



2024
Municipal Sewage Collection Report

Authorized Systems
Glen Walter – Lancaster – Green Valley

Version 2.0

Prepared by:

A handwritten signature in black ink, appearing to read "Dillen Seguin", is written over a horizontal line.

Dillen Seguin
Director of Water and Wastewater

February 18, 2025

Date

Approved by:

A handwritten signature in black ink, appearing to read "Sarah McDonald", is written over a horizontal line.

Sarah McDonald, P. Eng.
General Manager, Infrastructure Services

February 18, 2025

Date

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Revision History

Date	Description	Revision	Author
February 4, 2025	Initial Issue for Council Receipt	1.0	D. Seguin
February 18, 2025	Issued for Council Acceptance	2.0	D. Seguin

**Due March 31st of each year*

Wastewater Collection System Report

In accordance with the ECA Number: 185-W601 Issue: 1 dated January 11th, 2023. The owner shall prepare an annual performance report for the Authorized systems. This document covers the reporting year January 01 to December 31, 2024; the report summarizes important information regarding the maintenance, operations, relevant activities within the collection systems, analytical test results and overflow data. The ECA outlines the terms and conditions, and the report captures these terms and conditions in the following sections.

1. High Level Description of the Works

Glen Walter

System Description

The Glen Walter system consists of works for the collection and transmission of sewage, consisting of 8" gravity fed sewers, 2 sewage pumping stations, and 2 forcemains, with a final discharge point into the Glen Walter Sewage Treatment Plant. (*Pump Station #1*)

Lancaster

System Description

The Lancaster system consists of works for the collection and transmission of sewage, consisting of 2 sewer forcemains, 8" and 10" gravity fed sewers, 2 sewage pumping stations, and 2 pump station forcemains, with a final discharge point into the Lancaster Sewage Treatment Plant. (*Lagoon*)

Green Valley

System Description

The Green Valley system consists of works for the collection and transmission of sewage, consisting of 8" and 10" gravity fed sewers, 2 sewage pumping stations, and 2 forcemains, and 1 36"x 985" holding pipe for excessive flow with a final discharge point into the Green Valley Sewage Treatment Plant. (*Lagoon*)

2. Assets

Glen Walter

Asset ID	Asset Name	Address/Location
GW2	Pumping Station 2	6649 Bray Street
GW3	Pumping Station 3	Yacht Boulevard

Green Valley

Asset ID	Asset Name	Address/Location
GV1	Pumping Station 1	4028 County Road 34
GV2	Pumping Station 2	20386 Concession Road 8

Lancaster

Asset ID	Asset Name	Address/Location
LA1	Pumping Station 1	12 South Beech
LA2	Pumping Station 2	20425 Old Montreal Road

Glen Walter – Lancaster – Green Valley

Collection System	Km of Gravity Pipe	Km of Forcemain
Glen Walter	7,900 meters in total length of gravity sewers	GW2 - 250 meters in length GW3 - 900 meters in length (Total length – 1,150m)
Green Valley	4,500 meters in total length of gravity sewers	GV1 - 860 meters in length GV2 - 1,350 meters in length (Total length – 2,210m)
Lancaster	12,000 meters in total length of gravity sewers	LA1 - 1,300 meters in length LA2 - 2,800 meters in length (Total length – 4,100m)

3. Maintenance

The Operators performed the routine operations and maintenance at the pumping stations in accordance with the preventative maintenance program (report on file at plant). The activities are highlighted as follows:

Weekly	<ul style="list-style-type: none"> • Checked operations and performance of sewage pumps. • Flow Meter Checks • Building/Site Envelop Checks. • Wet Well Checks
Monthly	<ul style="list-style-type: none"> • Generator Test(s) • Collection System Inspections
Semi-Annually	<ul style="list-style-type: none"> • Generator Maintenance
Annually	<ul style="list-style-type: none"> • Annual Calibration of Flow Meters
Major Maintenance	<ul style="list-style-type: none"> • Manhole Grouting (15) • Grouting Spot Repairs (21) • CIPP Liners (11) • Clean Pump Stations x 7 (June)

All 2024 Repairs Listed Below (Major Maintenance)

Rehab Sections					
MH-MH	Street	Defect	Grade	Location (M)	Rehab
Glen Walter					
MH30-Pump	St. Laurent Blvd.	Broken	4	4.1	2 Meter Spot
Lancaster					
MH61-MH62	Oak St	Hole + Runner	5 + 4	84.9 + 86.9	3 Meter Spot
MH22-MH23	Broad St	Hole	5	103.4	1 Meter Spot
MH23-MH24	Broad St	Hole	5	7.3	1 Meter Spot
MH6A-MH47	Boundary	Joint Separate	4	59	1 Meter Spot
MH17-MH19	Wood St	Hole	4	16.2	1 Meter Spot
MH65-MH64	South Beech	Runner	4 + 3	62.8	1 Meter Spot
MH160-MH150	Bethune St	Runner	4	61.6	1 Meter Spot
MH49-MH50	County Road 34	Gusher	5	96.4	1 Meter Spot
MH39-MH40	Molan St	Gusher	5 + 3 + 3	86.1 - 86.5	2 Meter Spot

Rehab Sections					
MH-MH	Street	Defect	Grade	Location (M)	Rehab
Glen Walter					
MH1-MH2	GW Park Rd	Gusher/Connection	5	8.6	Grout
MH33-32	Lawrence St	Runner	4	62.8	Grout
MH8-MH7	GW Park Rd	Runner	4	28.5	Grout
MH37-MH31	Kilkenny Cr	Runner	4	29.4	Grout
Green Valley					
MH30-MH22	County Rd 8	Runner	4	5.9	Grout
Lancaster					
MH15-MH30	Front St	Gusher/Saddle	5	83.1	Grout
MH24-MH1	Cannon St	Gusher	5	62.2	Grout
MH2-MH1	Andrea Ave	Runner	4	37.3	Grout
MH11-MH10	County Road 34	Runner/Conection	4	60.6	Grout
MH59-MH62	Oak St	Gusher	5	0.0	Grout
MH20-MH25	County Road 2	Runner	4	59.3	Grout
MH15-MH30	Front St	Runner/Saddle	4	53.6	Grout
MH4B-MH4	Victoria	Runner/Saddle	4	40.5	Grout
MH4B-MH4	Victoria	Runner/Saddle	4	78.5	Grout
MH7-MH9	County Road 17	Runner	4	96.7	Grout
MH3-MH4	Spruce St	Runner	4	71.7	Grout
MH55-MH62	Maple St	Runner/Saddle	4	41.8	Grout
MH8-MH9	County Road 17	Runner (2)	4	58.1	Grout
MH4A-MH4B	Victoria	Runner/Saddle	4	16.6	Grout
MH14B-MH14A	Monk St	Runner/Saddle	4	16.9	Grout
MH24-MH28	Railside	Runner/Saddle	4	42.3	Grout

Rehab Sections					
MH-MH	Street	Defect	Grade	Location (M)	Rehab
Glen Walter					
MH29-MH30	Lana Drive	Gusher	5	80.4 (0.0)	Injection in MH (#30)
MH16-MH12	Easement	Gusher	5	0.0	Injection in MH (#12)
MH19-PUMP	Old Hwy 2 (WWTP)	Gusher	5	0.0	Injection in MH (#19)
MH31-MH30	Lawrence St	Runner	4	64.9 (0.0)	Injection in MH (#30)
MH25-MH24	Old Hwy 2	Runner	4	56.8 (0.0)	Injection in MH (#24)
Green Valley					
MH11-MH10	Lancaster St	Runner	4	110.6 (0.0)	Injection in MH (#10)
Lancaster					
MH30-MH40	County Road 2	Gusher	5	74.5 (0.0)	Injection in MH (#40)
MH55-MH54	South Terrace	Gusher	5	105.9 (0.0)	Injection in MH (#54)
MH14B-MH14	Monk	Gusher	5	88.5 (0.0)	Injection in MH (#14)
MH40-MH93	County Road 2	Gusher	5	0.0	Injection in MH (#40)
MH19-MH18	Thomas St	Runner	4	50.2 (0.0)	Injection in MH (#18)
MH58-MH56	Elm St	Runner	4	52.5 (0.0)	Injection in MH (#56)
MH1-MH40	Andrea Ave	Runner	4	0.0	Injection in MH (#1)
MH25-MH30	County Road 2	Runner	4	16.8 (0.5)	Injection in MH (#30)
MH45-MH44	County Road 2	Runner	4	49.3 (0.2)	Injection in MH (#44)

4. Operational Issues

During the year 2024 a few operational issues of note are listed below

Wet Weather Event

Wet Weather flow event August 9th, 2024. Higher than normal rain accumulation hit the South Glengarry area on August 9th. It was observed that an amount greater than 100mm hit the area within a 24-hour period. (All assets affected)

Genset Failure

During routine testing of the Generator located at GW2, it was observed that abnormal alarms were causing the generator to shutdown. As a precaution a temporary generator has been installed to order parts and review the issues within the generators diesel system.

5. Complaints

During the August 9th, rain event the Township had received multiple phone calls for interior flooding of basements. It was noted that all municipal systems were overwhelmed from the extreme amount of rain accumulation within a short period of time.

6. Alterations

No alterations were made within the wastewater collection systems for the year 2024.

7. Wet Weather vs Dry Weather Data

Definition of “Dry Weather Flows” means Sewage flow resulting from both sanitary Sewage, and infiltration and inflows from foundation drains or other drains occurring during periods with an absence of rainfall or snow melt.

During the 2024-year Wet Weather vs Dry Weather data was submitted in accordance with the ECA Number: 185-W601 Issue: 1 dated January 11th, 2023. Meeting the deadline for submittal of June 1, 2024.

It is noted that during high peaks of snow melt, rain fall and significant storms each collection system under the CLI is greatly impacted.

8. Laboratory

Caduceon Environmental laboratories is contracted to conduct the required analytical tests of the raw sewage samples collected from the collection system.

9. Monitoring And Recording

The *Owner* shall, upon commencement of bypass/overflow operation of the *Works*, carry out the following the monitoring program.

Monitoring - (samples to be collected at the outlet of the overflow discharge point or at the outfall as close as possible).

Parameters	Sample Type	Frequency
BOD	Grab	Event
Total Suspended Solids	Grab	Event
Total Phosphorus	Grab	Event
Total Kjeldahl Nitrogen	Grab	Event
<i>E. Coli</i>	Grab	Event

10. Overflow Report(s)

Glen Walter

Overflow occurrences: 1

Overflow 1

Date:	August 9th, 2024
Asset:	GW2
Location:	6649 Bray Street
Reference Number:	1-9RNQU8
Cause:	Wet Weather
Volume:	639m3
Duration:	6.5hours
Disinfection:	None
Adverse Impact:	None
Grab Samples:	Yes

Lancaster

Overflow occurrences: 2

Overflow 1

Date:	August 9th, 2024
Asset:	LA1
Location:	12 South Beech Street
Reference Number:	1-9RNR4A
Cause:	Wet Weather
Volume:	196m3
Duration:	2.0hours
Disinfection:	None
Adverse Impact:	None
Grab Samples:	Yes

Overflow 2

Date:	August 9th, 2024
Asset:	LA2
Location:	20425 Old Montreal Road.
Reference Number:	1-9RNRA5
Cause:	Wet Weather
Volume:	344m3
Duration:	3.2hours
Disinfection:	None
Adverse Impact:	None
Grab Samples:	Yes

Green Valley

Overflow occurrences: 1

Overflow 1

Date:	August 9th, 2024
Asset:	GV2
Location:	20386 Concession Road 8
Reference Number:	1-9RNR06
Cause:	Wet Weather
Volume:	408m3
Duration:	7.8hours
Disinfection:	None
Adverse Impact:	None
Grab Samples:	Yes

11. Sample Result(s)

CSO structure as of June 1, 2023, require at least one grab sample, for BOD, total suspended solids, total phosphorus, total Kjeldahl nitrogen, and E. coli.

GW2 – Overflow 1

Parameters	Average Concentration mg/L	Average Loadings Kg/D
CBOD ₅	3.0	1.92
Total Suspended Solids	15.0	9.59
Total Phosphorus	0.60	0.38
Total Kjeldahl Nitrogen	4.0	2.56
pH	7.85	-

LA1 – Overflow 1

Parameters	Average Concentration mg/L	Average Loadings Kg/D
CBOD ₅	10.0	1.96
Total Suspended Solids	55.0	10.78
Total Phosphorus	0.63	0.12
Total Kjeldahl Nitrogen	4.3	0.84
pH	7.81	-

LA2 – Overflow 2

Parameters	Average Concentration mg/L	Average Loadings Kg/D
CBOD ₅	3.0	1.03
Total Suspended Solids	11.0	3.78
Total Phosphorus	0.21	0.07
Total Kjeldahl Nitrogen	1.0	0.34
pH	7.80	-

GV2 – Overflow 1

Parameters	Average Concentration mg/L	Average Loadings Kg/D
CBOD ₅	3.0	1.22
Total Suspended Solids	11.0	4.49
Total Phosphorus	0.20	0.08
Total Kjeldahl Nitrogen	1.8	0.73
pH	8.06	-

Definition of “**Collection System Overflow**” means a discharge (SSO or CSO) to the environment at designated locations from the authorized system.

12. CSO Overflow Points

Glen Walter Sanitary Sewer Overflow Points including Pumping Stations (Designed / Authorized Overflow)

Asset ID	Asset Name	Overflow Location (Latitude & Longitude)	Point of Entry to final Receiver (Latitude & Longitude)
GW2	Pumping Station 2	45.021310N 74.383070W	45.020897N 74.383921W
GW3	Pumping Station 3	45.015618N 74.392454W	45.015629N 74.391333W

Green Valley Sanitary Sewer Overflow Points including Pumping Stations (Designed / Authorized Overflow)

Asset ID	Asset Name	Overflow Location (Latitude & Longitude)	Point of Entry to final Receiver (Latitude & Longitude)
GV1	Pumping Station 1	45.155693N 74.361356W	45.155751N 74.361375W
GV2	Pumping Station 2	45.151506N 74.352184W	45.151506N 74.332292W

Lancaster Sanitary Sewer Overflow Points including Pumping Stations (Designed / Authorized Overflow)

Asset ID	Asset Name	Overflow Location (Latitude & Longitude)	Point of Entry to final Receiver (Latitude & Longitude)
LA1	Pumping Station 1	45.082100N 74.300192W	45.081315N 74.301827W
LA2	Pumping Station 2	45.075526N 74.291146W	45.080345N 74.285413W

As per ECA Number: 185-W601, Identification signs must be installed on, or prior to December 1st, 2025. Identification signs installed in June of 2024, at all sites that have a designated overflow site.

13. Overflow Reduction

In the year 2023 The Township of South Glengarry both completed cleaning and CCTV work within the entire collection system works. All CCTV was reviewed for infiltration and deformities within the collection systems. Any deformities that scored greater than 4 with 5 being the worst rating, was listed for repair and quotation.

In the summer of 2024 two contracts were awarded to complete the repairs needed for each system. In total 47 areas of concern were addressed to aid in infiltration and overflow reduction.

**All overflows for the fiscal year 2024 were located within significant snowmelt events, significant storm events, and power outages due to significant storms.*

14. Reports

- 2023 CCTV Reports - (on-file at plant)
- 2024 CIPP Spot and Grout Repair Reports - (on-file at plant)
- Caduceon Environmental Laboratories Analytical Reports - (on-file at plant)
- Monthly Reports - (on-file at plant)
- Wet Weather vs Dry Weather Report - (on-file at plant/submitted)
- Bypass/Overflow Incident Report(s) - (on-file at plant/submitted)