres	10
Empire-Dr	11	Pearcey-Cres	9	Weatherup-Cres	5
Felt-Cres	5	Pepin-Ct	4	Welham-Rd	4

Street	No. Locations	Street	No. Locations	Street	No. Locations
Fleming-Cres	4	Perry St.	3	Wellington St. E	13
Ford-St	1	Pine-Dr	25	Wesley-St	2
Forsyth-Cres	7	Plunkett-Ct	9	Westminster-Cir	9
Gloria-St	4	Prince-Of-Wales-Dr	8	Whispering-Pine-Pl	3
Gloucester-Rd	7	Princess-Margaret-Gt	9	Wilson-Ct	3
Golden-Meadow-Rd	15	Prince-William-Way	17	Winchester-Terr	7
Grand-Forest-Rd	4	Puget St.	3		
Gray-Ln	8	Rawson-Ave	10		
Hanmer-St	11	Regalia-Way	7		

Per the City of Barrie Asset Management Plan, the 2022 condition rating of the sanitary sewer collection system in its entirety is mostly 'Very Good' as shown in Figure 11.

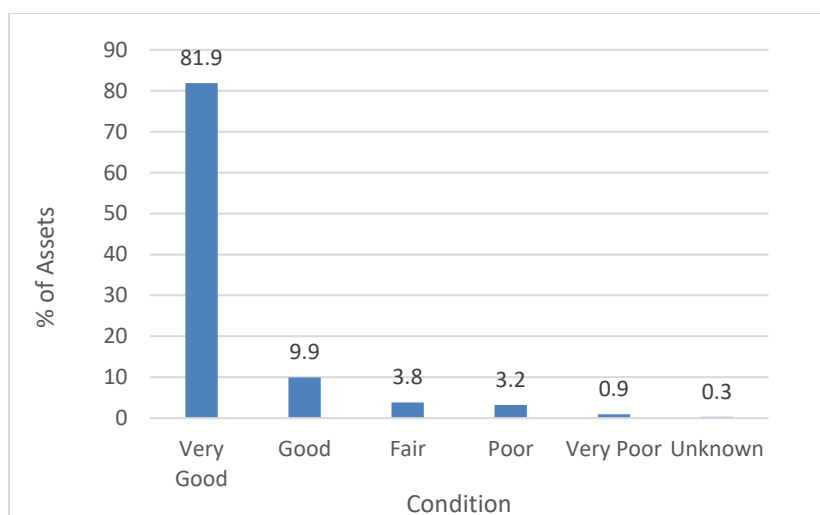


Figure 11 2022 Sanitary Sewer Condition Rating

### *Flow Monitoring*

The City commenced flow monitoring in the gravity sanitary sewer system in 2021. Monitors were installed on a temporary basis to allow staff to calibrate flow modelling software, and to identify areas of significant I&I for further examination. Flow monitoring in the gravity sanitary sewer concluded in July of 2022.



## Reporting section 2.6 (3) (b): Description of Operating Problems and Corrective Actions

### Pump Stations and Force Mains

There were no overflows from pump stations.

A list of Work Orders issued and completed for pump station repairs conducted is as follows:

Table 4 Pump Station and Forcemain Repairs Completed in 2022

Date	Repair Detail	Resolution and Closing Comments	Pump Station
22/3/2022	Please replace start float as we believe this float is failing.	Mar 22 at 10:45AM: Inspected station float. Tested float with operator. Float likely was hung up and Hi float caught under the mezzanine. May be good idea to adjust when station is Cleaned out	Barrier Wall
27/5/2022	Don't need a fob to clear entry alarm. Open door to pump controls and get an alarm. close door to pump control panel and alarm clears. never need to open fob side.	May 27 at 11:18AM: Tested intrusion with all good Alarm tested through SCADA and it worked as expected. There may be an electrical issue on-site.	Barrier Wall
27/5/2022	Well 1(east). Pump runs and runs but level doesn't change and I see nothing entering well 2(west). Pump in well 1 turned off and Al Baker informed	May 27 at 01:56PM: Flow is fine but well is still pumping down due to being off all night . Well has gone down 3 feet + and should be off soon May 27 at 01:56PM: Made entry to check floats. Floats were all ok.	Barrier Wall
1/10/2022	Pump #1 pump running nonstop and been shutdown.	Aug 02 at 02:43PM: Discharge line is plugged needs flushing Jun 10 at 01:45PM: Drained well. Pulled pump out. Re placed pump with new. Tested. All good Jun 09 at 10:07AM: Pulled pump Re-piped pump plumbing check valve was taken apart cleaned and rebuilt put in new pump with new piping cleaned truck in the morning the next day Jun 09 at 08:25AM: changed pump 1/2 hp 240 volt Jun 09 at 07:14AM: Removed pump from well, installed new pipe run onto new pump and reinstalled in the well Jun 08 at 02:47PM: Assisted with inspection and vac truck Jun 08 at 01:26PM: uploaded pics of pump	Barrier Wall
3/6/2022	Well # 2 high level float is hard to test	Jun 03 at 07:34PM: Fixed	Grove
11/7/2022	Install new ladder in the wet well as per code changes	Jul 11 at 09:10AM: Added Supply and Installation from Barrie Welding Invoice Sep 10 at 11:29AM: Was finished while I was on holidays. Jun 08 at 11:27AM: organize a meeting with Barrie welding and request and receive their confined space paperwork	Grove

Date	Repair Detail	Resolution and Closing Comments	Pump Station
22/7/2022	Milltronics in well #1 keeps bouncing up to 2.21 m and gets stuck there even when the well is empty	Jul 26 at 09:41AM: Confined space entry to clean the milltronics heads 1 and 2. Seems to be reading accurate	Grove
30/8/2022	Well #1 is in need of a suck out. Significant amount of scum floating around	Sept 01 complete	Grove
1/9/2022	HIHI Float in well 1 is out of its ring and needs to be put back in	Sep 01 at 01:10PM: Repaired	Grove
22/3/2022	High level alarm float does not seem to work. Also not properly installed and physically is set higher than hihi float	Mar 22 at 10:46AM: Floats were inspected. Both operational as designed. Relocated the high float to its previous position and now below the hihi	Heritage
14/1/2022	Please have CAT repair block heater.	Jan 14 at 11:42AM: Added materials Nov 12 at 07:41AM: cat was in and replaced block heater on Nov. 11/21 -Block Heater power relay faulty. Parts have been ordered under warranty. (CAT has upgraded relay to a heavier contactor this is a common problem) -Battery Charger alarm has had timer extended to allow the transfer delay to not cause a false alarm. -2 Gallons of anti-freeze have been left on site (Extended Life CAT anti-freeze)	Holly
11/3/2022	Please use this work order to capture the cost to repair the various deficiencies at Holly SPS.	on Mar 10 at 07:45AM: Added materials	Holly
7/4/2022	Hi float in well #1 rope is caught on something	Apr 07 at 07:11AM: 666	Holly
13/6/2022	Check leak detection failure	Pump under Warranty still. WO canceled on our end. Addressed by vendor.	Holly
2/8/2022	Computer screen frozen. Unable to change screen	Reboot SCADA	Holly
17/8/2022	Building is very hot inside and AC not working. Thermostat keeps going into fault E7.	Aug 17 at 02:42PM: Warranty Jul 13 at 02:07PM: please close on the maintenance side as this is a warranty issue. Jul 04 at 02:37PM: Closing. Nothing more needed on my end Jun 08 at 07:19AM: Not fixed yet Jun 08 at 07:00AM: They couldn't get it fixed and will be returning May 26 at 10:31AM: Warranty issue parts ordered	Holly
6/10/2022	Hi float is tangled entry needed.	Oct 06 at 10:26AM: Entry complete Sep 29 at 12:23PM: Extra time was required to find a truck and pintle connection plus go get trailer then attend the location.	Holly
30/12/2022	Cat Generator failed to start.	Dec 30 at 03:11PM: Tested and fixed Dec 30 at 02:44PM: Retested generator. Did 1 hour test Dec 30 at 11:18AM: retested and did 1hr load test alarms had been disabled?? All good now Dec 30 at 11:15AM: breaker tripped	Holly
2/9/2022	Intrusion alarm does not alarm when the doors are opened.	Sep 08 at 06:58AM: Point to point issue Aug 30 at 07:44AM: Checked cabinet to ensure plc	Innisfil

Date	Repair Detail	Resolution and Closing Comments	Pump Station
		is was get input from door switch. Found that fob input was held closed Kevin was going to address the issue. Aug 29 at 04:08PM: All good Found issue with the FOB input - found the door forced open in the software. Closed the door and tested. All good.	
15/2/2022	High float verification and repair	Sep 21 at 02:00PM: Float works	Little-lake
11/1/2022	please have power station come in as generator will not start with loss of the utility.	Jan 11 at 06:55AM: Power station removed timing relay to come back an program the deep sea for not in auto	Lockhart
8/2/2022	Check valve is not holding  *Work is already completed	Feb 09 at 07:01AM: Entry and free up check. Remove cover inspect, free up and grease and reinstall Feb 09 at 06:59AM: Did entry to inspect check valve, removed cover to loosen disk.	Lockhart
11/7/2022	Install new ladder in the wet well as per code changes	Jul 11 at 09:18AM: Added Supply & Installation from Barrie Welding Invoice Jun 02 at 06:42AM: completed by Barrie welding.	Lockhart
17/8/2022	When you turn pumps on they will chatter for a bit then come on maybe starter problem	Aug 17 at 02:41PM: Clean contacts new timer Jul 07 at 07:04AM: Ordered new timing relay	Lockhart
24/8/2022	Please have Power Station program a Not in Auto output in the engine controller and wire our PLC Not in Auto input. Test all alarms back to SCADA	Aug 10 at 09:22AM: All good tested needed to be programed fail safe.	Lockhart
18/10/2022	Please check inline GFCI for rooftop rain gauge data logger. There were two dates of power loss.	Oct 19 at 07:17AM: Located GFCI and it was not in a tripped position. Tripped and reset the device. Tested the receptacle and ensured 120v. Plugged in the heat trace. Advised that the internal battery backup likely needs replacing since it's not maintaining on a power loss.	Lockhart
17/8/2022	Please remove existing pumps in the well with new up to date pumps.	Jan 28 at 11:24AM: Added material Dec 21 at 07:07AM: Complete Dec 10 at 01:49PM: Assisted in the installation of pumps Dec 10 at 01:26PM: Both pumps are in spare flange is made for 3rd pump Dec 10 at 10:06AM: Assisted with removal of pump 2. Preparations for the replacement. Replaced the tek connector from pump feed. Added Kellum grip. And coiled up cable. Bump tested and all happy with rotation. Pump lowered into the poop. Closed up. Back to clean up tools. Dec 10 at 06:23AM: All done Dec 07 at 10:11PM: Gathering equipment and testing equipment to install tomorrow Oct 20 at 10:37AM: install both tube supports for pumps	Minets-Point

Date	Repair Detail	Resolution and Closing Comments	Pump Station
11/2/2022	Moorgate isn't transferring on its own from Utility to generator power. It is getting stuck on transfer switch itself and it says generator is running but it doesn't give power. This same issue occurred on June 18th of this year where transfer got stuck and had to be manually moved over.	Feb 11 at 09:15AM: Added materials Sep 21 at 02:03PM: Closed Sep 20 at 07:21AM: Trouble shooting at Sep 20 at 07:20AM: Replaced wiring	Mooregate
13/6/2022	Louvers are not working	Jun 13 at 04:53PM: Went to test louvers told not operating properly louvers would no stay open during the generator run once power transferred they closed sourced it back to the generator set wire off at the relay corrected it May 31 at 07:27AM: Tested the louvers. Checked that louvered fail alarm worked and alarmed to SCADA, removed power louvers opened. Powered them up and louvers closed	Mooregate
20/7/2022	Pump #1 Not pumping but shows running. Please repair.	Jul 20 at 12:49PM: Added Service Invoice from SPL Industrial May 10 at 07:10AM: Change soft start May 09 at 10:55AM: Replaced the soft start. Watched the pumps cycle properly.	Mooregate
2/8/2022	Unresponsive scada screen	Reboot SCADA	Mooregate
29/9/2022	Check alternator for a mouse nest. Remove nest, clean out alternator and check for bare wires. Repair as necessary	Sep 29 at 11:19AM: Locked out the unit, Opened the housing, cleaned out with vacuum. Inspected the top housing. No evidence of chewing. Facilities should fix the weather stripping on the doors to help eliminate the issue. Sep 29 at 11:17AM: Cleaned out nest from alternator. Checked wiring for and damage. Sep 28 at 02:51PM: Investigated the issue. Found a nest will remove and inspect Thursday	Mooregate
8/12/2022	Rags and water bottles are floating around in the well causing alarms and operating disruptions. Well clean out required.	Dec 09 at 10:05AM: Bottles removed, miltronics cleaned , well pumped down alarms reset	Mooregate
25/1/2022	Flow meter shows a constantly changing flow. Bot negative and positive values when neither pump is running.	Jan 25 at 03:49PM: This has been ongoing for the last 5 year	Splashpond
10/8/2022	The low level alarm has become a nuisance. The alarm has been defeated on the Splashpond SCADA page (blue banner)!	Aug 10 at 01:43PM: reset on the plc cabinet always has to be done when low float is energized Aug 04 at 08:51AM: Alarm was managed to get reset no need for entry	Splashpond
11/2/2022	Pump failed to start 2 times, please inspect and repair	24-07-2018 - TPPS-SP-1 - Timecard notes: repair 24-07-2018 - TPPS-SP-1 - Timecard notes: repair 24-07-2018 - TPPS-SP-1 - Timecard notes: repair 24-07-2018 - TPPS-SP-1 - Timecard notes: repair replaced pump and sending old pump down to flygt for rebuild	Tyndale

## Gravity Collection System

The City operates an annual in-situ repair program for the gravity collection system. Repair locations are derived from annual CCTV inspections and issues arising from field operations. Issues are prioritized and repaired to optimize available budget. The locations that were identified and repaired are noted below:

**Table 5 In-situ Repairs to Gravity System in 2022**

Street Location	Asset ID	Pipe Dia.	Action
Wellington St. E	101506087	200mm	CIPP Lining
Wellington St. E	101506072	200mm	CIPP Lining
Wellington St. E	101501338	200mm	CIPP Lining
Wellington St. E	101500924	200mm	CIPP Lining
Wellington St. E	101501337	200mm	CIPP Lining
Wellington St. E	101501336	200mm	CIPP Lining
Wellington St. E	101506075	200mm	CIPP Lining
Wellington St. E	101506074	200mm	CIPP Lining
Wellington St. E	101506073	200mm	CIPP Lining
Wellington St. E	101501335	200mm	CIPP Lining
Marwendy Dr.	101501220	200mm	CIPP Lining
Marwendy Dr.	101501221	200mm	CIPP Lining
Henry St.	101501052	200mm	CIPP Lining
Henry St.	101501051	200mm	CIPP Lining
Bellevue Cres.	101500756	250mm	CIPP Lining
Bellevue Cres.	101500755	250mm	CIPP Lining
Collete Cres.	101506437	200mm	Spot Repair
Collete Cres.	101500315	200mm	Spot Repair

There were two reportable incidents that occurred in the gravity collection system. A brief summary of events and City responses are as follows:

May 18, 2022 – Warnica Road, blockage was in City infrastructure due to misuse of system. Overland spill happened on private property. When Environmental Compliance arrived, no overland was detected. Grease was the cause of the blockage. City Wastewater Collection crew cleared the blockage with a flusher truck. Incident number EIR-029-2022. Sewer Use Report issued to the owner of plaza at 494 Big Bay Road.

December 29, 2022 – Bayfield Street, blockage was in City infrastructure due to misuse of system. Overland spill happened on private property. Wipes, grease and reduction in pipe diameter were the cause of the blockage. City Wastewater Collection crew cleared out the blockage on City side. Completed sewer use inspection at location. Incident Number EIR-165-2022. Sewer Use Report issued to the business at 326 Bayfield Street.

## Reporting section 2.6 (3) (c): Maintenance Summary

### Pump Stations and Force Mains

In 2022, 1,316 work orders were completed regarding inspections and maintenance at pump stations. Most work orders are for routine preventative maintenance and inspections. Operators perform preventative maintenance and preventative maintenance inspections that are tracked in a computerized maintenance management system database. Repair work orders were summarized in the preceding section. A list of all completed work orders is available upon request.

### Gravity Collection System

Local sanitary sewer cleaning is undertaken by a City operated flushing crew. The goal is to clean each local sanitary pipe every 2 to 3 years. Problem areas, usually in older parts of the City, are put on a weekly flushing list. The weekly flushing program keeps the pipe in working condition until the underlying problem can be addressed as part of our in-situ repair program, or as part of a larger capital engineering project.

The following sewers were included in the weekly flushing program:

Table 6 Gravity Sewers on Weekly Flushing Program in 2022

Sewer ID	Location
SAI02023-SAI02021	Frederick St.
SAN04142-SAN04141	Wellington St.
SAC07018-SAC07019	Glenwood Dr.
SAI06101-SAI06100	Cundles Rd.
SAC03026-SAC03025	Brookdale Dr.
SAE02002-SAE12064	Caroline St.
SAI02017-SAI02016	Sanford St.
SAB01021-SAB0109	Cumberland St.
SAE02010-SAE02011	Marcus St.

It is the City's responsibility to complete sanitary lateral replacements and critical repairs between the sewer main and homeowner's property line if the repairs are related to a structural deficiency in the lateral. Repairs resulting from misuse of the sewer system (i.e., blockage due to disposal of grease down the drain) are the responsibility of the homeowner. Structural repairs of the lateral on private property are also the homeowner's responsibility. Table 7 below is a list of properties where laterals were repaired or replaced by the City. Repairs completed by homeowners are not the responsibility of the City and are therefore not tracked or listed below.

Table 7 2022 Lateral Repair and Replacement Locations

WO#	Description	Date	Address
443113	Repair / Replace Lateral	1/17/2022	28 Springhome Rd.
443741	Repair / Replace Lateral	1/20/2022	90 Penetang St.
444470	Repair / Replace Lateral	1/27/2022	54 Queen St.
444471	Repair / Replace Lateral	1/27/2022	36 Puget St.
444474	Repair / Replace Lateral	1/27/2022	25 Eugenia St.
445137	Repair / Replace Lateral	1/31/2022	12 Burton Ave.
445687	Repair / Replace Lateral	2/4/2022	20 Oak St.

WO#	Description	Date	Address
455479	Repair / Replace Lateral	3/16/2022	13 Wellington St. E
456128	Repair / Replace Lateral	3/18/2022	167 Shanty Bay Rd.
457301	Repair / Replace Lateral	3/25/2022	287 Huronia Rd.
458332	Repair / Replace Lateral	4/1/2022	30 Ross St.
458940	Repair / Replace Lateral	4/6/2022	209 Owen St.
460510	Repair / Replace Lateral	4/13/2022	31 Baker Cres.
461500	Repair / Replace Lateral	4/21/2022	82 Shanty Bay Rd.
463323	Repair / Replace Lateral	5/9/2022	3 Valley Dr.
463505	Repair / Replace Lateral	3/31/2022	188 St Vincent St.
463506	Repair / Replace Lateral	5/4/2022	18 Marion Cres.
466396	Repair / Replace Lateral	5/17/2022	162 Lillian Cres.
466972	Repair / Replace Lateral	5/19/2022	60 Melrose Ave.
467496	Repair / Replace Lateral	5/25/2022	1 Campbell Ave.
469528	Repair / Replace Lateral	6/7/2022	109 Strabane Ave.
470791	Repair / Replace Lateral	6/16/2022	88 Penetang St.
473601	Repair / Replace Lateral	6/29/2022	32 Weldon St.
475923	Repair / Replace Lateral	7/13/2022	6 Melrose Ave.
482757	Repair / Replace Lateral	9/6/2022	70 Blake St.
483528	Repair / Replace Lateral	8/30/2022	30 Alfred St.
484553	Repair / Replace Lateral	8/29/2022	192 St Vincent St.
486635	Repair / Replace Lateral	9/20/2022	141 Codrington St.
487884	Repair / Replace Lateral	9/26/2022	24 Cunningham Dr.
489994	Repair / Replace Lateral	10/12/2022	44 Cundles Rd. E
490084	Repair / Replace Lateral	10/14/2022	111 John St.
492519	Repair / Replace Lateral	10/21/2022	23 Springhome Rd.
492520	Repair / Replace Lateral	10/31/2022	20 Center St.
493087	Repair / Replace Lateral	5/6/2022	61 Arthur Ave.
493275	Repair / Replace Lateral	11/3/2022	108 Nelson St.
493281	Repair / Replace Lateral	11/3/2022	89 Shanty Bay Rd.
496691	Repair / Replace Lateral	11/28/2022	28 Downsview Dr.
496885	Repair / Replace Lateral	11/29/2022	7 Brookdale Dr.
499838	Repair / Replace Lateral	12/21/2022	15 Collier St.
499853	Repair / Replace Lateral	12/21/2022	105 John St.
459710	Reline Lateral	04/11/2022	5 Tomlin Crt.
463397	Reline Lateral	5/2/2022	90 Rose St.
467495	Reline Lateral	5/24/2022	95 Innisfi St.
470490	Reline Lateral	6/13/2022	20 Alexander Ave.
477814	Reline Lateral	7/25/2022	22 Tower Cres.
486637	Reline Lateral	9/20/2022	11 Wood St.
493083	Reline Lateral	10/20/2022	28 Eugenia St.



In addition to the above, the following table summarizes maintenance activity on the gravity collection system:

Table 8 Summary of Other Maintenance on Gravity Sewers in 2022

Description	Number of Work Orders
Benching in Maintenance Hole	2
Check Sanitary Main	1
Clean Sanitary Main	4
Clean Sanitary Main - Master	138
Clear Blocked Sanitary Main	3
Clear Debris/Obstruction in Maintenance Hole	1
Maintenance Hole - Atmospheric Testing	130
Maintenance Hole - Inspection	126
Maintenance Hole Repair - Contractor	25
Reline Lateral	7
Reline Maintenance Hole	4
Remove Obstruction from Sanitary Main	1
Repair Damage by Others	1
Repair/Replace Lateral	40
Repair/Replace Sanitary Main	1
Sanitary Maintenance Hole Repair	22
Sanitary Maintenance Hole Repair - Contractor	180
Trace Lateral (Utility Locate)	2
Video Lateral	5
Weekly Cleaning of Sanitary Main	26
<b>Total</b>	<b>719</b>

A detailed list of individual work orders is not appended but can be supplied upon request.

## Reporting section 2.6 (3) (d): Summary of Calibration and Maintenance Program

This section summarizes calibration and maintenance on all monitoring equipment.

### Pump Stations and Force Mains

Flow meter verifications at pump stations were conducted by a Certified Calibration Contractor as follows:



Table 9 2020 Flow Meter Verifications

Tag ID	Description	Serial No.	Flow Range	Mfr	Result	Date (2022)
PSMGFIT101 P2	Moorgate PS 300 Kozlov St.	F7015916000	360 m <sup>3</sup> /hr	E+H	Passed	Oct. 19
PSMGFIT101 P1	Moorgate PS 300 Kozlov St.	F7013916000	360 m <sup>3</sup> /hr	E+H	Passed	Oct. 19
PSHO_FIT100	Holly PS 65 Logan Cr.	3K6720182909 56	400.90 l/s	ABB	Passed	Nov. 1
PSHO_FIT200	Holly PS 65 Logan Cr	3K6720182909 58	400.90 l/s	ABB	Passed	Nov. 1
PSSP_FIT100	Splash Pond PS 5 Lakeshore Dr	E60EC616000	90 m <sup>3</sup> /h	E+H	Passed	Nov. 1
PSTD_FIT100	Tyndale Park PS 45 Tyndale Rd	F31BE719000	68.1 m <sup>3</sup> /h	E+H	Passed	Nov. 1
PSLL_FIT100	Little Lake PS 510 Duckworth	J30B8416000	500 m <sup>3</sup> /h	E+H	Passed	Oct. 19

### Gravity Collection System

The City does not maintain any flow monitoring equipment in the gravity collection system at this time. For the flow monitoring described above in Table 3 of Section 2.6 (3) (a), calibration of the flow monitoring equipment was the responsibility of the City's contractor in accordance with the contract terms.

## Reporting section 2.6 (3) (e): Summary of Complaints and Responses

### Pump Stations and Force Mains

No complaints were received in 2022.

### Gravity Collection System

The City uses Cityworks (computerized maintenance management system) to track all internal and external service requests as well as work orders generated from service requests, in the gravity collection system. The City received 126 service requests related to the gravity collection system from the public. They are broken down into the following categories and compared to previous years' data in Table 10.

Table 10 Service Request Summary

Type of Service Request	Number of Service Requests			
	2019	2020	2021	2022
Miscellaneous Service Requests	9	10	9	2
Sanitary Lateral Problems	42	51	25	10
Sewer back up in basement	110	102	85	98
Sewer Smell	8	10	10	14
Maintenance Hole Cover off	10	11	3	0
Maintenance Hole Overflow	4	4	1	0
Maintenance Hole Sunken	10	6	2	0

## Reporting section 2.6 (3) (f): Summary of Pump Station Overflows

### Pump Stations and Force Mains

There were no pump station or force main overflows in 2022.

## Reporting section 2.6 (3) (g): Copies of Sch. 'C' section (1) Notices of Modifications Including Status

This section contains the status of all Notices of Modifications which were in effect. Copies of notices given in 2021 are contained in Appendix B.

### Pump Stations and Force Mains

No Notices of Modification were issued or in effect.

### Gravity Collection System

There was one Notice of Modification issued. The status of recent Notices of Modification is provided in Table 11.

Table 11 Notices of Modifications & Status

Number	Description	Date Signed	Status as of Dec. 31/22	Well Head Protection Area
2022-01	McKay Road West – Reid Drive and Da Vinci Avenue north.	Nov. 24, 2021	Construction ongoing	WHPA Q2
2021-01	Dunlop Street, Poyntz Street, Berczy Street and Codrington Street	June 21, 2021	Construction complete	WHPA B, C and D

## Reporting section 2.6 (3) (h): Report Summary for Schedule C Section 1(3)

### Pump Stations and Force Mains

No Notifications were issued regarding Schedule C Section 1(3).

### Gravity Collection System

No Notifications were issued regarding Schedule C Section 1(3).

## Reporting section 2.6 (3) (i): Modifications Posing a Significant Threat

This section discusses new modifications which may pose a significant threat to sources of drinking water.

### Pump Stations and Force Mains

There were no Notifications of Modifications in effect.

### Gravity Collection System

Limited information on each risk was included with the Notice and is contained in Appendix A.

## Reporting section 2.6 (3) (j): Notices of Assumption

This section contains a copy of all Notices of Assumption per condition 2.9.

### Pump Stations and Force Mains

There were no Notices of Assumption as per condition 2.9.

### Gravity Collection System

There were no Notices of Assumption as per condition 2.9.

## Reporting section 2.6 (3) (k): Other Info Required by the Water Supervisor

This section summarizes other info required by the Water Supervisor.

### Pump Stations and Force Mains

There were no requests for information from the Water Supervisor.

### Gravity Collection System

There were no requests for information from the Water Supervisor.

## APPENDIX A: ENVIRONMENTAL CERTIFICATE OF APPROVAL



Ministry of the Environment and Climate Change  
Ministère de l'Environnement et de l'Action en  
matière de changement climatique

### AMENDED ENVIRONMENTAL COMPLIANCE APPROVAL

NUMBER 5921-ATUKKR  
Issue Date: January 10, 2018

The Corporation of the City of Barrie  
70 Collier Street  
Post Office Box No. 400  
Barrie, Ontario  
L4M 4T5

Site Location: Municipal sanitary sewage collection system owned and operated by the City of Barrie servicing the Barrie Wastewater Treatment Facility, County of Simcoe.

*You have applied under section 20.2 of Part II.1 of the Environmental Protection Act, R.S.O. 1990, c. E. 19 (Environmental Protection Act) for approval of:*

system-wide municipal sanitary sewage Works serving the City of Barrie for the collection and transmission of sanitary sewage, connected to the Barrie Wastewater Treatment Facility;

The Environmental Compliance Approval includes the following:

Schedule	Contents
Schedule A	Description of Works
Schedule B	Terms and Conditions
Schedule C	Limited Operational Flexibility
Schedule D	Assumption of Ownership of Sewage Works
Schedule E	Supporting Documents

**Schedule A: Description of Works**

System Owner and Operator	<b>The Corporation of the City of Barrie</b>
System Name	<b>Sanitary Collection System servicing the Barrie Wastewater Treatment Facility</b>

The sanitary sewage collection system serving the Barrie Wastewater Treatment Facility consists of approximately 539 kilometres (km) of sanitary sewers and sanitary forcemains and twelve (12) sewage pumping stations (SPS). The sanitary sewage collection system also includes all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances that are essential for the proper operation of the Works. The sanitary sewage collection system serves the urban area of the City of Barrie.

Schedule A includes:

- 1.0 System-Wide Approval – Sanitary Sewage Collection System
- 2.0 System-Wide Approval – Sewage Pumping Stations
- 3.0 System-Wide Approval – Flow Regulators, Storage Tanks, and Pressure Release Valves

## 1.0 System Wide Approval – Sanitary Sewage Collection System

The main components of the Sanitary Sewage Collection System include the Mains and Forcemains described below:

### 1.1. Gravity sewer Mains and Forcemains included in Table 1:

Table 1. Sanitary Sewage Collection System	
Plan / Files	Revision Date
Sanitary Infrastructure Map - City of Barrie (not to scale)	March 2, 2016

Classification of the Sanitary Sewage Collection System at the date of issuance of this Approval by length:

Table 2. Sanitary Sewage Collection System by Length			
System Type	Pipe Diameter (mm)	Length (km)	System Total Length (km)
Sanitary sewers	0-250	408.77	530.23
	300-500	73.57	
	525-1,050	44.15	
	≥1,200	3.74	
Forcemains	0-250	2.20	9.00
	300-500	6.81	
	525-1,050	0.00	
	≥1,200	0.00	
Total length			539.23

## 2.0 System Wide Approval – Sewage Pumping Stations

2.1 Grove Street Sewage Pumping Station	
Location	238 Penetanguishene Road.
UTM Coordinates	607673.4 E, 4918006.8 N (UTM Nad83 Zone 17).
Description	Two (2) buildings, one (1) wet well and two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 157.8 L/s at 10.0m TDH, 26 kW (35 HP), connected to an approximately 254m long, 400mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 2403-5WFRH5 issued on February 25, 2004.
Notes	The drainage area is bounded in general by the City limit to the north and east, Grove Street East to the south, and Highway 400 to the west. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of approximately 177.6 ha comprised of a mixture of residential, commercial and industrial contributions. Overflow is received by a storm detention pond or ditch located north of the pumping station.

2.2 Minets Point Sewage Pumping Station	
Location	2 Lismer Boulevard.
UTM Coordinates	606188.4 E, 4914455.9 N (UTM Nad83 Zone 17).
Description	One (1) building, one (1) wet well and two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 61.34 L/s at 19.0m TDH, 22 kW (29 HP), connected to an approximately 401m long, 250mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 3-0200-85-006 issued on December 13, 1985 and 7739-8931.2S issued on September 29, 2010, respectively.
Notes	The drainage area is bounded in general by Kempenfelt Bay to the north, Brennan Avenue to the east, Hurst Drive and Lakeshore Drive to the south, and Allandale Station Park to the west. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of approximately 21.3 ha comprised of a mixture of residential, commercial and industrial contributions. There is no engineered overflow.



<b>2.3 Lockhart Road Sewage Pumping Station</b>	
Location	799 Bayview Drive.
UTM Coordinates	605603.9 E, 4908831.1 N (UTM Nad83 Zone 17).
Description	One (1) building, one (1) wet well and two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 51.4 L/s at 17.5m TDH, 22 kW (29 HP) connected to an approximately 464m long, 200mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 3-0975-83-877 issued on June 2, 1987.
Notes	The drainage area is bounded in general by Saunders Drive to the north, Bayview Drive to the east, Lockhart Road to the south and Highway 400 to the west. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of approximately 32.0 ha comprised of a mixture of residential, commercial and industrial contributions. There is no engineered overflow.

<b>2.4 Holly Sewage Pumping Station</b>	
Location	65 Logan Court.
UTM Coordinates	600907.4 E, 4908353.1 N (UTM Nad83 Zone 17).
Description	One (1) building, two (2) wet well and four (4) pumps.
Pumps	Four (4) pumps with a nominal rated capacity of approximately 232 L/s at 51.2 m TDH, connected to an approximately 1,937m long, 350mm diameter sanitary forcemain and approximately 2000m long, 400mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 3-1547-94-006 issued on December 2, 1994 and 7639-ACYHUF, issued on October 5, 2016, respectively.
Notes	The drainage area is bounded in general by Ardagh Bluffs West and Mapleton Avenue to the north, Essa Road to the east, Lougheed Road and Columbia Road to the south, and County Road 27 to the west, and southern annexed lands. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of approximately 373 ha comprised of a mixture of residential, commercial and industrial contributions. Overflow is received by Bear Creek.

<b>2.5 Little Lake Sewage Pumping Station</b>	
Location	510 Little Lake Road.
UTM Coordinates	605638.9 E, 4919108.4 N (UTM Nad83 Zone 17).
Description	One (1) building, one (1) wet well and two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 110 L/s at 46.66m TDH, 66 kW (88 HP) connected to an approximately 742m long twin 450mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 3-1113-97-006 dated September 5, 1997.
Notes	The drainage area is bounded in general by the City Limit to the north, Little Lake Park East to the east, Cundles Road East, St. Vincent Street and Livingstone Street E to the south, and Bayfield Street to the west. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of approximately 165.0 ha comprised of a mixture of residential, commercial and industrial contributions. There is no engineered overflow.

<b>2.6 Johnson's Beach Sewage Pumping Station</b>	
Location	1 Johnson Street.
UTM Coordinates	606944.7 E, 4916433.8 N (UTM Nad83 Zone 17).
Description	No building, one (1) wet well and one (1) pump.
Pumps	One (1) pump with an unknown nominal rated capacity, approximately 4 kW (5 HP) connected to an approximately 100m long, 100mm diameter sanitary forcemain.
Standby Power	None.
Previous ECA	No approval record or historically unapproved equipment.
Notes	The drainage area is bounded in general by Shanty Bay Road to the north, Barrie Yacht Club to the east, Kempenfelt Bay to the south and Johnsons Beach Park to the west. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of 1.2 ha comprised of a mixture of residential, commercial and industrial contributions. There is no engineered overflow.

<b>2.7 Perry Street Sewage Pumping Station</b>	
Location	83 Perry Street.
UTM Coordinates	603403.5 E, 4915206.1 N (UTM Nad83 Zone 17).
Description	No building, one (1) wet well, two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 7.3 L/s at 9.0m TDH, 4 kW (5 HP) connected to an approximately 127m long, 100mm diameter sanitary forcemain.
Standby Power	None.
Previous ECA	ECA No. 2165-5VUL4Q issued on February 5, 2004.
Notes	The drainage area is bounded in general by Perry Street to the north, west and south, and Boys Street South to the east. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of 0.5 ha comprised of a mixture of residential, commercial and industrial contributions. There is no engineered overflow.

<b>2.8 Innisfil Street Sewage Pumping Station</b>	
Location	4 Innisfil Street.
UTM Coordinates	603705.4 E, 4915369.7 N (UTM Nad83 Zone 17).
Description	No building, one (1) wet well and one (1) pump.
Pumps	One (1) pump with an unknown nominal rated capacity, approximately 7 kW (9 HP).
Standby Power	None.
Previous ECA	No approval record or historically unapproved equipment.
Notes	The drainage area is bounded in general by Perry Street to the north, Innisfil Street to the east, Audrey Milligan Pond to the south and west. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of approximately 1.7 ha comprised of a mixture of residential, commercial and industrial contributions. Overflow is received by Bunker's Creek.

<b>2.9 Tyndale Park Sewage Pumping Station</b>	
Location	45 Tyndale Road.
UTM Coordinates	608005.6 E, 4914300.6 N (UTM Nad83 Zone 17).
Description	One (1) building, one (1) wet well, two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 10.6 L/s at 16.1m TDH, 8 kW (11 HP) connected to an approximately 372m long, 100mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 8061-6GFJ37 issued on September 23, 2005.
Notes	The drainage area is bounded in general by Kempenfelt Bay to the north, Plunkett Court to the east, Capps Drive, Turner Drive and Dock Road to the south, and Cox Mill Road to the west. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of 44.6 ha comprised of a mixture of residential, commercial and industrial contributions. There is no engineered overflow.

<b>2.10 Heritage Park Sewage Pumping Station</b>	
Location	5 Simcoe Street.
UTM Coordinates	604653.9 E, 4915784.8 N (UTM Nad83 Zone 17).
Description	No building, one (1) wet well and two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 3.9 L/s at 16.7m TDH, 4 kW (5 HP) connected to an approximately 147m long, 60mm diameter sanitary forcemain.
Standby Power	None.
Previous ECA	ECA No. 7-0188-91-006 issued on July 22, 1991.
Notes	The pumping station provides for the collection and transmission of sanitary sewage, servicing the Heritage Park washrooms. There is no engineered overflow.

<b>2.11 Mooregate Sewage Pumping Station</b>	
Location	300 Kozlov Street.
UTM Coordinates	601884.6 E, 4918687.7 N (UTM Nad83 Zone 17).
Description	One (1) building, one (1) wet well and two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 12 L/s at 20.7m TDH, 5 kW (7 HP) connected to an approximately 472m long, 100mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 0158-8G4PXX issued on May 4, 2011.
Notes	The drainage area is bounded in general by the City limit to the north and west, Bayfield Street to the east, and Pearcey Crescent and Hanmer Natural Area and Hanmer Park to the south. The pumping station provides for the collection and transmission of sanitary sewage, servicing an area of 12.3 ha comprised of a mixture of residential, commercial and industrial contributions. There is no engineered overflow.

<b>2.12 Splash Pond Sewage Pumping Station</b>	
Location	9 Simcoe Street.
UTM Coordinates	604685.7 E, 4915805.9 N (UTM Nad83 Zone 17).
Description	One (1) building, one (1) wet well and two (2) pumps.
Pumps	Two (2) pumps with a nominal rated capacity of approximately 8.7 L/s at 4.5m TDH, 4 kW (5 HP) connected to an approximately 113m long, 100mm diameter sanitary forcemain.
Standby Power	Provided.
Previous ECA	ECA No. 8001-8EQL3B issued on March 31, 2011.
Notes	The pumping station provides for the collection and transmission of water servicing the Heritage Park Water Facility. Normally discharges to Lake Simcoe.

**3.0 System Wide Approval – Flow Regulators, Storage Tanks and Pressure Release Valves**

<b>3.1 Holly Sewage Pumping Station Pressure Release Valve</b>	
Location	Mapleview Drive at Seymour Crescent.
UTM Coordinates	601479.3 E, 4908868.6 N (UTM Nad83 Zone 17).
Description	Pressure relief valve, 50mm diameter, 1,034 kPa (150 psi).

**Schedule B: Terms and Conditions**

System Owner and Operator	<b>The Corporation of the City of Barrie</b>
System Name	<b>Sanitary Collection System servicing the Barrie Wastewater Treatment Facility</b>

Schedule B includes:

- 1.0 Definitions
- 2.0 Terms and Conditions
- 3.0 Reasons

## 1.0 Definitions

*For the purpose of this environmental compliance approval, the following definitions apply:*

"Approval" means this entire document and any schedules attached to it, and the application;

"Assumed Works" means those portions of the sewage works whose ownership has been assumed by the Owner from a different previous owner;

"BOD5" (also known as TBOD<sub>5</sub>) means five day biochemical oxygen demand measured in an unfiltered sample and includes carbonaceous and nitrogenous oxygen demand;

"Class Environmental Assessment Project" means an Undertaking that does not require any further approval under the EAA if the planning process set out in the class environmental assessment document is followed and successfully completed.

"CWA" means the Clean Water Act, R.S.O. 2006, c.22, as amended;

"Director" means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of the EPA;

"Duty to Consult" pertains to the Crown's legal obligation to consult with Aboriginal peoples where it contemplates decisions or actions that may adversely impact asserted or established Aboriginal or treaty rights;

"*E. coli*" refers to the thermally tolerant forms of *Escherichia* that can survive at 44.5 degrees Celsius;

"EAA" means the Environmental Assessment Act, R.S.O. 1990, c. E.18, as amended;

"Emergency Situation" means a structural, mechanical or electrical failure that causes a temporary reduction in the capacity of the Sewage Pumping Station or an unforeseen flow condition that may result in:

- a) danger to the health or safety of any person; or
- b) injury or damage to any property, or serious risk of injury or damage to any property;

"EPA" means the Environmental Protection Act, R.S.O. 1990, c.E.19, as amended;

"Equivalent Equipment" means a substituted equipment or like-for-like equipment that meets the required quality and performance standards of a named equipment;

"Event" means an action or occurrence at the Sewage Pumping Station that causes a Sewage Pumping Station Overflow. An Event ends when there is no recurrence of a Sewage Pumping Station Overflow in the 12-hour period following the last Sewage Pumping Station Overflow. Two Events are separated by at least 12 hours during which there has been no recurrence of a Sewage Pumping Station Overflow;

"Limited Operational Flexibility" (LOF) means any modifications that the Owner is permitted to make to the Works under this Approval;



"Minister" means the Minister of the Environment and Climate Change;

"Ministry" means the ministry of the government of Ontario responsible for the EPA, CWA and OWRA and includes all officials, employees or other persons acting on its behalf;

"Notice of Assumption" means the form entitled "Notice of Assumption of Sewage Works";

"Notice of Modifications" means the form entitled "Notice of Modification to Sewage Works";

"Owner" means the Corporation of the City of Barrie, and includes its successors and assignees;

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended;

"Part II Order" means an order issued by the Minister that makes a Class Environmental Assessment Project an Undertaking that is subject to Part II of the EAA;

"Professional Engineer" means a person entitled to practice as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;

"Proposed Works" means those portions of the sewage works under Limited Operational Flexibility proposed as part of a Notice of Modifications;

"Significant Drinking Water Threat" has the same meaning as in the CWA;

"Significant Threat Policy(ies)" has the same meaning as in the CWA;

"Source Protection Plan" means a drinking water source protection plan prepared under the CWA;

"Rated Capacity" means the Average Daily Flow which the Works are approved to handle;

"Sewage Pumping Station Overflow" means any discharge from a Sewage Pumping Station to the environment that does not undergo any treatment or only receives partial treatment before it is discharged to the environment;

"Substantial Completion" has the same meaning as "substantial performance" in the Construction Lien Act;

"Undertaking" has the same meaning as in the EAA;

"Water Supervisor" means the Water Supervisor of the appropriate local office of the Safe Drinking Water Branch of the Ministry, where the Works are geographically located; and

"Works" means the sewage works described in the Owner's application, this Approval, Proposed Works and the modifications made under Limited Operational Flexibility.

## **2.0 Terms and Conditions**

*You are hereby notified that this environmental compliance approval is issued to you subject to the terms and conditions outlined below:*

### **TERMS AND CONDITIONS**

#### **2.1 GENERAL CONDITIONS**

- (1) The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Works is notified of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these conditions, the Owner shall design, build, install, operate and maintain the Works in accordance with the description given in this Approval, and the application for approval of the Works.
- (3) Where there is a conflict between a provision of any document in the schedule referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence, and where there is a conflict between the documents in the schedule, the document bearing the most recent date shall prevail.
- (4) Where there is a conflict between the documents listed in Schedule 'A' and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The conditions of this Approval are severable. If any condition of this Approval, or the application of any requirement of this Approval to any circumstance, is held invalid or unenforceable, the application of such condition to other circumstances and the remainder of this Approval shall not be affected thereby.

#### **2.2 CHANGE OF OWNER**

- (1) The Owner shall notify the Water Supervisor and the Director, in writing, of any of the following changes within thirty (30) days of the change occurring:
  - (a) change of Owner;
  - (b) change of address of the Owner;
  - (c) change of partners where the Owner is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the Water Supervisor; or

- (d) change of name of the corporation where the Owner is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Information Act, R.S.O. 1990, c. C39 shall be included in the notification to the Water Supervisor.
- (2) In the event of any change in ownership of the Works, other than a change to a successor municipality, the Owner shall notify in writing the succeeding owner of the existence of this Approval, and a copy of such notice shall be forwarded to the Water Supervisor and the Director.
- (3) The Owner shall ensure that all communications made pursuant to this condition refer to the number at the top of this Approval.

### **2.3 SEWAGE PUMPING STATION OVERFLOW**

- (1) Any Sewage Pumping Station Overflow is prohibited, except:
  - (a) in an Emergency Situation; and
  - (b) where the Sewage Pumping Station Overflow is a direct and unavoidable result of a planned maintenance procedure, the Owner having notified the Water Supervisor at least fifteen (15) days prior to the occurrence of the Sewage Pumping Station Overflow and the Water Supervisor having given written consent of the Sewage Pumping Station Overflow.
- (2) The Owner shall forthwith notify the Spills Action Centre (SAC) and the Medical Officer of Health of all Events as soon as possible. This notice shall include, at a minimum, the following information:
  - (a) the date, time, and duration of the Event;
  - (b) the location of the Sewage Pumping Station Overflow and the receiver;
  - (c) the measured or estimated volume of the Event (unless the Event is ongoing); and
  - (d) the reason for the Event.
- (3) The Owner shall submit a summary report of the Sewage Pumping Station Overflow Events to the Water Supervisor on a quarterly basis, no later than each of the following dates for each calendar year: February 14, May 15, August 14, and November 15. The summary reports shall be in a format specified by the Ministry, which shall include, at a minimum, the following information on any Events that occurred during the preceding quarter:
  - (a) the date of the Event(s);

- (b) the measured or estimated volume of the Event(s);
  - (c) the duration of the Event(s);
  - (d) the location of the Sewage Pumping Station Overflow and the receiver;
  - (e) the reason for the Event(s); and
  - (f) the impact of the Event(s) on the receiver(s).
- (4) The Owner shall use best efforts to collect a representative sample consisting of a minimum of two (2) grab samples of the Sewage Pumping Station Overflow and have it analyzed for the parameters outlined in Condition 2.5 using the protocols specified in Condition 2.5, one at the beginning of the Event and the second approximately near the end of the Event, to best reflect the effluent quality of the Sewage Pumping Station Overflow.
- (5) The Owner shall maintain a logbook of all Sewage Pumping Station Overflows, which shall contain, at a minimum, the types of information set out in sub-conditions 2(a) to 2(d) in respect of each Sewage Pumping Station Overflow.

## **2.4 OPERATION AND MAINTENANCE**

- (1) The Owner shall exercise due diligence in ensuring that, at all times, the Works and the related equipment and appurtenances used to achieve compliance with this Approval are properly operated and maintained. Proper operation and maintenance shall include effective performance, adequate funding, adequate operator staffing and training, including training in all procedures and other requirements of this Approval and the EPA and regulations, adequate laboratory services, process controls and alarms and the use of process chemicals and other substances used in the Works.
- (2) The Owner shall prepare an operations manual for facilities within twelve (12) months of the issuance date of this Approval, that includes or references, but is not necessarily limited to, the following information:
- (a) operating and maintenance procedures for routine operation of the Works;
  - (b) inspection programs, including frequency of inspection, for the Works and the methods or tests employed to detect when maintenance is necessary;
  - (c) inspection programs, to include closed-camera television inspection every 5 years, for sanitary sewers and related pipes within a vulnerable area where it would present a significant drinking water threat under the Clean Water Act and the methods or tests employed to detect when maintenance is necessary;
  - (d) repair and maintenance programs, including the frequency of repair and maintenance for

the Works;

- (e) procedures for the inspection and calibration of monitoring equipment;
  - (f) a spill prevention control and countermeasures plan, consisting of contingency plans and procedures for dealing with equipment breakdowns, potential spills and any other abnormal situations, including notification to the Spills Action Centre (SAC), the Medical Officer of Health, and the Water Supervisor; and
  - (g) procedures for receiving, responding and recording public complaints, including recording any follow-up actions taken.
- (3) The Owner shall maintain the operations manual current and have access to a copy for each sewage pumping station for the operational life of the station. Upon request, the Owner shall make the manual available to Ministry and Source Protection Authority staff.
  - (4) The Owner shall provide for the overall operation of the sewage pumping stations an operator who holds a licence that is applicable to that type of facility and that is of the same class as or higher than the class of the facility in accordance with Ontario Regulation 129/04.

## 2.5 MONITORING AND RECORDING

The Owner shall carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this Approval are to be taken at a time and in a location characteristic of the quality and quantity of the Sewage Pumping Station Overflow stream over the time period being monitored.
- (2) Samples shall be collected at the following sampling points, at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

<b>Table 3. Monitoring during a Sewage Pumping Station Overflow Event</b> (Samples to be collected from the Sewage Pumping Station Overflow stream)	
<b>Sample Type</b>	Grab
<b>Frequency</b>	One sample at the beginning of the Event and the second sample approximately near the end of the Event
<b>Parameters</b>	BOD5, Total Suspended Solids, Total Phosphorus, Total Ammonia Nitrogen, <i>E. coli</i> , and pH

Note 1: Sampling and analysis shall be performed only for Events that occur between April 1 and October 31 inclusive

- (3) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- (a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)", as amended from time to time by more recently published editions;
- (b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
- (c) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.

## **2.6 REPORTING**

- (1) The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- (2) The Owner shall notify and consult with the Water Supervisor at least thirty (30) days prior to submitting a Notice of Modifications for Proposed Works that are subject to schedule B or schedule C of the Class Environmental Assessment process.
- (3) The Owner shall prepare and submit a performance report to the Water Supervisor on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the issuance of this Approval and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
  - (a) a summary and interpretation of all monitoring data, including an overview of the success and adequacy of the Works;
  - (b) a description of any operating problems encountered and corrective actions taken;
  - (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Works;
  - (d) a summary of the calibration and maintenance carried out on all monitoring equipment;
  - (e) a summary of any complaints received during the reporting period and any steps taken to address the complaints;
  - (f) a summary of all Sewage Pumping Station Overflows, spill or abnormal discharge events;
  - (g) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of

Schedule C, Section 1(1), with a status report on the implementation of each modification;

- (h) a report summarizing all modifications completed as a result of Schedule C, Section 1(3);
  - (i) a report on any new modifications which could pose a significant threat to sources of drinking water as described in Schedule B, Section 2.8.
  - (j) a copy of all Notice of Assumptions submitted to the Water Supervisor as a result of Condition 2.9; and
  - (k) any other information the Water Supervisor requires from time to time.
- (4) The Owner shall, within thirty (30) calendar days of issuance of this Approval, submit a Municipal Wastewater System Profile Information Form, and shall resubmit the updated document every time a notification is provided to the Water Supervisor in compliance with requirements of change of ownership under this Approval.
  - (5) The Owner shall retain for a minimum of five (5) years from the date of their creation, all records and information related to or resulting from the operation, maintenance and monitoring activities required by this Approval.

## **2.7 SOURCE WATER PROTECTION**

- (1) The Owner shall ensure for the Works located within Wellhead Protection Areas (WHPAs), Intake Protection Zones (IPZ), Highly Vulnerable Aquifers (HVA) and Significant Groundwater Recharge Areas (SGRAs), where this activity has been identified as a Significant Drinking Water Threat, there is an operation and maintenance program in place that includes, but is not limited to, the following requirements:
  - (a) regular maintenance and inspection;
  - (b) best management practices to be applied; and
  - (c) operational requirements as set out in the approved Standard Operating Policy for Sewage Works published on the Environmental Registry (Posting # 012-2968), as amended from time to time.
- (2) The Owner, upon request, shall make all reports and plans available to the Ministry or Source Protection Authority.
- (3) The Owner shall prepare a report within six (6) months of the issuance date of this Approval, that includes, but is not necessarily limited to:



- (a) an outline of the circumstances under which sewage Works pose a significant threat to sources of drinking water based on the Director's Technical Rules established under the Clean Water Act, 2006 as amended from time to time;
  - (b) a list of which components of the Works were found to be a significant drinking water threats;
  - (c) an outline of how the City screens the Works to identify drinking water threats under the Clean Water Act, as well as design considerations and mitigating measures taken during construction and operation of the Works to protect sources of drinking water.
- (4) The Owner shall maintain the report and have access to a copy for each location of the Works for the operational life of the Works. Upon request, the Owner shall make the report available to Ministry or Source Protection Authority staff.

## **2.8 LIMITED OPERATIONAL FLEXIBILITY**

- (1) The Owner may make modifications to the Works in accordance with the terms and conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Municipal Sewage Works", included under Schedule C of this Approval, as amended.
- (2) Sewage works proposed under Limited Operational Flexibility shall adhere to the design guidelines contained within the Ministry's publication "Design Guidelines for Sewage Works 2008", as amended.
- (3) The Owner shall ensure at all times, that the Works, related equipment and appurtenances which are installed or used to achieve compliance are operated in accordance with all terms and conditions of this Approval.
- (4) For greater certainty, the following are not permitted as part of Limited Operational Flexibility:
  - (a) modifications to the Works that result in an increase of the approved Rated Capacity of the Works;
  - (b) modifications to the Works that may adversely affect the approved effluent quality criteria or the location of the discharge/outfall;
  - (c) modifications to the treatment process technology of the Works, or modifications that involve construction of new reactors (tanks) or alter the treatment train process design;
  - (d) modifications to activities mentioned in sub-section 9(1) of the EPA;
  - (e) modifications to the Works pursuant to an order issued by the Ministry;



- (f) modifications to Works that are part of an Undertaking for which a request to issue a Part II Order has been submitted to the Ministry;
  - (g) modifications to Works that are part of an Undertaking for which a Part II Order has been issued by the Minister; and
  - (h) modifications to Works that will trigger the Duty to Consult.
- (5) Implementation of Limited Operational Flexibility is not intended to be used for piecemeal measures that result in major alterations or expansions.
- (6) If the implementation of Limited Operational Flexibility requires changes to be made to the Emergency Response, Spill Reporting and Contingency Plan, the Owner shall, as deemed necessary in consultation with the Water Supervisor, provide a revised copy of this plan to the local fire services authority prior to implementing Limited Operational Flexibility.
- (7) For greater certainty, any modification made under the Limited Operational Flexibility may only be carried out after other legal obligations have been complied with, including those arising from the Environmental Protection Act, Environmental Assessment Act, Niagara Escarpment Planning and Development Act, Oak Ridges Moraine Conservation Act, Lake Simcoe Protection Act and Greenbelt Act.
- (8) At least thirty (30) days prior to implementing Limited Operational Flexibility, the Owner shall complete a Notice of Modifications describing any proposed modifications to the Works and submit it to the Water Supervisor.
- (9) The Owner shall ensure that an engineering assessment is completed for each Notice of Modifications prior to submitting the Notice of Modifications to the Water Supervisor. The engineering assessment shall be prepared by a Professional Engineer that was not involved in the design of the Proposed Works. The Owner shall abide by the recommendations made under the engineering assessment for the Proposed Works. The engineering assessment shall include, at minimum, the following:
- (a) description of the Proposed Works;
  - (b) the documentation and drawings that were reviewed;
  - (c) regulatory requirements applicable to the Proposed Works;
  - (d) technical criteria used to assess the Proposed Works;
  - (e) any issues that were identified during the engineering review of the Proposed Works;
  - (f) design considerations and mitigating measures taken during construction and operation

of the Works to protect sources of drinking water, including Design and Operational Requirements included in the approved Standard Operating Policy for Sewage Works published on the Environmental Registry (Posting # 012-2968), as amended from time to time; and

- (g) recommendations.
- (10) Upon the Substantial Completion of Proposed Works, the Owner shall prepare a statement, certified by a Professional Engineer, that the works are constructed in accordance with the Notice of Modifications, and upon request, shall make the written statement available for inspection by Ministry personnel.
- (11) Within twelve (12) months of the Substantial Completion of Proposed Works, a set of as-built drawings showing the Proposed Works "as constructed" shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time, and be made available upon Ministry request.

## **2.9 ASSUMPTION OF OWNERSHIP OF SEWAGE WORKS**

- (1) The Owner may make modifications to the Works in accordance with the terms and conditions of this Approval and subject to sub-sections (2), (3) and (4) of this condition.
- (2) The Owner may add Assumed Works to this Approval, provided that:
  - (a) the transfer of the ownership of the sewage works to the Owner is complete;
  - (b) the previous owner of the sewage works has notified the Director of the change in ownership; and
  - (c) the Assumed Works are part of the municipal sanitary sewage Works utilized for the collection and transmission of sanitary sewage in the City of Barrie that are connected to the Barrie Wastewater Treatment Facility.
- (3) To add Assumed Works to this Approval, the Owner shall complete a Notice of Assumption and submit it to the Water Supervisor, along with a copy of the approval issued to the sewage works prior to the transfer of ownership.
- (4) Upon submission of the Notice of Assumption to the Water Supervisor, the terms and conditions of this Approval apply to the Assumed Works for which the Notice of Assumption has been submitted.

## **2.10 REVIEW OF APPROVAL**

- (1) No later than six (6) months past the fifth anniversary of the date of issuance of this Approval, the Owner shall submit to the Director an application to have the Approval

reviewed. The application shall include, at minimum, the following information:

- (a) an updated description of the Works, including any modifications to the Works that were made during the five (5) year period in accordance with the terms and conditions of this Approval and subject to the Ministry's "Limited Operational Flexibility Criteria for Modifications to Municipal Sewage Works", included under Schedule C of this Approval, as amended;
- (b) a copy of all Notice of Modifications submitted to the Water Supervisor as a result of Schedule C, Section 1(1), with the engineering assessment for each Notice of Modifications;
- (c) a status report on the implementation of each modification;
- (d) a copy of all Notice of Assumptions submitted to the Water Supervisor as a result of Condition 2.9, along with a copy of the approval issued to each sewage works that were assumed;
- (e) a performance report on the operation and maintenance of the Works; and
- (f) the application form.

### 3.0 Reasons

*The reasons for the imposition of these terms and conditions are as follows:*

- 3.1 Condition 2.1 is imposed to ensure that the Works are constructed and operated in the manner in which they were described and upon which approval was granted. This condition is also included to emphasize the precedence of conditions in the Approval and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review.
- 3.2 Condition 2.2 is included to ensure that the Ministry records are kept accurate and current with respect to approved Works and to ensure that subsequent owners of the Works are made aware of the Approval and continue to operate the Works in compliance with it.
- 3.3 Condition 2.3 is included to indicate that Sewage Pumping Station Overflows are prohibited, except in circumstances where the failure to overflow could result in greater injury to the public interest than the Sewage Pumping Station Overflow itself. The notification and documentation requirements allow the Ministry to take action in an informed manner and ensure that the Owner is aware of the extent and frequency of Events.
- 3.4 Condition 2.4 is included to ensure that the Works are properly operated, maintained, funded, staffed and equipped such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented. The Condition also ensures that a comprehensive operations manual governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the Owner and is made available to the Ministry. Such a manual is an integral part of the operation of the Works. Its compilation and use should assist the Owner in staff training, proper plant operation, and identification and planning for contingencies during abnormal conditions. The manual will also act as a benchmark for Ministry staff when reviewing the operation of the Works.
- 3.5 Condition 2.5 is included to provide additional details on the monitoring of Sewage Pumping Station Overflows.
- 3.6 Condition 2.6 is included to provide a performance record for future references, to ensure that the Ministry is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this Approval, so that the Ministry can work with the Owner in resolving any problems in a timely manner.
- 3.7 Condition 2.6 (3)(i), 2.7 and 2.8 (9)(f) is included to protect sources of drinking water and to conform with the Significant Threat Policies of the local Source Protection Plan, which requires that the Approval contain terms and conditions to protect sources of drinking water if the Works are a significant drinking water threat.
- 3.8 Condition 2.8 is included to ensure that the Works are operated in accordance with the application and supporting documentation submitted by the Owner, and not in a manner which the Director has not been asked to consider. These conditions are also included to ensure that a Professional Engineer has

reviewed the proposed modifications and attests that the modifications are in line with that of Limited Operational Flexibility, and provide assurance that the proposed modifications comply with the Ministry's requirements stipulated in the terms and conditions of this Approval, Ministry policies, guidelines, and industry engineering standards and best management practices.

- 3.9 Condition 2.9 is included to specify the requirements that need to be met by the Owner to add Assumed Works to this Approval.
- 3.10 Condition 2.10 is included to ensure that the Approval is updated on a regular basis by the Owner.

**Schedule C: Limited Operational Flexibility**

System Owner and Operator	<b>The Corporation of the City of Barrie</b>
System Name	<b>Sanitary Collection System servicing the Barrie Wastewater Treatment Facility</b>

Schedule C includes:

- 1.0 Limited Operational Flexibility Criteria for Modifications to Municipal Sewage Works
- 2.0 Notice of Modification to Sewage Works

**1.0 Limited Operational Flexibility Criteria for Modifications to Municipal Sewage Works**

1. The modifications to sewage works approved under an Environmental Compliance Approval (Approval) that are permitted under the Limited Operational Flexibility (LOF), are outlined below and are subject to the LOF conditions in the Approval, and require the submission of the Notice of Modifications. If there is a conflict between the sewage works listed below and the Terms and Conditions in the Approval, the Terms and Conditions in the Approval shall take precedence.

**1.1 Sanitary Sewers and Sanitary Forcemains**

- a. Alteration, extension, enlargement or replacement of existing sanitary sewers and sanitary forcemains or establishment of new sanitary sewers and sanitary forcemains, provided that:
  - i. the nominal pipe diameter is not greater than a total of 1,200 millimetres;
  - ii. the sewers and mains are not combined sewers;
  - iii. the sewers and mains do not discharge directly to a sewage treatment plant;
  - iv. the design of the modification to or establishment of the sewers and mains has been prepared by a Professional Engineer;
  - v. the consent of the property owner has been obtained for the establishment of new sewers and mains; and
  - vi. if the sanitary sewers and forcemains are located in an area where they would be a significant drinking water threat, the designs adhere to the Design and Operational Requirements specified in the approved Standard Operating Policy for Sewage Works published on the Environmental Registry (Posting # 012-2968), as amended from time to time.

**1.2 Sewage Pumping Stations**

- a. Alteration of pumping capacity by adding or replacing equipment where new equipment is located within an existing sewage pumping station site, provided that the modifications do not result in an increase of the pumping station's Rated Capacity and the existing flow process and/or treatment train are maintained, as applicable; and
- b. If the pumping station is located in an area where it would be a significant drinking water threat the designs, shall be prepared by a Professional Engineer and shall adhere to the Design and Operational Requirements specified in the approved Standard Operating Policy for Sewage Works published on the Environmental Registry (Posting # 012-2968), as amended from time to time.

**1.3 Flow Regulators, Storage Tanks and Pressure Release Valves**

- a. Alteration of capacity by adding or replacing equipment, structures or instrumentation in the sanitary sewage collection system, provided that the modifications do not result in an increase in the Rated Capacity of the sewage pumping station(s) and that the existing flow processes are maintained; and
- b. If the storage tanks are located in an area where it would be a significant drinking water threat the designs, shall be prepared by a Professional Engineer and shall adhere to the Design and Operational Requirements specified in the approved Standard Operating Policy for Sewage published on the Environmental Registry (Posting # 012-2968), as amended from time to time.

#### 1.4 Pilot Systems


- a. Installation of pilot systems for new or existing technologies provided that:
  - i. any effluent from the pilot system is discharged to the inlet of the sewage pumping station or hauled off-site for proper disposal;
  - ii. any effluent from the pilot system discharged to the inlet of the sewage pumping station or sewage conveyance system does not significantly alter the composition/concentration of the influent sewage to be treated in the downstream process; and that it does not add any inhibiting substances to the downstream process;
  - iii. the pilot system's duration does not exceed a maximum of two (2) years; and a report with results is submitted to the Director and Water Supervisor three (3) months after the completion of the pilot project; and
  - vi. if the pilot systems are located in an area where it would be a significant drinking water threat, the designs, shall be prepared by a Professional Engineer and shall adhere to the Design and Operational Requirements specified in the approved Standard Operating Policy for Sewage published on the Environmental Registry (Posting # 012-2968), as amended from time to time.
- 2. Sewage works that are exempt from section 53 of the OWRA by O. Reg. 525/98 continue to be exempt and are not required to follow the notification process under this Limited Operational Flexibility.
- 3. Normal or emergency operational modifications
  - a. Normal or emergency operational modifications, such as repairs, reconstructions, or other improvements that are part of maintenance activities, including cleaning, renovations to existing approved sewage works equipment, provided that the modification is made with Equivalent Equipment, are considered pre-approved unless they are located in an area that where the works are is a significant drinking water threat; and
  - b. If the modifications include repairs, reconstruction or renovations to existing equipment in an area where the sanitary sewage works would be a significant drinking water threat, the design of the



modifications shall be prepared by a Professional Engineer and shall adhere to the Design and Operational Requirements specified in the approved Standard Operating Policy for Sewage published on the Environmental Registry (Posting # 012-2968), as amended from time to time.

4. The modifications noted in sub-section (3a) above are not required to follow the notification protocols under Limited Operational Flexibility, provided that the number of pieces and description of the equipment as described in the Approval does not change.

## 2.0 Notice of Modification to Sewage Works

		<b>Notice of Modification to Sewage Works</b>	
RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)			
<b>Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility</b> <i>(Insert the ECA's owner, number, issuance date and notice number, which should start with "01" and consecutive numbers thereafter)</i>			
ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)	
ECA Owner	Municipality		
<b>Part 2: Description of the modifications as part of the Limited Operational Flexibility</b> <i>(Attach a detailed description of the sewage works)</i>			
Description shall include: 1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.) 2. Confirmation that the anticipated environmental effects are negligible. 3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)			
<b>Part 3 – Declaration by Professional Engineer</b>			
I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design: 1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario; 2. Conforms with the Limited Operational Flexibility as per the ECA; 3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations. I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.			
Name (Print)		PEO License Number	
Signature		Date (mm/dd/yy)	
Name of Employer			
<b>Part 4 – Declaration by Owner</b>			
I hereby declare that: 1. I am authorized by the Owner to complete this Declaration; 2. The Owner consents to the modification; and 3. These modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA. 4. The Owner has fulfilled all applicable requirements of the <i>Environmental Assessment Act</i> . I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.			
Name of Owner Representative (Print)		Owner representative's title (Print)	
Owner Representative's Signature		Date (mm/dd/yy)	


**Schedule D: Assumption of Sewage Works**

System Owner and Operator	<b>The Corporation of the City of Barrie</b>
System Name	<b>Sanitary Collection System servicing the Barrie Wastewater Treatment Facility</b>

Schedule D includes:

- 1.0 Notice of Assumption of Sewage Works

## 1.0 Notice of Assumption of Sewage Works

		<b>Notice of Assumption of Sewage Works</b>	
<p>RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)</p>			
<b>Part 1 – System-Wide Environmental Compliance Approval (ECA)</b> <i>(Insert the ECA's owner, number, issuance date and notice number, which should start with "01" and consecutive numbers thereafter)</i>			
ECA Number	Issuance Date (mm/dd/yyyy)	Notice number (if applicable)	
ECA Owner		Municipality	
<b>Part 2: Transfer of Ownership of Sewage Works</b>			
Name of Previous Owner (Print)		ECA Number and Issuance Date of Sewage Works whose Ownership has been Transferred	
Date of the Transfer of Ownership of Sewage Works (mm/dd/yyyy)		Confirmation that the Transfer of Ownership of Sewage Works is Complete (y/n)	
<b>Part 3: Description of the Assumed Works</b> <i>(Attach a detailed description of the sewage works, e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)</i>			
<b>Part 4 – Declaration by Owner</b> I hereby declare that: 1. I am authorized by the Owner to complete this Declaration; 2. The Owner consents to the addition of the Assumed Works to the System-Wide ECA; and 3. The Owner has fulfilled all applicable requirements of the <i>Environmental Assessment Act</i> . I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.			
Name of Owner Representative (Print)		Owner representative's title (Print)	
Owner Representative's Signature		Date (mm/dd/yyyy)	

**Schedule E: Supporting Documents**

System Owner and Operator	<b>The Corporation of the City of Barrie</b>
System Name	<b>Sanitary Collection System servicing the Barrie Wastewater Treatment Facility</b>

Schedule E includes:

- 1.0 Supporting Documents
- 2.0 Sanitary Infrastructure Map for the City of Barrie

**1.0 Supporting Documents**

1. Application for Environmental Compliance Approval for System-wide Municipal and Private Sewage Works, dated August 29, 2017, submitted by the Corporation of the City of Barrie;
2. Application for Environmental Compliance Approval for System-wide Municipal and Private Sewage Works, dated May 9, 2016, submitted by the Corporation of the City of Barrie;
3. Two (2) e-mails from Katie Thompson of the City of Barrie to the Ministry, dated September 16, 2016 and September 22, 2016, respectively;
4. E-mail from Tyler Adamson of the City of Barrie to the Ministry, dated September 27, 2016;
5. Two (2) e-mails from Katie Thompson of the City of Barrie to the Ministry, dated September 29, 2016;
6. E-mail from Bala Araniyasundaran of the City of Barrie to the Ministry, dated September 11, 2017; and
7. Detailed Description of Works, Sanitary Sewage Collection System: City of Barrie, dated September 29, 2016.



**Upon issuance of the environmental compliance approval, I hereby revoke Approval No(s).  
7160-AQWSAX issued on September 11, 2017**

*In accordance with Section 139 of the Environmental Protection Act, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 142 of the Environmental Protection Act provides that the Notice requiring the hearing shall state:*

- a. The portions of the environmental compliance approval or each term or condition in the environmental compliance approval in respect of which the hearing is required, and;
- b. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*Pursuant to subsection 139(3) of the Environmental Protection Act, a hearing may not be required with respect to any terms and conditions in this environmental compliance approval, if the terms and conditions are substantially the same as those contained in an approval that is amended or revoked by this environmental compliance approval.*

*The Notice should also include:*

1. The name of the appellant;
2. The address of the appellant;
3. The environmental compliance approval number;
4. The date of the environmental compliance approval;
5. The name of the Director, and;
6. The municipality or municipalities within which the project is to be engaged in.

*And the Notice should be signed and dated by the appellant.*

*This Notice must be served upon:*

The Secretary\*  
Environmental Review Tribunal  
655 Bay Street, Suite 1500  
Toronto, Ontario  
M5G 1E5

AND

The Director appointed for the purposes of Part II.1 of  
the Environmental Protection Act  
Ministry of the Environment and Climate Change  
135 St. Clair Avenue West, 1st Floor  
Toronto, Ontario  
M4V 1P5

\* Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal at: Tel: (416) 212-6349, Fax: (416) 326-5370 or [www.ert.gov.on.ca](http://www.ert.gov.on.ca)

*The above noted activity is approved under s.20.3 of Part II.1 of the Environmental Protection Act.*

DATED AT TORONTO this 10th day of January, 2018



Christina Labarge, P.Eng.  
Director  
appointed for the purposes of Part II.1 of the  
*Environmental Protection Act*



RU/  
c: DWMD Supervisor, MOECC Barrie  
Sinclair Garner, GHD Limited

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## APPENDIX B: NOTICES OF MODIFICATION



## Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)

### Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

*(Insert the ECA's owner, number, issuance date and notice number, which should start with "01" and consecutive numbers thereafter)*

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
8130-ACUPHE	October 5, 2016	01-
ECA Owner	Municipality	
The Corporation of the City of Barrie	Barrie	

### Part 2: Description of the modifications as part of the Limited Operational Flexibility

*(Attach a detailed description of the sewage works)*

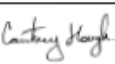
The proposed works on Dunlop Street, Poyntz Street, Berczy Street and Codrington Street include full depth reconstruction with new curb and gutter, sidewalk in accordance with AODA requirements, road base and asphalt. The sanitary component includes the addition of approx. 95m of 250mm PVC sewer on Codrington Street connecting to the existing sewer approx. 30m east of Berczy Street and discharging approx. 65m west of Berczy Street to ex. SAN. MH SAL03068; approx. 20m of 250mm PVC sewer on Eugenia Street discharging to SAN MH #SAL34112 at Berczy Street; approx. 110m of 250mm PVC sewer on Berczy Street from Eugenia Street to Codrington Street; approx. 230m of 250mm PVC sewer on Poyntz Street from approx. 20m south of Worsley Street discharging to existing SAN. MH SAL03101 at Dunlop Street.

1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

### Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
  2. Conforms with the Limited Operational Flexibility as per the ECA;
  3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s.53 of the Ontario Water Resources Act; and other appropriate regulations.
- I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.

Name (Print)	PEO License Number
Courtney Hough, P.Eng.	100107685
Signature	Date (mm/dd/yy)
 2021.06.21 07:56:45 -04'00'	06/21/2021
Name of Employer	
Ainley Group	

### Part 4 – Declaration by Owner

I hereby declare that:

1. I am authorized by the Owner to complete this Declaration;
  2. The Owner consents to the modification; and
  3. These modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.
  4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.
- I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.

Name of Owner Representative (Print)	Owner representative's title (Print)
Bala Araniyasundaran, P. Eng., PMP.	Director of Engineering
Owner Representative's Signature	Date (mm/dd/yy)

**CITY OF BARRIE – ENGINEERING ASSESSMENT FOR  
NOTICE OF MODIFICATION TO SEWAGE WORKS**

(Requirements of ECA No. 5921-ATUKKR, in accordance with Schedule "B", Section (1))

Project:

Dunlop Street, Poyntz Street, Berczy Street and Codrington Street Improvements

Description of Project (Summary):

The proposed works on Dunlop Street, Poyntz Street, Berczy Street and Codrington Street include full depth reconstruction with new curb and gutter, sidewalk in accordance with AODA requirements, road base and asphalt.

The sanitary component includes the addition of approx. 95m of 250mm PVC sewer on Codrington Street connecting to the existing sewer approx. 30m east of Berczy Street and discharging approx. 65m west of Berczy Street to ex. SAN. MH SAL03068; approx. 20m of 250mm PVC sewer on Eugenia Street discharging to SAN MH #SAL34112 at Berczy Street; approx. 110m of 250mm PVC sewer on Berczy Street from Eugenia Street to Codrington Street; approx. 230m of 250mm PVC sewer on Poyntz Street from approx. 20m south of Worsley Street discharging to existing SAN. MH SAL03101 at Dunlop Street.

The sanitary sewers discharging to ex. SAN. MH SAL03068 service a total area of 11.32ha and a population of 291.

The sanitary sewers discharging to ex. SAN.MH SAL03101 service a total area of 1.54ha and a population of 28.

Documentation Reviewed:

- City of Barrie Environmental Compliance Approval Number 8130-ACUPHF, dated October 5, 2016.
- Engineering plans forming part of the Contract - Dunlop Street, Poyntz Street, Berczy Street and Codrington Street Improvements

Regulatory Requirements:

This work is being carried out in accordance with the City of Barrie Capital Plan.

The project meets the Limited Operational Flexibility Criteria for Modifications of Sewage Works provided in Schedule B of the Environmental Compliance Approval Number 8130-ACUPHF, dated October 5, 2016.

Technical Criteria Used to Assess the Application:

The following technical criteria were used to assess the application:

- Ministry of the Environment and Climate Change, Design Guidelines for Sewage works, 2008;

- City of Barrie, Sanitary Sewage Collection System Policies and Design Guideline, 2017.

Issues Identified:

No issues have been identified.

New/Modified Terms and Conditions:

None.

Source Water Protection:

The proposed work is located within Well Head Protection Area (WHPA) B, C and D.

Recommendation:

The proposed works are recommended for approval under the Limited Operational Flexibility for Modification to Sewage Works for SWM Systems.



June 21, 2021

Courtney Hough, P.Eng.  
Ainley Group



## Notice of Modification to Sewage Works

RETAIN COPY OF COMPLETED FORM AS PART OF THE ECA AND SEND A COPY TO THE WATER SUPERVISOR (FOR MUNICIPAL) OR DISTRICT MANAGER (FOR NON-MUNICIPAL SYSTEMS)

### Part 1 – Environmental Compliance Approval (ECA) with Limited Operational Flexibility

(Insert the ECA's owner, number, issuance date and notice number, which should start with "01" and consecutive numbers thereafter)

ECA Number	Issuance Date (mm/dd/yy)	Notice number (if applicable)
5921-ATUUKR	January 10, 2018	01-
ECA Owner	Municipality	
The Corporation of the City of Barrie	Barrie	

### Part 2: Description of the modifications as part of the Limited Operational Flexibility

(Attach a detailed description of the sewage works)

Please refer to the attached chart.

Description shall include:

1. A detail description of the modifications and/or operations to the sewage works (e.g. sewage work component, location, size, equipment type/model, material, process name, etc.)
2. Confirmation that the anticipated environmental effects are negligible.
3. List of updated versions of, or amendments to, all relevant technical documents that are affected by the modifications as applicable, i.e. submission of documentation is not required, but the listing of updated documents is (design brief, drawings, emergency plan, etc.)

### Part 3 – Declaration by Professional Engineer

I hereby declare that I have verified the scope and technical aspects of this modification and confirm that the design:

1. Has been prepared or reviewed by a Professional Engineer who is licensed to practice in the Province of Ontario;
2. Conforms with the Limited Operational Flexibility as per the ECA;
3. Has been designed consistent with Ministry's Design Guidelines, adhering to engineering standards, industry's best management practices, and demonstrating ongoing compliance with s 53 of the Ontario Water Resources Act; and other appropriate regulations.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.

Name (Print)	PEC License Number
Hacik Tozcu	46850509
Signature	Date (mm/dd/yy)
	11/24/21
Name of Employer	
Schaeffers Consulting Engineers	

### Part 4 – Declaration by Owner

I hereby declare that:

1. I am authorized by the Owner to complete this Declaration;
2. The Owner consents to the modification; and
3. These modifications to the sewage works are proposed in accordance with the Limited Operational Flexibility as described in the ECA.

4. The Owner has fulfilled all applicable requirements of the *Environmental Assessment Act*.

I hereby declare that to the best of my knowledge, information and belief the information contained in this form is complete and accurate.

Name of Owner Representative (Print)	Owner representative's title (Print)
Bala Araniyasundaran, P. Eng., PMP	Director of Engineering
Owner Representative's Signature	Date (mm/dd/yy)
	Jan 27, 2022



**EXTERNAL SERVICING AND ROADWAY IMPROVEMENT ON MCKAY ROAD AND  
VETERAN'S DRIVE**

City of Barrie

Attachment to the Notice of Modification to Sewage Works Form, Part 2

**SANITARY SEWERS**

STREET	FROM (street/manhole)	TO (street/manhole)	Diameter (mm)
<b>1. Detail Description</b>			
McKay Road West	Approximately 800 metres west of Veteran's Drive/MH604A	Approximately 323 metres east of Veteran's Drive/SAP34252	1200
Future Reid Drive north of McKay Road West	Approximately 36m north of McKay Road West/Plug	McKay Road West/MH603A	400
Reid Drive	Approximately 22m south of McKay Road West/Plug	McKay Road West/MH603A	400
Future Da Vinci Avenue north of McKay Road West	Approximately 34m north of McKay Road West/Plug	McKay Road West/MH602A	400
McKay Road West & Veteran's Drive intersection	MH601A	Northeast quadrant of McKay Road West & Veteran's Drive intersection/Temporary SPS	400
<b>2. ENVIRONMENTAL EFFECTS</b>			
Possible environmental effects during construction will be mitigated. No effects are anticipated during regular operation of the sewers.			
<b>3. LIST OF APPROVALS RELEVANT TO THIS ECA APPLICATION</b>			
ECA Sewers # 5720-BQDST6 issued 2020/06/16			
ECA Sanitary Sewage Pumping Station # A-500-3114372819 issued 2020/06/12			
Amended ECA Sewers # 6072-C82QBL issued 2021/11/07			






# EN1257 - ECA SAN

Final Audit Report

2022-01-27

Created:	2022-01-27
By:	Sheila MacDonald (sheila.macdonald@barrie.ca)
Status:	Signed
Transaction ID:	CBJCHBCAABAAfX2d75nA1JTNmRAVhEF190YwRbHHTXoa

## "EN1257 - ECA SAN" History

-  Document created by Sheila MacDonald (sheila.macdonald@barrie.ca)  
2022-01-27 - 9:22:09 PM GMT- IP address: 99.233.58.97
-  Document emailed to Bala Araniyasundaran (bala.araniyasundaran@barrie.ca) for signature  
2022-01-27 - 9:22:37 PM GMT
-  Email viewed by Bala Araniyasundaran (bala.araniyasundaran@barrie.ca)  
2022-01-27 - 11:35:39 PM GMT- IP address: 104.47.60.254
-  Document e-signed by Bala Araniyasundaran (bala.araniyasundaran@barrie.ca)  
Signature Date: 2022-01-27 - 11:37:00 PM GMT - Time Source: server- IP address: 99.240.82.50
-  Agreement completed.  
2022-01-27 - 11:37:00 PM GMT



**CITY OF BARRIE - ENGINEERING ASSESSMENT FOR  
NOTICE OF MODIFICATION TO SEWAGE WORKS**

(Requirement of ECA No. 5921-ATUKKR, in accordance with Schedule "B", Section (1))

Project:

External Servicing and Roadway Improvement on McKay Road and Veteran's Drive

Description of Project (Summary):

The establishment of wastewater infrastructure Works located in the City of Barrie, Simcoe County, consisting of the following:

- sanitary sewers on McKay Road West from approximately 800 metres west of Veteran's Drive to approximately 325 metres east of Veteran's Drive, Veteran's Drive from approximately 310 metres south of McKay Road West to McKay Road West, intersection McKay Road West and Veteran's Drive from McKay Road to temporary sewage pumping station, discharging to the temporary sewage pumping station located in the northwest quadrant of the McKay Road West and Veteran's Drive intersection.

including erosion/sedimentation control measures during construction and all other controls and appurtenances essential for the proper operation of the aforementioned Works.

Documentation Reviewed:

Set of engineering drawings prepared by Schaeffers Consulting Engineers for 100% submission review to the City of Barrie.

Regulatory Requirement:

This project was part of the Wastewater Collection Master Plan completed in 2013 in accordance with the Ontario Environmental Assessment Act and followed the Municipal Class Environmental Assessment (October 2000, as amended in 2007, 2011, and 2015) process.

Technical Criteria Used to Assess the Application:

The following technical criteria were used to assess this application:

- Ministry of the Environment and Climate Change, Design Guidelines for Sewage Works, 2008;
- City of Barrie, Sanitary Sewage Collection System Policies and Design Guidelines, 2012.

Issues Identified:

No issues have been identified.

New/Modified Terms and Conditions:

None.

Source Water Protection:

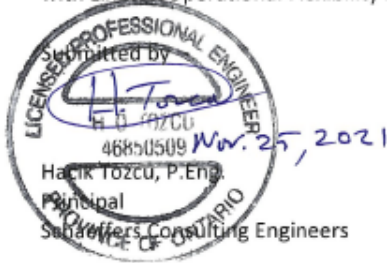
Zoom in (Ctrl+Plus)

The proposed work is located within Significant Groundwater Recharge Area and Wellhead Protection Area Q2.

The City of Barrie's Risk Management Official was consulted and confirms that the proposed works meet requirement SEWG(b)-2 of the Approved South Georgian Bay Lake Simcoe Source Protection Plan.

Recommendation:

The proposed works are recommended for approval under the Environmental Compliance Approval with Limited Operational Flexibility # 5921-ATUKKR, in accordance with Schedule "B", section (1) and (2).













# 2022 Wastewater Collection System Annual Report

Final Audit Report

2023-03-29

Created:	2023-03-29
By:	Meghan Thorn (Meghan.thorn@barrie.ca)
Status:	Signed
Transaction ID:	CBJCHBCAABAA6XLSvh0VL0T7bIYIOKNZa4WsQw3rgE3z

## "2022 Wastewater Collection System Annual Report" History

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-  Document emailed to Pamela Guenther (pamela.guenther@barrie.ca) for signature  
2023-03-29 - 5:54:13 PM GMT
-  Email viewed by Pamela Guenther (pamela.guenther@barrie.ca)  
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-  Document emailed to Martin Shaw (martin.shaw@barrie.ca) for signature  
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-  Signer greg.jorden@barrie.ca entered name at signing as Greg Jorden  
2023-03-29 - 8:27:26 PM GMT- IP address: 70.49.179.189

 Document e-signed by Greg Jorden (greg.jorden@barrie.ca)

Signature Date: 2023-03-29 - 8:27:28 PM GMT - Time Source: server- IP address: 70.49.179.189

 Document emailed to sherry.diemert@barrie.ca for signature

2023-03-29 - 8:27:30 PM GMT

 Email viewed by sherry.diemert@barrie.ca

2023-03-29 - 8:35:30 PM GMT- IP address: 104.47.75.254

 Signer sherry.diemert@barrie.ca entered name at signing as Sherry Diemert

2023-03-29 - 8:36:45 PM GMT- IP address: 99.233.110.156

 Document e-signed by Sherry Diemert (sherry.diemert@barrie.ca)

Signature Date: 2023-03-29 - 8:36:47 PM GMT - Time Source: server- IP address: 99.233.110.156

 Agreement completed.

2023-03-29 - 8:36:47 PM GMT

Names and email addresses are entered into the Acrobat Sign service by Acrobat Sign users and are unverified unless otherwise noted.