



TOWNSHIP OF SOUTH STORMONT
MUNICIPAL STORMWATER MANAGEMENT SYSTEM
2025 ANNUAL REPORT

ECA Number: 186-S701

March 25, 2026

	Stormwater Management Facilities 2025 Annual Report Township of South Stormont	2025-March-23 Rev #0
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1. Introduction

This annual report has been prepared in accordance with the requirements of Environmental Compliance Approval #186-S701 for the South Stormont Stormwater Management Systems.

The Township of South Stormont owns and operates the systems described within the South Stormont Stormwater Management CLI ECA. The system is composed of 15.5 km of storm sewers, 582 km of ditches and swales and 15 stormwater management facilities.

Throughout the reporting period (January 1, 2025 to December 31, 2025), Township staff maintained, rehabilitated and renewed portions of the system as described herein.

No Ministry of the Environment, Conservation, and Parks (MECP) inspections occurred within the reporting period.

2. Monitoring Data

Monitoring and inspection of the Stormwater Management Systems included storm sewer flushing and storm water management facility inspections.

The following table summarizes the inspections that were conducted within the reporting period.

Date	Location	Work Description
2025/04/23	SWP1 – Arrowhead Ph 1-6	Semi-Annual Inspection – No Action Required
2025/11/17	SWP1 – Arrowhead Ph 1-6	Semi-Annual Inspection – Install Signage
2025/04/23	SWP2 – Arrowhead Estates Ph7	Semi-Annual Inspection – No Action Required
2025/10/27	SWP2 – Arrowhead Estates Ph7	Semi-Annual Inspection – Replace Signage
2025/05/07	SWP3 – Chase Meadows	Semi-Annual Inspection – No Action Required
2025/11/04	SWP3 – Chase Meadows	Semi-Annual Inspection – No Action Required
2025/04/23	SWP4 – Parkway Estates	Semi-Annual Inspection – No Action Required
2025/11/17	SWP4 – Parkway Estates	Semi-Annual Inspection – Brushing Required
2025/04/22	SWP5 – Malyon Estates	Semi-Annual Inspection – No Action Required
2025/11/04	SWP5 – Malyon Estates	Semi-Annual Inspection – No Action Required
2025/05/07	SWP6 – St. Andrews Firehall	Semi-Annual Inspection – No Action Required
2025/11/05	SWP6 – St. Andrews Firehall	Semi-Annual Inspection – No Action Required
2025/05/07	SWP7 – Fenton Farms	Semi-Annual Inspection – No Action Required
2025/11/04	SWP7 – Fenton Farms	Semi-Annual Inspection – No Action Required

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2025/05/07	SWP8 – Township Office / OPP	Semi-Annual Inspection – Shrub Removal
2025/10/27	SWP8 – Township Office / OPP	Semi-Annual Inspection – Tree Removal
2025/04/23	SWP9 – East Industrial Park	Semi-Annual Inspection – No Action Required
2025/11/17	SWP9 – East Industrial Park	Semi-Annual Inspection – No Action Required
2025/05/07	SWP10 – EMS Station	Semi-Annual Inspection – No Action Required
2025/10/27	SWP10 – EMS Station	Semi-Annual Inspection – No Action Required
2025/05/07	SWP11 – Glenco Subdivision	Semi-Annual Inspection – Roadway to be installed, planting is ongoing
2025/	SWP11 – Glenco Subdivision	Semi-Annual Inspection – Road grading to be completed
2025/05/07	SWP12 – John Chase Subdivision	Semi-Annual Inspection – No Action Required
2025/11/17	SWP12 – John Chase Subdivision	Semi-Annual Inspection – No Action Required
2025/05/07	SWP13 – Long Sault Drain	Semi-Annual Inspection – No Action Required
2025/11/17	SWP13 – Long Sault Drain	Semi-Annual Inspection – No Action Required
2025/05/07	SWP14 – St. Lawrence Medical Clinic	Semi-Annual Inspection – No Action Required
2025/11/04	SWP14 – St. Lawrence Medical Clinic	Semi-Annual Inspection – Install Signage
2025/05/07	SWP15 – Stonegate Subdivision	Semi-Annual Inspection – No Action Required
2025/11/04	SWP15 – Stonegate Subdivision	Semi-Annual Inspection – Install Signage

3. Preventative Maintenance Actions

Date	Location	Work Description
2025/07/02	SWP 13 – Long Sault Drain	Beaver Control
2025/07/02	SWP4 – Parkway Estates	Beaver control, tree removal
2025/07/03	SWP9 – East Industrial Park	Grass mowing
2025/09/03	SWP9 – East Industrial Park	Grass mowing

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4. Operational Issues and Corrective Actions Taken

As required in Environmental Compliance Approval the following actions have been initiated:

- There were no operations issues or corrective actions required in 2025.

Complaints

Date	Location	Complaint	Date Resolved	Resolution Description
June 10, 2025	SWP3 – Chase Meadows	Resident would like the frogs and mosquitos eliminated from the SWMP.	July, 2025	Resident was informed that both species are part of the ecosystem and could not be eliminated.

5. Alterations to the Authorized System

There were no additional systems or facilities added.

6. Spills and Discharges

All ponds are regulated discharge with provisions for overflow/bypass. There were no bypasses witnessed in 2025.

There were no spills reported in 2025.

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This 2025 Annual Report for the Township of South Stormont Stormwater Management Facilities as required by the Environmental Compliance Approval Number 186-S701 for the operation of the Stormwater Facilities:

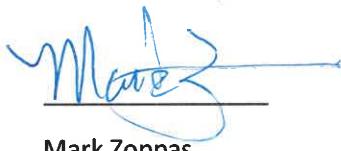
Prepared by;



Bailey McBride

Manager of Infrastructure Services

Reviewed By:



Mark Zoppas

Manager Environmental Services

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APPENDIX A – Environmental Compliance Approval

ENVIRONMENTAL COMPLIANCE APPROVAL For a Municipal Stormwater Management System

ECA Number: 186-S701

Issue Number: 1

Pursuant to the *Environmental Protection Act*, R.S.O. 1990, c. E. 19 (EPA), and the regulations made thereunder and subject to the limitations thereof, this environmental compliance approval is issued under section 20.3 of Part II.1 of the EPA to:

South Stormont, The Corporation of the Township of

**2 Mille Roches Rd P.O. Box 84
Long Sault, ON K0C 1P0**

For the following Sewage Works:

South Stormont Stormwater Management System

This Environmental Compliance Approval (ECA) includes the following:

Schedule	Description
Schedule A	System Information
Schedule B	Municipal Stormwater Management System Description
Schedule C	List of Notices of Amendment to this ECA: Additional Approved Works
Schedule D	General
Schedule E	Operating Conditions
Schedule F	Residue Management
Appendix A	Stormwater Management Criteria

Except where specified otherwise, all prior ECAs, or portions thereof, issued by the Director for Sewage Works described in section 1 of Schedule B are revoked and replaced by this Approval.

DATED at TORONTO this 28th day of November, 2022

Signature



Aziz Ahmed, P.Eng.
Director, Part II.1, *Environmental Protection Act*

Schedule A: System Information

System Owner	South Stormont, The Corporation of the Township of
ECA Number	186-S701
System Name	South Stormont Stormwater Management System
ECA Issue Date	November 28th, 2022

1.0 ECA Information and Mandatory Review Date

ECA Issue Date	November 28th, 2022
Application for ECA Review Due Date	August 15, 2027

- 1.1 Pursuant to section 20.12 of the EPA, the Owner shall submit an application for review of the Approval no later than the Application for ECA Review Date indicated above.

2.0 Related Documents

2.1 Other Documents

Document Title	Version
Design Criteria for Sanitary Sewers, Storm Sewers, and Force mains for Alterations Authorized under Environmental Compliance Approval	v.1.1 (Jul 28, 2022)

3.0 Stormwater Master Plan and Asset Management Plan

Document Title	Version
2021 Asset Management Plan (Core Assets)	June 2022

4.0 Operating Authority

System	Operating Authority
South Stormont Stormwater Management System	The Corporation of the Township of South Stormont

Schedule B: Municipal Stormwater Management System Description

System Owner	South Stormont, The Corporation of the Township of
ECA Number	186-S701
System Name	South Stormont Stormwater Management System
ECA Issue Date	November 28th, 2022

1.0 System Description

- 1.1 The following is a summary description of the Sewage Works comprising the Municipal Stormwater Management System:

Overview

The Municipal Stormwater Management (SWM) System serving the Township of South Stormont's drainage area, is a separate system for stormwater (i.e. designed not to convey sanitary sewage, combined sewage) within the St. Lawrence and Raisin Rivers and the Raisin Region Conservation Authority watersheds. The Municipal SWM System consists of storm sewers, culverts, ditches, Stormwater Management Facilities and outlets.

This ECA covers the entire Municipal SWM System owned and operated by the Township of South Stormont. This ECA does not cover municipally or privately owned sewage works on industrial or commercial land.

This Municipal SWM System connects to the United Counties of SDG system

Sewage Collection System

- 1.2 The Authorized System comprises:
- 1.2.1 The Sewage Works described and depicted in each document or file identified in column 1 of Table B1.

Table B1: Infrastructure Map	
Column 1 Document or File Name	Column 2 Date
Stormwater 03 – Infrastructure Map	04/27/2022

- 1.2.2 Storm Sewers, Stormwater Management Facilities, stormwater pumping stations and Sewage Works associated with a Third Pipe Collection System that have been added, modified, replaced, or extended through authorization provided in a Schedule C Notice respecting this Approval, where Completion occurs on or after the date identified in column 2 of Table B1 for each document or file identified in column 1.
- 1.2.3 Storm Sewers, Stormwater Management Facilities and Sewage Works associated with a Third Pipe Collection System that have been added, modified, replaced, or extended through authorization provided by Schedule D of this Approval, where Completion occurs on or after the date identified in column 2 of Table B1 for each document or file identified in column 1.
- 1.2.4 Any Sewage Works described in conditions 1.3 through 1.8 below.

Stormwater Collection System

- 1.3 Categorization of the Authorized System at the date of issue of this Approval is as follows:

Table B2. Stormwater Collection System by Diameter			
System Type	Pipe Diameter (mm)	Length (km)	System Totals (km)
Storm Sewers	Up to 450	7.4	--
Storm Sewers	> 450 – 1,500	8.1	--
Storm Sewers	> 1,500	0.0	--
Total Storm Sewers	--	--	15.5
Culverts	Up to 450	2.3	--
Culverts	> 450 – 1,500	3.5	--
Culverts	> 1,500	0.3	--
Culvert (Rectangle)	--	0.3	
Total Culverts	--	--	6.3
Ditches / Swales	--	--	582
Total System Length (km)	--	--	604

Table B3. Summary of Stormwater Management Facilities by Type and Pumping Stations

Facility Type	Basic Treatment for Suspended Solids*	Normal Treatment for Suspended Solids *	Enhanced Treatment for Suspended Solids *	Other Treatment Level for Suspended Solids**	Total Quality Control	Total Quantity Control	Total Number of Facilities
LID Facilities - Retention (infiltration, evapotranspiration, harvest)							
LID Facilities - Filtration							
Stormwater Management Ponds – Wet (includes wetlands, hybrids)	4				4		4
Stormwater Management Ponds - Dry	4				4		4
Super Pipe / Storage Facility							
Filtration MTD - Filter Unit							
Sedimentation MTD - OGS							
Pumping Stations							
Other							
Total Number of Facilities	8				8		8

* Basic, normal, and enhanced treatment correspond to 60%, 70% and 80% suspended solids removal on an annual average long-term basis, respectively.

** Treatment levels below 60% suspended solids removal on an annual average long-term basis.

Table B4. Third Pipe Collection System

Description	Pipe Diameter (mm)	Length (km)	Quantity	System Totals
Third Pipe Sewer	Up to 250		N/A	
Third Pipe Sewer	> 250 - 500		N/A	
Third Pipe Sewer	> 500		N/A	
Total				Km
Other Infrastructure Components (e.g., storage tank)	N/A	N/A		

**Table B5. Sewage Works on Private Land that are part of the
Municipal Stormwater Treatment Train***

Description	Location	ECA # (if applicable)

* Identifies privately owned Sewage Works that are not part of the Authorized System, but are part of a Stormwater Treatment Train

Stormwater Management Facilities

1.4 The following are Stormwater Management Facilities in the Authorized System:

SWP1 – Stormwater Management Dry Pond

Location	45.033734, -74.872122
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to South Branch of the Raisin River
Outlet location	45.034088, -74.871793
Catchment Area	
Level of Treatment for suspended solids	
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	Quantity: 100-yr storm;
Reference ECA(s)	5256-73PGZW
Reference Works as part of treatment train	
Brief Description	Dry pond with a bottom outlet pipe with a diameter of 450 millimetres ditch discharging into a ditch inlet manhole; a 600 millimetre by 1200 millimetre ditch inlet manhole with the bottom of the grate opening at 0.75 metres from the bottom of the pond, outletting into a 900 millimetre diameter pipe; a 12 metre long, 900 millimetre diameter pipe emptying into a ditch via a rip rap area; a 3 metre by 1.5 metre rip area as per OPSD 810.01
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	6637 cubic metres storage capacity

SWP2 – Stormwater Management Wet Pond

Location	45.034974, -74.878517
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to South Branch of the Raisin River
Outlet location	45.035189, -74.878372
Catchment Area	2.41 ha
Level of Treatment for suspended solids	“Normal” level water quality control: Level 2 – 70% suspended solids removal
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	Quantity: 100-yr storm
Reference ECA(s)	9409-9YVKNX
Reference Works as part of treatment train	
Brief Description	Wet pond with a sediment forebay servicing Matthew Kieran Crescent and an easement, receiving inflow from storm sewers, discharging via an existing County Road 36 Roadside ditch, ultimately to the Raisin River; catchment area 2.41 hectares.
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	Permanent pool volume 143 cubic metres, extended detention volume 99 cubic metres, total storage volume 367 cubic metres, total depth 1.4m at permanent pool volume

SWP3 – Stormwater Management Wet Pond

Location	45.034156, -74.884061
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to South Branch of the Raisin River
Outlet location	45.033969, -74.883390
Catchment Area	11.5 ha
Level of Treatment for suspended solids	“Normal” level water quality control: Level 2 – 70% suspended solids removal
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	Quantity: 100-yr storm
Reference ECA(s)	2903-9BUQE9
Reference Works as part of treatment train	
Brief Description	Wet pond with a sediment forebay, draining via an existing ditch on County Road 36 and existing 600 mm diameter culvert under Road 36 to South Branch of the Raisin River and the St. Lawrence River; catchment area 11.5 hectares.
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	Permanent pool volume 1385 cubic metres, extended detention volume 465 cubic metres, total storage volume 3100 cubic metres, total depth 3.3m at permanent pool volume

SWP4 – Stormwater Management Wet Pond

Location	45.039679, -74.910800
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to South Branch of the Raisin River
Outlet location	45.039402, -74.912348
Catchment Area	28.42 ha
Level of Treatment for suspended solids	"Normal" level water quality protection: Level 2 – 70% suspended solids removal
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	Quantity: 100-yr storm
Reference ECA(s)	7828-93MM94
Reference Works as part of treatment train	
Brief Description	Wetland with an open ditch inlet into a forebay, discharging into existing roadside ditches prior to falling into the St. Lawrence River; one (1) 200mm diameter bottom draw outlet pipe with perforated raised section capped, located in a plunge pool area of the pond to discharge extended detention volume into a 600mmX1200mm grated catchbasin/control manhole complete with a 173mm diameter orifice inlet having invert elevation at 78.80m ASL (permanent water level), for a controlled flow rate ranging from 0.0cu.m./s to 0.028cu.m./sec; one (1) 450mm diameter outlet pipe, from a catchbasin outlet /outfall from the control manhole into an approximately 4.5m wide 1.5m deep roadside ditch, ultimately to discharge into an existing open ditch/water course, a 3.6m wide X 600mm deep emergency spillway protected with stone riprap to provide for high water storms in case of blockage of the normal outlets, to discharge into the existing water course.
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	Total volume of 7969 cubic metres at 1.3m depth, permanent pool volume of 1902 cubic metres, extended detention volume of 1180 cubic metres

SWP5 – Stormwater Management Dry Pond

Location	45.095014, -74.807817
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to Main Branch of the Raisin River
Outlet location	45.095187, -74.808316
Catchment Area	
Level of Treatment for suspended solids	Level 2 – 70% suspended solid removal
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	
Reference ECA(s)	N/A
Reference Works as part of treatment train	
Brief Description	Hydrocarbon Separator “CDS Model 2015-4.c”
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	Capable of treating 83% of annual runoff

SWP6 – Stormwater Management Dry Pond

Location	45.095736, -74.793837
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to Main Branch of the Raisin River
Outlet location	45.095858, -74.793594
Catchment Area	
Level of Treatment for suspended solids	
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	
Reference ECA(s)	N/A
Reference Works as part of treatment train	
Brief Description	
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	

SWP7 – Stormwater Management Wet Pond

Location	45.038033, -74.872120
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to South Branch of the Raisin River
Outlet location	45.037934, -74.871809
Catchment Area	5.56 ha
Level of Treatment for suspended solids	“Enhanced” level water quality protection
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	Quantity: 100-yr storm
Reference ECA(s)	4382-C7HKNN
Reference Works as part of treatment train	
Brief Description	Wet pond with sediment forebay, located on Block 45, an inlet structure consisting of a 675 millimetre diameter storm inlet pipe and a concrete headwall, an outlet structure comprised of a 150 millimetre pipe complete with a 66 millimetre diameter orifice and a 450 millimetre diameter outlet pipe complete with a 300 millimetre diameter orifice, allowing a maximum discharge of 165.15 litres per second under the 100-year storm event to the side ditch of County Road 36.
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	Storage volume of 712 cubic metres, extended detention volume of 222 cubic metres, total storage volume of 1321 cubic metres including permanent pool depth of 2.5m

SWP8 – Stormwater Management Dry Pond

Location	45.030230, -74.889014
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of discharge	Surface discharge to South Branch of the Raisin River
Outlet location	45.030061, -74.888674
Catchment Area	
Level of Treatment for suspended solids	
Treatment for other contaminants, as required	
Level of Volume control	
Design Storm	
Reference ECA(s)	N/A
Reference Works as part of treatment train	
Brief Description	
Receive Emergency Sanitary Overflows	No
Notes / Additional Information	

Stormwater Pumping Stations

- 1.5 The following are identified Stormwater pumping stations in the Authorized System:

N/A

Third Pipe Collection System

- 1.6 The following are identified third pipe systems in the Authorized System.

[*Asset ID* (e.g., Third Pipe 10)]

Asset ID and Name	
Location	
Watershed/Subwatershed	
Receiver of discharge	
Outlet location	
Catchment Area	
Treatment, if applicable	
Reference ECA(s), if applicable	
Brief Description	

Notes	
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Other Works:

1.7 The following works are part of Authorized System:

Table B6: Other Works			
Column 1 Asset ID / Name	Column 2 Site Location (Latitude & Longitude)	Column 3 Component	Column 4 Description

Developer-Operated Facilities:

1.8 The following facilities are part of the Authorized System, have been constructed, and are being operated by the developer under the authority of an agreement entered into with the Owner of the system.

Table B7: Developer-Operated Facilities			
Asset ID	Type of Facility	Location	Developer Name

1.9 The Owner shall notify the Director, using the Director Notification Form, within thirty (30) days where the operation of any Facility identified in Table B7 has been:

1.9.1 Incorporated into the overall Stormwater Management System and assumed by an Operating Authority identified in Schedule B of this Approval.

1.9.2 Has been transferred from the developer identified in Table B7 to another party.

Transitional – Facilities with Individual ECAs

1.10 The following Facilities are connected to the Authorized System, but ownership has not been assumed by the Owner. These Sewage Works are not part of the Authorized System and will continue to have separate ECAs until the Facilities are assumed by the Owner.

Table B8: Facilities with Individual ECAs				
Asset ID	Type of Facility	Location	ECA Number	Developer Name

- 1.11 The Owner shall notify the Director, using the Director Notification Form, within thirty (30) days where the ownership of any Facility identified in Table B8 has been assumed by the Owner.
- 1.12 The Director Notification required in condition 1.11 shall include:
 - 1.12.1 A request from the developer to revoke the ECA identified in Table B8; or
 - 1.12.2 A copy of an agreement or other documentation that demonstrates that the municipality has assumed ownership of the Facility and that the ECA identified in Table B8 should be revoked.

Schedule C: List of Notices of Amendment to this ECA: Additional Approved Sewage Works

System Owner	South Stormont, The Corporation of the Township of
ECA Number	186-S701
System Name	South Stormont Stormwater Management System
ECA Issue Date	November 28th, 2022

1.0 General

- 1.1 Table C1 provides a list of all notices of amendment to this Approval that have been issued pursuant to clause 20.3(1) of the EPA that impose terms and conditions in respect of the Authorized System after consideration of an application by the Director (Schedule C Notices).

Table C1: Schedule C Notices				
Column 1 Issue #	Column 2 Issue Date	Column 3 Description	Column 4 Status	Column 5 DN#
N/A	N/A	N/A	N/A	N/A

Schedule D: General

System Owner	South Stormont, The Corporation of the Township of
ECA Number	186-S701
System Name	South Stormont Stormwater Management System
ECA Issue Date	November 28th, 2022

1.0 Definitions

1.1 For the purpose of this Approval, the following definitions apply:

“Adverse Effect(s)” has the same meaning as defined in section 1 of the EPA.

“Alteration(s)” includes the following, in respect of the Authorized System, but does not include repairs to the system:

- a) An extension of the system,
- b) A replacement or retirement of part of the system, or
- c) A modification of, addition to, or enlargement of the system.

“Appendix A” means Appendix A of this Approval.

“Approval” means this Environmental Compliance Approval including any Schedules attached to it.

“Appurtenance(s)” has the same meaning as defined in O. Reg. 525/98 (Approval Exemptions) made under the OWRA.

“Authorized System” means the Sewage Works comprising the Municipal Stormwater Management System authorized under this Approval”.

“Class Environmental Assessment Project” means an Undertaking that does not require any further approval under the EAA if the proponent complies with the process set out in the Municipal Engineers Association Class Environmental Assessment document, (Municipal Class Environmental Assessment approved by the Lieutenant Governor in Council on October 4, 2000 under Order in Council 1923/2000), as amended from time to time.

“Combined Sewer(s)” means pipes that collect and transmit both sanitary Sewage and other Sewage from residential, commercial, institutional, and

industrial buildings and facilities and Stormwater through a single-pipe system, but does not include Nominally Separate Sewers.

“Completion” means substantial performance as described in s.2 (1) of the *Construction Act*, R.S.O. 1990, c. C.30.

“Compound of Concern” means a Contaminant that is discharged from the Facility in an amount that is not negligible.

“Contaminant” has the same meaning as defined in section 1 of the EPA.

“CSO” means a combined sewer overflow which is a discharge to the environment at designated location(s) from a Combined Sewer or Partially Separated Sewer that usually occurs as a result of precipitation when the capacity of the Sewer is exceeded. An intervening time of twelve hours or greater separating a CSO from the last prior CSO at the same location is considered to separate one overflow Event from another.

“CWA” means the *Clean Water Act*, R.S.O. 2006, c.22.

“Design Criteria” means the design criteria set out in the Ministry’s publication “Design Criteria for Sanitary Sewers, Storm Sewers and Force mains for Alterations Authorized under Environmental Compliance Approval”, (as amended from time to time).

“Design Guidelines for Sewage Works” means the Ministry document titled “Design Guidelines for Sewage Works”, 2008 (as amended from time to time).

“Director” means a person appointed by the Minister pursuant to section 5 of the EPA for the purposes of Part II.1 of EPA (Environmental Compliance Approvals).

“Director Notification Form” means the most recent version of the Ministry form titled Director Notification – Alterations to a Municipal Stormwater Management System, as obtained directly from the Ministry or from the Ministry’s website.

“District Manager” means the district manager or a designated representative of the Local Ministry Office.

“EAA” means the *Environmental Assessment Act*, R.S.O. 1990, c. E.18.

“EPA” means the *Environmental Protection Act*, R.S.O. 1990, c.E.19.

“ESC” means erosion and sediment control.

“Facility” means the entire operation located on the property where the Sewage Works or equipment is located.

“Form SW1” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Storm Sewers/Ditches/Culverts as obtained directly from the Ministry or from the Ministry’s website.

“Form SW2” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Stormwater Management Facilities as obtained directly from the Ministry or from the Ministry’s website.

“Form SW3” means the most recent version of the Ministry form titled Record of Future Alteration Authorized for Third Pipe Collection Systems as obtained directly from the Ministry or from the Ministry’s website.

“Licensed Engineering Practitioner” means a person who holds a licence, limited licence, or temporary licence under the *Ontario Professional Engineers Act* R.S.O. 1990, c. P.28.

“LID” means “low impact development” a Stormwater management strategy that seeks to mitigate the impacts of increased runoff and Stormwater pollution by managing runoff as close to its source as possible. LID comprises a set of site design strategies that minimize runoff and distributed, small scale structural practices that mimic natural or predevelopment hydrology through the processes of infiltration, evapotranspiration, harvesting, filtration, and detention of Stormwater.

“Local Ministry Office” means the local office of the Ministry responsible for the geographic area where the Authorized System is located.

“Minister” means the Minister of the Ministry or such other member of the Executive Council as may be assigned the administration of the EPA and OWRA under the *Executive Council Act*, R.S.O. 1990, c. E.25.

“Ministry” means the Ministry of the Minister and includes all employees or other persons acting on its behalf.

“Monitoring Plan” means the monitoring plan prepared and maintained by the Owner under condition 4.1 in Schedule E of this Approval.

“MTD” means manufactured treatment device.

“Municipal Drain” has the same meaning as drainage works as defined in section 1 of the *Drainage Act* R.S.O. 1990, c. D.17.

“Municipal Drainage Engineer’s Report” means a report signed by a drainage engineer employed or contracted by a municipality and approved in writing by municipal council or equivalent.

“Municipal Sewage Collection System” means all Sewage Works, located in the geographical area of a municipality, that collect and transmit sanitary Sewage and are owned, or may be owned pursuant to an agreement with a municipality entered into under the *Planning Act* or *Development Charges Act*, 1997, by:

- a) A municipality, a municipal service board established under the *Municipal Act*, 2001 or a city board established under the *City of Toronto Act*, 2006; or
- b) A corporation established under sections 9, 10, and 11 of the *Municipal Act*, 2001 in accordance with section 203 of that Act or under sections 7 and 8 of the *City of Toronto Act*, 2006 in accordance with sections 148 and 154 of that Act.

“Municipal Stormwater Management System” means all Sewage Works, located in the geographical area of a municipality, that collect, transmit, or treat Stormwater and are owned, or may be owned pursuant to an agreement entered into under the *Planning Act* or *Development Charges Act*, 1997, by:

- a) A municipality, a municipal service board established under the *Municipal Act*, 2001 or a city board established under the *City of Toronto Act*, 2006; or
- b) A corporation established under sections 9, 10, and 11 of the *Municipal Act*, 2001 in accordance with section 203 of that Act or under sections 7 and 8 of the *City of Toronto Act*, 2006 in accordance with sections 148 and 154 of that Act.

“Natural Environment” has the same meaning as defined in section 1 of the EPA.

“Nominally Separate Sewer(s)” mean Separate Sewers that also have connections from roof leaders and foundation drains, and are not considered to be Combined Sewers.

“OGS” means Oil and Grit Separator(s).

“Operating Authority” means, in respect of the Authorized System, the person, entity, or assignee that is given responsibility by the Owner for the operation, management, maintenance, or Alteration of the Authorized System, or a portion of the Authorized System.

"Owner" for the purposes of this Approval means The Corporation of the Township of South Stormont, and includes its successors and assigns.

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

"O&M Manual" means the operation and maintenance manual prepared and maintained by the Owner under condition 3.2 in Schedule E of this Approval.

"Partially Separated Sewer(s)" means Combined Sewers that have been retrofitted to transmit sanitary Sewage but in which roof leaders or foundation drains still contribute Stormwater inflow to the Partially Separated Sewer.

"Pre-development" means the more stringent of a site's:

- a) Existing condition prior to proposed development or construction activities; or
- b) Condition as defined by the local municipality.

"Prescribed Person" means a person prescribed in O. Reg. 208/19 (Environmental Compliance Approval in Respect of Sewage Works) for the purpose of ss. 20.6 (1) of the EPA, and where the alteration, extension, enlargement, or replacement is carried out under an agreement with the Owner.

"Privately Owned Stormwater Works" means Stormwater Sewage Works on private land that are privately owned and, while not part of the Authorized System, are considered part of a Stormwater Treatment Train.

"Qualified Person (QP)" means persons who have obtained the relevant education and training and have demonstrated experience and expertise in the areas relating to the work required to be carried out by this Approval.

"Schedule C Notice(s)" means notice(s) of amendment to this Approval issued pursuant to clause 20.3(1) of the EPA that imposes terms and conditions in respect of the Authorized System after consideration of an application by the Director.

"Separate Sewer(s)" means pipes that collect and transmit sanitary Sewage and other Sewage from residential, commercial, institutional, and industrial buildings.

"Sewage" has the same meaning as defined in section 1 of the OWRA.

"Sewage Works" has the same meaning as defined in section 1 of the OWRA.

“Sewer” has the same meaning as defined in section 1 of O. Reg. 525/98 under the OWRA.

“Significant Drinking Water Threat” has the same meaning as defined in section 2 of the CWA.

“Significant Snowmelt Event(s)” means the melting of snow at a rate which adversely affects the performance and function of the Authorized System and/or the Sewage Treatment Plant(s) identified in Schedule A of this Approval.

“Significant Storm Event(s)” means a minimum of 25 mm of rain in any 24 hours period.

“Source Protection Authority” has the same meaning as defined in section 2 of the CWA.

“Source Protection Plan” means a drinking water source protection plan prepared under the CWA.

“SSO” means a sanitary sewer overflow which is a discharge of Sewage from a Separate Sewer or Nominally Separate Sewer to the environment from designated location(s) in the Authorized System.

“Standard Operating Policy for Sewage Works” means the standard operating policy developed by the Ministry to assist in the implementation of Source Protection Plan policies related to Sewage Works and providing minimum design and operational standards and considerations to mitigate risks to sources of drinking water, as amended from time to time.

“Storm Sewer” means Sewers that collect and transmit, but not exfiltrate or lose by design, Stormwater resulting from precipitation and snowmelt.

“Stormwater” means rainwater runoff, water runoff from roofs, snowmelt, and surface runoff.

“Stormwater Management Facility(ies)” means a Facility for the treatment, retention, infiltration, or control of Stormwater.

“Stormwater Management Planning and Design Manual” means the Ministry document titled “Stormwater Management Planning and Design Manual”, 2003 (as amended from time to time).

“Stormwater Treatment Train” means a series of Stormwater Management Facilities designed to meet Stormwater management objectives (e.g., Appendix A) for a given area, and can consist of a combination of MTDs, LIDs and end-of-pipe controls.

“TRCA” means the Toronto Region Conservation Authority.

“Third Pipe Collection System” means Sewage Works designed to collect and transmit foundation drainage and/or groundwater to a receiving surface water or dry well;

“Undertaking” has the same meaning as in the EAA.

“Vulnerable Area(s)” has the same meaning as in the CWA.

2.0 General Conditions

- 2.1 The works comprising the Authorized System shall be constructed, installed, used, operated, maintained, replaced, or retired in accordance with the conditions of this Approval, which includes the following Schedules:

Schedule A – System Information

Schedule B – Municipal Stormwater Management System Description

Schedule C – List of Notices of Amendment to this ECA

Schedule D – General

Schedule E – Operating Conditions

Schedule F – Residue Management

Appendix A – Stormwater Management Criteria

- 2.2 The issuance of this Approval does not negate the requirements of other regulatory bodies, which includes but is not limited to, the Ministry of Northern Development, Mines, Natural Resources and Forestry and the local Conservation Authority.
- 2.3 Where there is a conflict between a provision of any document referred to in this Approval and the conditions of this Approval, the conditions in this Approval shall take precedence. Where there is a conflict between the information in a Schedule C Notice and another section of this Approval, the document bearing the most recent date shall prevail.
- 2.4 The Owner shall ensure that any person authorized to carry out work on or operate any aspect of the Authorized System is provided with a print or electronic copy of this Approval and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- 2.5 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.

3.0 Alterations to the Municipal Stormwater Management System

- 3.1 For greater certainty, the Alterations authorized under this Approval are limited to Sewage Works comprising the Authorized System which does not include municipally or Privately Owned Stormwater Works:
 - 3.1.1 On industrial, commercial, or institutional land;
 - 3.1.2 Serving a single parcel of land, unless the stormwater management facility is located on a municipally owned park or community center;
 - 3.1.3 That are operated as waste disposal sites defined under the EPA or snow dump / melt facilities; or,
 - 3.1.4 That propose to collect, store, treat, or discharge stormwater containing substances or pollutants (other than Total Suspended Solids, or oil and grease) detrimental to the environment or human health.
- 3.2 Any Schedule C Notice shall provide authority to alter the Authorized System in accordance with the conditions of this Approval.
- 3.3 All Schedule C Notices issued by the Director for the Municipal Stormwater Management System shall form part of this Approval.
- 3.4 The Owner and a Prescribed Person shall ensure that the documentation required through conditions in this Approval and the documentation required in the Design Criteria are prepared for any Alteration of the Authorized System.
- 3.5 The Owner shall notify the Director within thirty (30) calendar days of placing into service or Completion of any Alteration of the Authorized System which had been authorized:
 - 3.5.1 Under Schedule D to this Approval where the Alteration results in a change to Sewage Works specifically described in Schedule B of this Approval;
 - 3.5.2 Through a Schedule C Notice respecting Sewage Works other than Storm Sewers; or
 - 3.5.3 Through another approval that was issued under the EPA prior to the issue date of this Approval.
- 3.6 The notification requirements set out in condition 3.5 do not apply to any Alteration in respect of the Authorized System which:
 - 3.6.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98;

- 3.6.2 Constitutes maintenance or repair of the Authorized System; or
- 3.6.3 Is a Storm Sewer, ditch, or culvert authorized by condition 4.1 of Schedule D of this Approval.
- 3.7 The Owner shall notify the Director within ninety (90) calendar days of:
 - 3.7.1 The discovery of existing Sewage Works not described or depicted in Schedule B, or
 - 3.7.2 Additional or revised information becoming available for any Sewage Works described in Schedule B of this Approval.
- 3.8 The notifications required in condition 3.5 and 3.7 shall be submitted to the Director using the Director Notification Form.
- 3.9 The Owner shall ensure that any chemicals, coagulants, or polymers used in the Authorized System have obtained written approval from the Director prior to use, unless required for spill control or spill clean-up.
- 3.10 The Owner shall ensure that an ESC plan is prepared, and temporary ESC measures are installed in advance of and maintained during any construction activity on the Authorized System, subject to the following conditions:
 - 3.10.1 Inspections of ESC measures are to be conducted at a frequency specified per the ESC plan, for dry weather periods (active and inactive construction phases), after Significant Storm Events and Significant Snowmelt Events, and after any extreme weather events.
 - 3.10.2 Any deficiencies shall be addressed, and any required maintenance actions(s) shall be undertaken as soon as practicable once they have been identified.
 - 3.10.3 Inspections and maintenance of the temporary ESC measures shall continue until they are no longer required.
- 3.11 The Owner shall ensure that records of inspections required by this Approval during any construction activity, including those required under condition 3.10:
 - 3.11.1 Include the name of the inspector, date of inspection, visual observations, and the remedial measures, if any, undertaken to maintain the temporary ESC measures.

- 3.11.2 Be retained with records relating to the Alteration that the construction relates to, such as the form required in conditions 4.4.1, 5.5.1, and 6.2.1 of Schedule D, or the Schedule C Notice.
- 3.11.3 Be retrievable and made available to the Ministry upon request.
- 3.12 The document(s) or file(s) referenced in Table B1 of Schedule B of this Approval shall:
 - 3.12.1 Be retained by the Owner;
 - 3.12.2 Include at a minimum:
 - a) Identification of Storm Sewers, which shall include the following information:
 - i Location relative to street names or easements; and
 - ii Sewer diameters.
 - b) Identification of existing municipally owned Stormwater Sewage Works, including but not limited to ditches, swales, culverts, outlets, Stormwater Management Facilities, sedimentation MTD (for example oil grit separators), filtration MTD, LID, end of pipe controls, Third Pipe Collection Systems, and pumping stations, including any applicable Asset IDs.
 - c) Identification of the main tributaries and receiving water bodies that the Sewage Works discharge to.
 - d) Delineation of municipal, watershed, and subwatershed boundaries, as available.
 - e) Identification of the storm sewersheds for each outlet.
 - f) Identification of any source protection Vulnerable Areas.
 - g) Identification of any Sewage Works that receive SSOs or CSOs.
 - 3.12.3 Be updated to include:
 - a) Alterations authorized under Schedule D of this Approval or through a Schedule C Notice within twelve (12) months of the Alteration being placed into service.
 - b) Updates to information contained in the document(s) or files(s) not associated with an Alteration within twelve (12) months of becoming aware of the updated information.

- 3.13 An Alteration is not authorized under Schedule D of this Approval for projects that impact Indigenous treaty rights or asserted rights where:
- 3.13.1 The project is on Crown land or would alter access to Crown land;
 - 3.13.2 The project is in an open or forested area where hunting, trapping or plant gathering occur;
 - 3.13.3 The project involves the clearing of forested land unless the clearing has been authorized by relevant municipal, provincial, or federal authorities, where applicable;
 - 3.13.4 The project alters access to a water body;
 - 3.13.5 The proponent is aware of any concerns from Indigenous communities about the proposed project and these concerns have not been resolved; or,
 - 3.13.6 Conditions respecting Indigenous consultation in relation to the project were placed in another permit or approval and have not been met.
- 3.14 No less than 60 days prior to construction associated with an Alteration the Director may notify the Owner in writing that a project is not authorized through Schedule D of this Approval where:
- 3.14.1 Concerns regarding treaty rights or asserted rights have been raised by one or more Indigenous communities that may be impacted by the Alteration; or
 - 3.14.2 The Director believes that it is in the public interest due to site specific, system specific, or project specific considerations.
- 3.15 Where an Alteration is not authorized under condition 3.13 or 3.14 above:
- 3.15.1 An application respecting the Alteration shall be submitted to the Ministry; and,
 - 3.15.2 The Alteration shall not proceed unless:
 - a) Approval for the Alteration is granted by the Ministry (i.e., a Schedule C Notice); or,
 - b) The Director provides written notice that the Alteration may proceed in accordance with conditions in Schedule D of this Approval.

4.0 Authorizations of Future Alterations to Storm Sewers, Ditches, or Culverts - Additions, Modifications, Replacements and Extensions

4.1 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, replacing, or extending a Storm Sewer, ditch, or culvert within the Authorized System subject to the following conditions and conditions 4.2 and 4.3 below:

4.1.1 The design of the addition, modification, replacement, or extension:

- a) Has been prepared by a Licensed Engineering Practitioner;
- b) Has been designed only to collect and transmit Stormwater;
- c) Has not been designed to collect or treat any sanitary Sewage;
- d) Has not been designed to collect, store, treat, control, or manage groundwater, unless for the purpose of foundation drains, road subdrains, or LIDs;
- e) Satisfies the Design Criteria or any municipal criteria that have been established that exceed the minimum requirements set out in the Design Criteria;
- f) Satisfies the standards set out in Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD), as applicable to ditches and culverts;
- g) Is consistent with or otherwise addresses the design objectives contained within the Design Guidelines for Sewage Works;
- h) Is planned, designed, and built to be consistent with the Stormwater Management Planning and Design Guidance Manual. If there is a conflict with Appendix A of this Approval, then Appendix A shall prevail; and
- i) Includes design considerations to protect sources of drinking water, including those set out in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies.

4.1.2 The addition, modification, replacement, or extension shall be designed so that it will:

- a) Not adversely affect the ability to maintain a gravity flow in the Authorized System without overflowing or increase surcharging in any maintenance holes as per design; and
 - b) Provide smooth flow transition to existing gravity Storm Sewers.
- 4.1.3 The Alteration shall not result in:
 - a) Adverse Effects; or
 - b) A deterioration of the approved effluent quality or quantity of downstream Stormwater Management Facilities which results in not being able to achieve the overall Stormwater performance criteria per Appendix A.
- 4.1.4 The Storm Sewer, ditch or culvert addition, modification, replacement, or extension is wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent property owner respecting the Alteration and resulting Sewage Works.
- 4.1.5 The Owner consents in writing to the addition, modification, replacement, or extension.
- 4.1.6 A Licensed Engineering Practitioner has verified in writing that the addition, modification, replacement, or extension meets the requirements of conditions 4.1.1 a) to h), 4.3.9, and 4.3.10.
- 4.1.7 The Owner has verified in writing that the addition, modification, replacement, or extension has complied with inspection and testing requirements in the Design Criteria.
- 4.1.8 The Owner has verified in writing that the addition, modification, replacement, or extension meets the requirements of conditions 4.1.1 i), 4.1.2 to 4.1.6, 4.3.7, and 7.2.
- 4.2 The addition of Storm Sewers or ditches can be constructed but not operated until the Stormwater Management Facilities required to service the new Storm Sewers or ditches are in operation.
- 4.3 The Owner or a Prescribed Person is not authorized to undertake an Alteration described above in condition 4.1 where the Alteration relates to the addition, modification, replacement, or extension of a Storm Sewer that:
 - 4.3.1 Passes under or through a body of surface water, unless trenchless construction methods are used or the local Conservation Authority has authorized an alternative construction method.

- 4.3.2 Has a nominal diameter greater than 2,400 mm, or equivalent sizing.
- 4.3.3 Is a Combined Sewer.
- 4.3.4 Is a concrete channel.
- 4.3.5 Is designed to, at any time, transmit, store, or control sanitary Sewage.
- 4.3.6 Converts rural road cross section ditches to curb, gutter, and Storm Sewers if the Stormwater volume and/or peak flow is increased and no water quality treatment is planned or demonstrated to be achieved, in accordance with this Approval and Appendix A, to offset the increase in Stormwater.
- 4.3.7 Results in new discharges or increased discharges to a Municipal Drain without written approval by the Owner and a signed Municipal Drainage Engineer's Report in accordance with the *Drainage Act* R.S.O. 1990, c. D.17.
- 4.3.8 Establishes a new outlet with direct discharge into the Natural Environment without monitoring in accordance with this Approval and without achieving the requirements set in Appendix A.
- 4.3.9 Increases Stormwater flow of an existing Storm Sewer or ditch without achieving water quality criteria set in Appendix A in accordance with this Approval unless the existing downstream Municipal Stormwater Management System has sufficient residual transmission and treatment capacity to accommodate the additional Stormwater.
- 4.3.10 Increases local hydraulic capacity of an existing Storm Sewer or ditch to accommodate new Stormwater flows unless the existing downstream Municipal Stormwater Management System has sufficient residual hydraulic capacity to accommodate the additional Stormwater.
- 4.3.11 Connects to another Municipal Stormwater Management System, unless:
 - a) Prior to construction, the Owner of the Authorized System obtains written consent from the Owner or Owner's delegate of the Municipal Stormwater System being connected to; and
 - b) The Owner of the Authorized System retains a copy of the written consent from the Owner or Owner's delegate of the Municipal Stormwater Management System being connected

to as part of the record that is recorded and retained under condition 4.4.

4.3.12 Is part of an Undertaking in respect of which:

- a) A request under s.16(6) of the EAA has been made, namely a request that the Minister make an order under s.16;
- b) The Minister has made an order under s.16; or
- c) The Director under that EAA has given notice under s.16.1 (2) that the Minister is considering making an order under s.16.

4.4 The consents and verifications required in conditions 4.1 and 4.3, if applicable, shall be:

4.4.1 Recorded on Form SW1, prior to the Storm Sewer, ditch, or culvert addition, modification, replacement, or extension being placed into service; and

4.4.2 Retained for a period of at least ten (10) years by the Owner.

4.5 For greater certainty, the verification requirements set out in condition 4.4 do not apply to any Alteration in respect of the Authorized System which:

4.5.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or

4.5.2 Constitutes maintenance or repair of the Authorized System.

5.0 Authorizations of Future Alterations to Stormwater Management Facilities - Additions, Modifications, Replacement, and Extensions

5.1 Subject to conditions 5.2 and 5.3, the Owner or a Prescribed Person may alter the Stormwater Management Facilities in the Authorized System by adding, modifying, replacing, or extending the following components:

5.1.1 Rooftop storage

5.1.2 Parking lot storage

5.1.3 Superpipe storage

5.1.4 Reduced lot grading

5.1.5 Roof leader to ponding area

5.1.6 Roof leader to soakaway pit

- 5.1.7 Infiltration trench
 - 5.1.8 Engineered grassed swales / bioswale
 - 5.1.9 Pervious pipes
 - 5.1.10 Pervious catchbasins
 - 5.1.11 Vegetated filter strips
 - 5.1.12 Natural buffer strips
 - 5.1.13 Green roofs/Rooftop gardens
 - 5.1.14 Wet pond
 - 5.1.15 Engineered wetland
 - 5.1.16 Dry pond
 - 5.1.17 Hybrid Facility
 - 5.1.18 Infiltration basin
 - 5.1.19 Filtration MTD
 - 5.1.20 Sedimentation MTD - OGS
 - 5.1.21 LID that relies on one or more of the following mechanisms to achieve treatment and control:
 - a) Evapotranspiration;
 - b) Infiltration into the ground; or
 - c) Filtration.
 - 5.1.22 Any other Stormwater Management Facilities where the Director has provided authorization in writing to proceed with the Alteration.
- 5.2 Any Alteration to the Authorized System authorized under condition 5.1 is subject to the following conditions:
- 5.2.1 The design of the Alteration shall:
 - a) Be prepared by a Licensed Engineering Practitioner;

- b) Be designed only to collect, receive, treat, or control only Stormwater and has not been designed to collect, receive, treat, or control sanitary Sewage;
- c) Be planned, designed, and built to be consistent with the Stormwater Management Planning and Design Guidance Manual. If there is a conflict with Appendix A of this Approval, then Appendix A shall prevail;
- d) Satisfy the Design Criteria or any municipal criteria that have been established that exceed the minimum requirements set out in the Design Criteria;
- e) Be part of a Stormwater Treatment Train approach that satisfies the requirements outlined in Appendix A, or transmits Stormwater to a Stormwater Management Facility that satisfies the requirements outlined in Appendix A;
- f) Include an outlet or an emergency overflow for the Sewage Works, with the verification of the location, route, and capacity of the receiving major system to accommodate overflows; and
- g) Include design considerations to protect sources of drinking water, including those set out in the Standard Operating Policy for Sewage Works and any applicable local Source Protection Plan policies.

5.2.2 The Alteration shall not result in:

- a) Adverse Effects; or
- b) A deterioration on the approved effluent quality or quantity of downstream Stormwater Management Facilities which results in not being able to achieve the overall Stormwater performance criteria per Appendix A.

5.2.3 The Alteration may incorporate co-benefits, but in doing so shall not diminish functionality or efficiency of any Stormwater Management Facility(ies) that may be impacted by the Alteration.

5.2.4 Any new sedimentation MTD that is part of the Alteration shall meet the following requirements:

- a) Tested in accordance with the TRCA protocol Procedure for Laboratory Testing of OGSs and testing data verified in accordance with the ISO 14034 Environmental Technology Verification (ETV) protocol. The suspended solids removal claimed for the sedimentation MTD in achieving the water

quality criteria in Appendix A, and the sizing methodology used to determine the appropriate sedimentation MTD dimensions for the particular site, shall be based on the verified removal efficiency for all particle size fractions comprising the particle size distribution specified within the testing protocol or a particle size distribution approved by the Director.

- b) Using the verified sediment removal efficiencies for the respective surface loading rates specified in the testing protocol, the sedimentation MTD sizing methodology shall use linear interpolation to calculate sediment removal efficiencies for surface loading rates that lie between the specified surface loading rates. For surface loading rates less than the lowest specified and tested surface loading rate, the sediment removal efficiency shall be assumed to be identical to the verified removal efficiency for the lowest specified and tested surface loading rate. Where available, 15 min rainfall stations shall be used for sizing the sedimentation MTD.
- c) When two or more sedimentation MTD are installed in series, no additional sediment removal credit shall be applied beyond the sediment removal credit of the largest device in the series.
- d) The sediment removal rate at the specified surface loading rates determined for the tested full scale, commercially available MTD may be applied to similar MTDs of smaller or larger size by proper scaling. Scaling the performance results of the tested MTD to other model sizes without completing additional testing is acceptable provided that:
 - i The claimed sediment removal efficiencies for the similar MTD are the same or lower than the tested MTD at identical surface loading rates; and
 - ii The similar MTD is scaled geometrically proportional to the tested unit in all inside dimensions of length and width and a minimum of 85% proportional in depth.
- e) The units must be installed in an off-line configuration if the unit had an effluent concentration greater than 25 mg/L at any of the surface loading rates conducted during the sediment scour and resuspension test as part of the ISO 14034 verification.
- f) The sedimentation MTD should be sized for the highest suspended solids percent removal physically and

economically practicable, and used as a pre-treatment device in a treatment train designed to achieve the water quality criteria in Appendix A.

5.2.5 Any new filtration MTD that is part of the Alteration shall meet the following requirements:

- a) Field tested and verified in accordance with a minimum of one of the following protocols:
 - i Washington State Technology Assessment Protocol - Ecology (TAPE) General Use Level Designation (GULD); and
 - 1. Has ISO 14034 ETV verification to satisfy ETV Canada requirements;
 - 2. The field monitoring data set used to obtain GULD certification should include a minimum of three (3) events that exceed 75th percentile rainfall event with at least one hour with an intensity of 6 mm/h or greater.
 - ii Another testing and verification method, where the Director has communicated acceptability in writing.
- b) Where available, 15 min rainfall stations shall be used for sizing the filtration MTD using the rainfall intensity corresponding to 90% of annual runoff volume;
- c) The SS removal rate determined for the tested full scale, commercially available filtration MTD, or single full-scale commercially available cartridge or filtration module, may be applied to other model sizes of that filtration MTD provided that appropriate scaling principles are applied. Scaling the tested filtration MTD or single full-scale commercially available cartridge or filtration module, to determine other model sizes and performance without completing additional testing is acceptable provided that:
 - i Depth of media, composition of media, and gradation of media remain constant.
 - ii The ratio of the maximum treatment flow rate to effective filtration treatment area (filter surface area) is the same or less than the tested filtration MTD;

- iii The ratio of effective sedimentation treatment area to effective filtration treatment area is the same or greater than the tested filtration MTD; and
 - iv The ratio of wet volume to effective filtration treatment area is the same or greater than the tested filtration MTD.
- 5.2.6 When it is necessary to use Privately Owned Stormwater Works in the Stormwater Treatment Train to achieve Appendix A criteria as part of or as a result of an Alteration, the following conditions apply:
 - a) The Owner shall, through legal instruments or binding agreements, obtain the right to access, operate, and maintain the Privately Owned Sewage Works;
 - b) The Owner shall ensure that the right to access, operate and maintain the Privately Owned Sewage Works described in condition 5.2.6 a) above is maintained at all times that the works are in service and used to achieve Appendix A criteria.
 - c) The Owner shall ensure on-going operation and maintenance of the Privately Owned Stormwater Works; and,
 - d) The Owner shall ensure that the Privately Owned Stormwater Works have obtained separate approval(s) under the EPA, as required.
- 5.2.7 The Alteration is wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent municipality respecting the Alteration and resulting Sewage Works.
- 5.2.8 The Owner consents in writing to the Alteration authorized under condition 5.1.
- 5.2.9 A Licensed Engineering Practitioner has verified in writing that the Alteration authorized under condition 5.1 meets the design requirements of conditions 5.2.1 a) to f), 5.2.4 and 5.2.5.
- 5.2.10 The Owner has verified in writing that the Alteration authorized under condition 5.1 meets the requirements of conditions 5.2.1 g), 5.2.2, 5.2.6 to 5.2.9, 5.3, 5.4, and 7.2.
- 5.3 The authorization in condition 5.1 does not apply:
 - 5.3.1 To the establishment of a regional end-of-pipe flood control Facility;

- 5.3.2 Where the Alteration will result in new or increased discharges to a Municipal Drain without written approval by the Owner and a signed Municipal Drainage Engineer's Report in accordance with the *Drainage Act* R.S.O. 1990, c. D.17;
- 5.3.3 To the establishment of a new outlet with direct discharge into the Natural Environment without treatment and monitoring in accordance with this Approval;
- 5.3.4 Where the Alteration will service a drainage area greater than 65 ha;
- 5.3.5 Where the Alteration will result in conversion of an existing Stormwater Management Facility into another type of Stormwater Management Facility;
- 5.4 Any Alteration to LID or end-of-pipe Stormwater Management Facilities shall be inspected before operation of the Alteration to confirm construction as per specifications (including depth, as applicable).
- 5.5 The consents and verifications required in conditions 5.2.8 to 5.2.10 if applicable, shall be:
 - 5.5.1 Recorded on Form SW2, prior to undertaking the Alteration;
and
 - 5.5.2 Retained for a period of at least ten (10) years by the Owner.
- 5.6 For greater certainty, the verification requirements set out in condition 5.5 do not apply to any Alteration in respect of the Authorized System which:
 - 5.6.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or
 - 5.6.2 Constitutes maintenance or repair of the Authorized System.

6.0 Authorizations of Future Alterations for Third Pipe Collection System Additions, Modifications, Replacements and Extensions

- 6.1 The Owner or a Prescribed Person may alter the Authorized System by adding, modifying, replacing, or extending, and operating works comprising a municipal Third Pipe Collection System to collect foundation drainage and groundwater where:
 - 6.1.1 The design of the Alteration:
 - a) Has been prepared by a Licensed Engineering Practitioner;

- b) Is limited to collection, transmission, reuse and/or treatment of only foundation drainage and groundwater, and is not designed to collect or treat sanitary Sewage;
 - c) Satisfies the Design Criteria or any municipal criteria that have been established that exceed the minimum requirements set out in the Design Criteria; and
 - d) Is scoped so that the resulting Sewage Works are intended to:
 - i Primarily function for the non-potable reuse, as deemed acceptable by the Owner and the local health unit, of foundation drainage and/or groundwater, and no discharge to a Storm Sewer or Separate Sewer if there is excess volume that cannot be reused; and/or
 - ii Provide wetland recharge, in which case, collection of rooftop runoff will also be acceptable.
- 6.1.2 The Alteration is not located on a contaminated site, or where natural occurring conditions result in contaminated discharge, or where the site receives contaminated groundwater or foundation drainage from another site, unless the discharge being received has been remediated or treated prior to acceptance by the Third Pipe Collection System.
- 6.1.3 The Owner has undertaken a site assessment for water quantity, water quality, and hydrogeological site conditions regarding the Alteration.
- 6.1.4 The Alteration will not result in Adverse Effects.
- 6.1.5 The Alteration is wholly located within the municipal boundary over which the Owner has jurisdiction or there is a written agreement in place with the adjacent property owner respecting the Alteration and resulting Sewage Works.
- 6.1.6 The Owner consents in writing to the Alteration.
- 6.1.7 A Licensed Engineering Practitioner has verified in writing that the Alteration meets the requirements of condition 6.1.1.
- 6.1.8 The Owner has verified in writing that the Alteration meets the requirements of conditions 6.1.2 to 6.1.7.
- 6.2 The consents, verifications and documentation required in conditions 6.1.7 and 6.1.8 shall be:

- 6.2.1 Recorded on Form SW3 prior to undertaking the Alteration; and
- 6.2.2 Retained for a period of at least ten (10) years by the Owner.
- 6.3 For greater certainty, the verification requirements set out in condition 6.2 do not apply to any Alteration in respect of the Authorized System which:
 - 6.3.1 Is exempt under section 53(6) of the OWRA or by O. Reg. 525/98; or
 - 6.3.2 Constitutes maintenance or repair of the Authorized System, including changes to software for an existing SCADA system resulting from Alterations authorized in condition 6.1.
- 6.4 The Owner shall update, within twelve (12) months of the Alteration of the Sewage Works being placed into service, any drawings maintained for the Municipal Stormwater Management System to reflect the Alterations of the Sewage Works, where applicable.

7.0 Outlets

- 7.1 Any outlet established or altered as part of an Alteration authorized through conditions 4, 5, or 6 of Schedule D in this Approval shall have regard to the 2012 TRCA Stormwater Management Criteria document, Appendix E, for outlets.
- 7.2 Any outlet established as part of an Alteration authorized through conditions 4, 5, or 6 of Schedule D in this Approval shall not:
 - 7.2.1 Increase discharge or create a new point source discharge to privately owned land unless there is express written consent of the owner(s) of such private land(s).
 - 7.2.2 Result in Adverse Effects.

8.0 Previously Approved Sewage Works

- 8.1 If approval for an Alteration to the Authorized System was issued under the EPA and is revoked by this Approval, the Owner may make the Alteration in accordance with:
 - 8.1.1 The terms of this Approval; or
 - 8.1.2 The terms and conditions of the revoked approval as of the date this approval was issued, provided that the Alteration is commenced within five (5) years of the date that the revoked approval was issued.

9.0 Transition

- 9.1 An Alteration of the Authorized System is exempt from the requirements in clause (e) of condition 4.1.1, clause (d) of condition 5.2.1, and clause (c) of condition 6.1.1 where:
- 9.1.1 Effort to undertake the Alteration, such as tendering or commencement of construction of the Sewage Works associated with the Alteration, begins on or before October 30, 2023.
 - 9.1.2 The design of the Alteration conforms to the Stormwater Management Planning and Design Manual, and where applicable, Design Guidelines for Sewage Works;
 - 9.1.3 The design of the Alteration was completed on or before the issue date of this Approval or a Class Environmental Assessment was completed for the Alteration and changes to the design result in significant cost increase or significant project delays; and
 - 9.1.4 The Alteration would be otherwise authorized under this Approval.

Schedule E: Operating Conditions

System Owner	South Stormont, The Corporation of the Township of
ECA Number	186-S701
System Name	South Stormont Stormwater Management System
ECA Issue Date	November 28th, 2022

1.0 General Operations

- 1.1 The Owner shall ensure that, at all times, the Sewage Works comprising the Authorized System and the related equipment and Appurtenances used to achieve compliance with this Approval are properly operated and maintained.
- 1.2 Prescribed Persons and Operating Authorities shall ensure that, at all times, the Sewage Works under their care and control and the related equipment and Appurtenances used to achieve compliance with this Approval are properly operated and maintained.
- 1.3 In conditions 1.1 and 1.2 “properly operated and maintained” includes effective performance, adequate funding, adequate operator staffing and training, including training in applicable procedures and other requirements of this Approval and the EPA, OWRA, CWA, and regulations, adequate laboratory services, process controls and alarms and the use of process chemicals and other substances used in the Authorized System.
- 1.4 The Owner shall ensure that Sewage Works are operated with the objective that the effluent from the Sewage Works is essentially free of floating and settleable solids and does not contain oil or any other substance in amounts sufficient to create a visible film, sheen, foam, or discoloration on the receiving waters, and shall evaluate the need for maintenance if the objective is not being met.
- 1.5 The Owner shall ensure that any Storm Sewers or ditches authorized under Schedule D of this approval are not placed into operation until the associated Stormwater Management Facilities to provide treatment are constructed and operated.

2.0 Duties of Owners and Operating Authorities

- 2.1 The Owner, Prescribed Persons, and any Operating Authority shall ensure the following:

- 2.1.1 At all times that the Sewage Works within the Authorized System are in service, the Sewage Works are:
 - a) Operated in accordance with the requirements under the EPA and OWRA, and
 - b) Maintained in a state of good repair.
- 2.1.2 The Authorized System is operated by persons that are familiar with the requirements of this Approval.
- 2.1.3 All sampling, testing, monitoring, and reporting requirements under the EPA and this Approval that relate to the Authorized System are complied with.
- 2.1.4 All necessary steps are taken to ensure that operations of the Sewage Works and any associated physical structures do not constitute a safety or health hazard to the general public.
- 2.1.5 Where a Stormwater Management Facility ceases to function as a Stormwater Management Facility, whether by intent, accident, or otherwise (e.g., a CSO or an SSO), a workplan shall be developed that includes local community notification, plans for rehabilitating the Stormwater Management Facility to proper function in a reasonable time, identification of actions that will be taken to prevent reoccurrences, and timelines for implementing the workplan.
- 2.1.6 That operations and maintenance activities are undertaken at the frequency and in conformance with the procedures set out in the O&M Manual.
 - a) A Prescribed Person or Operating Authority shall only undertake operations and maintenance activities where they have been delegated the authority to undertake such activities by the Owner or the Owner has expressly approved the activity(ies).
- 2.2 For clarity, the requirements outlined in the above conditions 2.1 for Prescribed Persons and any Operating Authority only apply to Sewage Works within the Authorized System where they are responsible for the operation.
- 2.3 The Owner, Prescribed Persons, and Operating Authority shall take all reasonable steps to minimize and ameliorate any Adverse Effect on the Natural Environment or impairment of the quality of water of any waters resulting from the operation of the Authorized System, including such accelerated or additional monitoring as may be necessary to determine the nature and extent of the effect or impairment.

3.0 Operations and Maintenance

3.1 Inspection

- 3.1.1 The Owner shall ensure that all Sewage Works within the Authorized System are inspected at the frequency and in accordance with procedures set out in their O&M Manual.
- 3.1.2 The owner shall ensure that:
 - a) Any Stormwater Management Facilities, pumping stations, and any outlets that discharge to a receiver, are inspected at least once before December 31, 2026, if these have not been inspected since January 1, 2018 and thereafter as required by the O&M Manual; and
 - b) Any Stormwater Management Facilities, pumping stations, and any outlets that discharge to a receiver, established, or replaced within the Authorized System after the date of issuance of this Approval, are inspected within one year of being placed into service and thereafter as required by the O&M Manual.
- 3.1.3 The Owner shall clean and maintain Sewage Works within the Authorized System to ensure the Sewage Works perform as designed.
- 3.1.4 The Owner shall inspect the Stormwater Management Facilities in the Authorized System after significant flooding events as defined in, and in accordance with procedures documented in, the O&M Manual.
- 3.1.5 The Owner shall maintain records of the results of the inspections required in condition 3.1.1, 3.1.2 and 3.1.4 and any cleaning and maintenance operations undertaken, and shall make available the records for inspection by the Ministry upon request. The records shall include the following:
 - a) Asset ID and name of the Sewage Works;
 - b) Date and results of each inspection, maintenance, or cleaning;
 - c) Name of person who conducted the inspection, maintenance, or the name of the inspecting official, where applicable, and
 - d) As applicable to the type of works, observations resulting from the inspection including, at a minimum:

- i Hydraulic operation of the works (e.g., length of occurrence since the last rainfall event, evidence or occurrence of overflows).
- ii Condition of vegetation in and around the works.
- iii Occurrence of obstructions at the inlet and outlet of the works.
- iv Evidence of spills and/or oil/grease contamination.
- v Presence of trash build-up, and
- vi Measurements of other parameters as required in the Monitoring Plan.

3.2 Operations & Maintenance (O&M) Manual

3.2.1 The Owner shall prepare and implement an operations and maintenance manual for Sewage Works within the Authorized System on or before October 30, 2023, that includes or references, but is not necessarily limited to, the following information:

- a) Procedures for the routine operation of the Sewage Works;
- b) Inspection programs, including the frequency of inspection, and the methods or tests employed to detect when maintenance is necessary, including:
 - i Presence of algae and/or invasive species impairing the Works (e.g., phragmites, goldfish);
 - ii Measurements of sediment depth, manual water levels (staff gauge) and/or visual observations, as appropriate to the Stormwater Management Facilities.
- c) Maintenance and repair programs, including:
 - i The frequency of maintenance and repair for the Sewage Works;
 - ii Stormwater pond sediment cleanout, dewatering, and management;

- iii Excavation, modification, replacement of LID soil/media/aggregate/geotextile, such as bioretention cells, green roof, permeable pavement; and
 - iv The frequency of maintenance for any other Stormwater Management Facilities identified in Schedule B that collect sediment.
 - d) Operational and maintenance requirements to protect sources of drinking water, such as those included in the Standard Operating Policy for Sewage Works, and any applicable local Source Protection Plan policies;
 - e) Procedures for routine physical inspection and calibration of monitoring equipment or components in accordance with the Monitoring Plan;
 - f) Emergency Response, Spill Reporting and Contingency Plans and Procedures for dealing with equipment breakdowns, potential spills, and any other abnormal situations, including notification to the Spills Action Centre, the Medical Officer of Health, and the District Manager, as applicable;
 - g) Procedures for receiving, responding, and recording public complaints, including recording any follow-up actions taken; and
 - h) As-built drawings or record drawings of the Sewage Works for stormwater works constructed on or after January 1, 2010 and where available for stormwater works constructed prior to January 1, 2010.
- 3.2.2 The Owner shall review and update the O&M Manual and ensure that access to a copy is readily available for each Stormwater Management Facility for the operational life of the works.
- 3.2.3 The Owner shall provide a copy of the O&M Manual to Ministry staff, upon request.
- 3.2.4 The Owner shall revise the O&M Manual to include procedures necessary for the operation and maintenance of any Sewage Works within the Authorized System that are established, altered, extended, replaced, or enlarged after the date of issuance of this approval prior to placing into service those Sewage Works.
- 3.2.5 For greater certainty, the O&M Manual may be a single document or a collection of documents that, when considered together, apply to all parts of the Authorized System.

- 3.3 On or before October 30, 2025, the Owner shall establish signage to notify the public at any Stormwater Management Facility identified in Schedule B that is a wet pond, dry pond, hybrid Facility, or engineered wetland. The signage shall include the following minimum information:
- 3.3.1 Identification that the site contains a Stormwater Management Facility;
 - 3.3.2 Identification of potential hazards and limitations of water use, as applicable;
 - 3.3.3 Identification of the purpose of the Facility;
 - 3.3.4 ECA approval number and/or asset ID; and
 - 3.3.5 Owner's contact information.
- 3.4 Prior to any maintenance of Sewage Works comprising the Authorized System, the Owner shall ensure that all applicable permits or authorizations have been obtained from Federal or Provincial agencies having legislative mandates relating to species at risk or water resources.

4.0 Monitoring Plan

- 4.1 On or before October 30, 2024 or within twenty-four (24) months of the date of the publication of the Ministry's monitoring guidance, whichever is later, the Owner shall develop and implement a monitoring plan for the Authorized System. The monitoring plan shall be:
- 4.1.1 Signed and approved by management with the authority delegated by the Owner to do so;
 - 4.1.2 Peer-reviewed by a third-party Qualified Person (QP), external to the development of the Monitoring Plan, to verify the adequacy of the Monitoring Plan in complying with conditions 4.4 and 4.5 of Schedule E. The results of the peer review shall include:
 - a) Written confirmation from the QP that they have the experience and qualifications to carry out the work; and
 - b) Written confirmation from the QP of the adequacy of the Monitoring Plan.
- 4.2 The Owner, or a QP designated by the Owner, may jointly develop the Monitoring Plan in partnership with Owner(s) of other Municipal Stormwater Management Systems as long as the Municipal Stormwater Management Systems are within the same watershed.

- 4.3 The Owner shall ensure the Monitoring Plan is implemented and any resulting monitoring data is recorded in an electronic database.
- 4.4 The Monitoring Plan shall include:
- 4.4.1 Procedures to verify that the operational performance of the Authorized System is as designed/planned;
 - 4.4.2 Procedures to assess the environmental impact of the Municipal Stormwater Management System; and
 - 4.4.3 Procedures for any corrective action that may be required to address any performance deficiencies or environmental impacts identified from above conditions 4.4.1 or 4.4.2.
- 4.5 The Monitoring Plan shall also include, but not be limited to:
- 4.5.1 Identification of the Sewage Works to be monitored, including outlets and any works that provide quality and/or quantity control;
 - 4.5.2 Identification of the key receivers to be monitored within the Owner's municipal boundaries and the monitoring locations;
 - 4.5.3 Consideration of relevant municipal land use and environmental planning documents (e.g., Stormwater Management Master Plan, Class Environmental Assessment Project, asset management plan, subwatershed studies, and planned development);
 - 4.5.4 Characterization of water quality and quantity conditions and identification of water users to be protected, based on conditions 4.5.2 and 4.5.3;
 - 4.5.5 Identification of water quality and quantity goals, as it relates to Stormwater management, using the information collected in condition 4.5.4;
 - 4.5.6 Identification of locations of rainfall gauges to be used;
 - 4.5.7 Identification of inspections, measurements, sampling, analysis and/or other monitoring activities that were used as the basis for or will inform future updates to the procedures identified in condition 4.4.
 - 4.5.8 Details respecting a monitoring program for the works and the receivers, that includes, at a minimum:
 - a) Hydrological, chemical, physical, and biological parameters, as appropriate, in alignment with the goals;

- b) Ensures water level of the Stormwater Measurement Facilities, excluding MTDs, are measured at regular intervals with a water level gauge;
 - c) Monitoring methodology, including the frequency and protocols for sampling, analysis, and recording, with consideration of dry and wet weather events and timing of sampling during wet weather events.
 - d) Ensures that the time of all samples or measurements are recorded.
- 4.5.9 An implementation plan for the monitoring program that identifies timelines and, if the monitoring occurs on a rotational basis, provides a description of the rotational schedule and associated works.
- 4.5.10 Includes a summary of all monitoring data along with an interpretation of the data and any conclusion drawn from the data evaluation about the need for future modifications to the Authorized System or system operations, and
- 4.5.11 Consideration of adaptive management practices (e.g., evidence-based decision making).
- 4.6 The Owner shall ensure that the Monitoring Plan is updated where necessary within twelve (12) months of any Alteration to the Authorized System, or more frequently as required by the Monitoring Plan.
- 4.7 The Owner shall, on request and without charge, provide a copy of the Monitoring Plan and any resulting monitoring data to members of the public.

5.0 Reporting

- 5.1 The Owner shall, upon request, make all manuals, plans, records, data, procedures and supporting documentation available to Ministry staff.
- 5.2 The Owner shall prepare an annual performance report for the Authorized System that:
 - 5.2.1 Is submitted to the Director on or before April 30th of each year and covers the period from January 1st to December 31st of the preceding calendar year.
 - a) For clarity, the first report shall cover the period of January 1, 2023 to December 31st, 2023 and be submitted to the Director on or before April 30th, 2024.

- 5.2.2 Includes a summary of all monitoring data along with an interpretation of the data and an overview of the condition and operational performance of the Authorized System and any Adverse Effects on the Natural Environment;
- 5.2.3 Includes a summary and interpretation of environmental trends based on all monitoring information and data for the previous five (5) years;
- 5.2.4 Includes a summary of any operating problems encountered and corrective actions taken;
- 5.2.5 Includes a summary of all inspections, maintenance, and repairs carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Authorized System;
- 5.2.6 Includes a summary of the calibration and maintenance carried out on all monitoring equipment;
- 5.2.7 Includes a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints;
- 5.2.8 Includes a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat;
- 5.2.9 Includes a summary of all spills or abnormal discharge events;
- 5.2.10 Includes a summary of actions taken, including timelines, to improve or correct performance of any aspect of the Authorized System; and
- 5.2.11 Includes a summary of the status of actions for the previous reporting year.
- 5.3 The report described in condition 5.2 shall be:
 - 5.3.1 Made available, on request and without charge, to members of the public who are served by the Authorized System; and
 - 5.3.2 Made available, by June 1st of the same reporting year, to members of the public without charge by publishing the report on the Internet, if the Owner maintains a website on the Internet.

6.0 Record Keeping

- 6.1 The Owner shall retain for a minimum of ten (10) years from the date of their creation:
 - 6.1.1 All records, reports and information required by this Approval and related to or resulting from Alterations to the Authorized System, and
 - 6.1.2 All records, report and information related to the operation, maintenance and monitoring activities required by this Approval.
- 6.2 The Owner shall update, within twelve (12) months of any Alteration to the Authorized System being placed into service, any drawings maintained for the Municipal Stormwater Management System to reflect the Alteration of the Sewage Works, where applicable.

7.0 Review of this Approval

- 7.1 No later than the date specified in Condition 1 of Schedule A of this Approval, the Owner shall submit to the Director an application to have the Approval reviewed. The application shall, at minimum:
 - 7.1.1 Include an updated description of the Sewage Works within the Authorized System, including any Alterations to the Sewage Works that were made since the Approval was last issued; and
 - 7.1.2 Be submitted in the manner specified by Director and include any other information requested by the Director.

8.0 Source Water Protection

- 8.1 The Owner shall ensure that any Alteration in the Authorized System is designed, constructed, and operated in such a way as to be protective of sources of drinking water in Vulnerable Areas as identified in the Source Protection Plan, if available.
- 8.2 The Owner shall prepare a "Significant Drinking Water Threat Assessment Report for Proposed Alterations" for the Authorized System on or before October 30, 2023 that includes, but is not necessarily limited to:
 - 8.2.1 An outline of the circumstances under which proposed Alterations could pose a Significant Drinking Water Threat based on the Director's Technical Rules established under the CWA.
 - 8.2.2 An outline of how the Owner assesses the proposed Alterations to identify drinking water threats under the CWA.

- 8.2.3 For any proposed Alteration a list of components, equipment, or Sewage Works that are being altered and have been identified as a Significant Drinking Water Threat.
- 8.2.4 A summary of design considerations and other measures that have been put into place to mitigate risks resulting from construction or operation of the components, equipment, or Sewage Works identified in condition 8.2.3, such as those included in the Standard Operating Policy for Sewage Works.
- 8.3 The Owner shall make any necessary updates to the report required in condition 8.2 at least once every twelve (12) months.
- 8.4 Any components, equipment, or Sewage Works added to the report required in condition 8.2 shall be included in the report for the operational life of the Sewage Works.
- 8.5 Upon request, the Owner shall make a copy of the report required in condition 8.2 available to the Ministry or Source Protection Authority staff.

9.0 Storm Sewer Catchment Asset Inventory

- 9.1 The Owner shall prepare and submit to the Director an inventory of the storm sewersheds and classify in accordance with Tables E1 and E2, on or before October 30, 2025. Minimum classification of the level of Stormwater management is as follows:
- 9.1.1 Level A – Stormwater receives treatment for water quality and quantity prior to discharge to the environment;
- 9.1.2 Level B – Stormwater receives treatment for water quality but no water quantity prior to discharge to the environment; and
- 9.1.3 Level C – Stormwater receives no treatment for water quality prior to discharge to the environment.

Table E1. Storm Sewershed and Associated Treatment

Outlet Asset ID	Sewershed Catchment Area (ha)	Tributary or Receiver	Subwatershed/ Watershed	Stormwater Management Level (A, B or C)	Treatment provided by other municipality (if applicable)

Table E2. Summary of Storm Sewersheds

Stormwater Management Level	Total Number of Outlets to Environment	Total Sewershed Catchment Area (ha)

Level A		
Level B		
Level C		

- 9.2 Within 12 (twelve) months of the date that the inventory required in condition 9.1 is submitted to the Director, the document(s) or file(s) referenced in Table B1 of Schedule B of this Approval shall be updated to identify the storm sewersheds for each outlet and their level of Stormwater management.

Schedule F: Residue Management

System Owner	South Stormont, The Corporation of the Township of
ECA Number	186-S701
System Name	South Stormont Stormwater Management System
ECA Issue Date	November 28th, 2022

1.0 Residue Management System

1.1 Not Applicable.

Appendix A – Stormwater Management Criteria

1.0 Applicability of Criteria

- 1.1 The criteria listed under Table A1 of this Appendix applies to all drainage areas greater than 0.1 ha, with the construction erosion and sediment control criteria applying also to sites <0.1 ha;
- 1.2 Despite condition 1.1 of Appendix A, if some or all of the criteria listed under Table A1 of this Appendix have been assessed for and addressed in other adjacent developed lands to the project site through a subwatershed plan or equivalent study, then those criteria may not be applicable to the project site.

Table A1. Performance Criteria

Water Balance ^[1]	FOR DEVELOPMENT SCENARIOS ^[2] Assessment Studies: i) Control ^[3] as per the criteria identified in the water balance assessment completed in one or more of the following studies ^[15], if undertaken: a watershed/subwatershed plan; Source Protection Plan (Assessment Report component); Master Stormwater Management Plan, Master Environmental Servicing Plan; Class EA, or similar approach that transparently considers social, environmental and financial impacts; or local site study including natural heritage, Ecologically significant Groundwater Recharge Areas (EGRA), inflow and infiltration strategies. The assessment should include sufficient detail to be used at a local site level and consistent with the various level of studies; OR IF Assessment Studies in i) NOT completed: ii) Control ^[3] the recharge ^[4] to meet Pre-development ^[5] conditions on property; OR iii) Control ^[3] the runoff from the 90th percentile storm event. Lake Simcoe Watershed Municipalities: iv) Control ^[3] as per the evaluation of anticipated changes in water balance between Pre-development and post-development assessed through a Stormwater management plan in support of an application for Major Development ^[6]. The assessment should include sufficient detail to be used at a local site level. If it is demonstrated, using the approved water balance estimation methods ^[7], that the site’s post to Pre-development water balance cannot be met, and Maximum Extent Possible ^[8] has been attained, the proponent may use Lake Simcoe and Region Conservation Authority’s (LSRCA) Recharge Compensation Program ^[9]. FOR RETROFIT SCENARIOS ^[10] Assessment Studies: i) Control as per criteria identified in the water balance assessment completed in one or more of the following studies: a watershed/subwatershed plan, Source Protection Plan (Assessment Report component), Master Stormwater Management Plan, Master Environmental Servicing Plan,
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	Class EA, or local site study including natural heritage, EGRA, inflow and infiltration strategies, if undertaken. The assessment should include sufficient detail to be used at a local site level and consistent with the various level of studies; OR ii) If constraints ^[11] identified in i), then control ^[3] as per Maximum Extent Possible ^[8] based on environmental site feasibility studies or address local needs^[14]. IF Assessment Studies in i) NOT completed: iii) Control ^[3] the recharge ^[4] to meet Pre-development ^[5] conditions on property; OR iv) Control ^[3] the runoff from the 90th percentile storm event.
Water Quality ^[1]	FOR DEVELOPMENT SCENARIOS ^[2] All of the following criteria must be met for development scenarios: General: i) Characterize the water quality to be protected and Stormwater Contaminants (e.g., suspended solids, nutrients, bacteria, water temperature) for potential impact on the Natural Environment, and control as necessary, OR ii) As per the watershed/subwatershed plan, similar area-wide Stormwater study, or Stormwater management plan to minimize, or where possible, prevent increases in Contaminant loads and impacts to receiving waters. Suspended Solids: i) Control ^[3] 90th percentile storm event and if conventional methods are necessary, then enhanced, normal, or basic levels of protection (80%, 70%, or 60% respectively) for suspended solids removal (based on the receiver). Phosphorus: i) Minimize existing phosphorus loadings to Lake Erie and its tributaries, as compared to 2018 or conditions prior to the proposed development, OR ii) Minimize phosphorus loadings to Lake Simcoe and its tributaries. Proponents with development sites located in the Lake Simcoe watershed shall evaluate anticipated changes in phosphorus loadings between Pre-development and post-development through a Stormwater management plan in support of an application for Major Development ^[6]. The assessment should include sufficient detail to be used at a local site level. If, using the approved phosphorus budget tool ^[12], it is demonstrated that the site's post to Pre-development phosphorus budget cannot be met, and Maximum Extent Possible ^[8] has been attained, the proponent may use LSRCA's Phosphorus Offsetting Policy ^[9]. FOR RETROFIT SCENARIOS ^[10] i) Improve the level of water quality control currently provided on site; AND ii) As per the 'Development' criteria for Suspended Solids, OR iii) If 'Development' criteria for Suspended Solids cannot be met, Works are designed as a multi-year retrofit project, in accordance with a rehabilitation study or similar area-wide Stormwater study, such that the completed treatment train will achieve the 'Development' criteria for Suspended Solids or local needs^[14], within ten (10) years; OR

	iv) If constraints ^[11] identified in ii) and iii), then control ^[3] as per Maximum Extent Possible ^[8] based on environmental site feasibility studies.
Erosion Control (Watershed) ^[1]	FOR DEVELOPMENT SCENARIOS ^[8] i) As per erosion assessment completed in watershed/subwatershed plan, Master Stormwater Management Plan, Master Environmental Servicing Plan, Drainage Plan, Class EA, local site study, geomorphologic study, or erosion analysis; OR ii) As per the Detailed Design Approach or Simplified Design Approach methods described in the Stormwater Management Planning and Design Manual: a. The Detailed Design Approach may be selected by the proponent for any development regardless of size and location within the watershed provided technical specialists are available for the completion of the technical assessments; or considered more appropriate than the simplified approach given the size and location of the development within the watershed and the sensitivity of the receiving waters in terms of morphology and habitat function. b. The Simplified Design Approach may be adopted for watersheds whose development area is generally less than twenty hectares AND either one of the following two conditions apply: 1) The catchment area of the receiving channel at the point-of-entry of Stormwater drainage from the development is equal to or greater than twenty-five square kilometres; or 2) Meets the following conditions: • The channel bankfull depth is less than three quarters of a metre; • The channel is a headwater stream; • The receiving channel is not designated as an Environmentally Sensitive Area (ESA) or Area of Natural or Scientific Interest (ANSI) and does not provide habitat for a sensitive aquatic species; • The channel is stable to transitional; and • The channel is slightly entrenched; OR iii) In the absence of a guiding study, detain at minimum, the runoff volume generated from a 25 mm storm event over 24 to 48 hours. FOR RETROFIT SCENARIOS ^[10] i) If approaches i-iii) under ‘Development Scenarios’ are not feasible as per identified constraints ^[11] , then improve the level of erosion control ^[3] currently provided on site to Maximum Extent Possible ^[8] based on environmental site feasibility studies or address local needs ^[14] .
Water Quantity (Minor and Major System) ^[1]	i) As per municipal standards, Master Stormwater Management Plan, Class EA, Individual EA and/or ECA, as appropriate for the type of project ^[13]
Flood Control (Watershed Hydrology) ^[1]	FOR DEVELOPMENT SCENARIOS ^[2] i) Manage peak flow control as per watershed/subwatershed plans, municipal criteria being a minimum 100 year return storm (except for site-specific considerations and proximity to receiving water bodies), municipal guidelines and standards, Individual/Class EA, ECA, Master Plan, as appropriate for the type of project ^[13] .

	FOR RETROFIT SCENARIOS ^[10] i) If approaches i) under ‘Development Scenarios’ are not feasible as per identified constraints ^[11], then improve the level of flood control ^[3] currently provided on site to Maximum Extent Possible ^[8] based on environmental site feasibility studies.
Construction Erosion and Sediment Control	i) Manage construction erosion and sediment control through development and implementation of an erosion and sediment control (ESC) plan. The ESC plan shall: a. Have regard to Canadian Standards Association (CSA) W202 Erosion and Sediment Control Inspection and Monitoring Standard (as amended); OR b. Have regard to Erosion and Sediment Control Guideline for Urban Construction 2019 by TRCA (as amended). ii) Be prepared by a QP for sites with drainage areas greater than 5 ha or if specified by the Owner for a drainage lower than 5 ha. iii) Installation and maintenance of the ESC measures specified in the ESC plan shall have regard to CSA W208:20 Erosion and Sediment Control Installation and Maintenance (as amended). iv) For sites with drainage areas greater than 5 ha, a QP shall inspect the construction ESC measures, as specified in the ESC plan.
Footnote	1. Where the opportunity exists on your project site or the same subwatershed, reallocation of development elements may be optimal for management as described in footnote ^[3]. 2. Development includes new development, redevelopment, infill development, or conversion of a rural cross-section into an urban cross-section. 3. Stormwater volumes generated from the geographically specific 90th percentile rainfall event on an annual average basis from all surfaces on the entire site are targeted for control. Control is in the following hierarchical order, with each step exhausted before proceeding to the next: 1) retention (infiltration, reuse, or evapotranspiration), 2) LID filtration, and 3) conventional Stormwater management. Step 3, conventional Stormwater management, should proceed only once Maximum Extent Possible ^[8] has been attained for Steps 1 and 2 for retention and filtration. 4. Recharge is the infiltration and movement of surface water into the soil, past the vegetation root zone, to the zone of saturation, or water table. 5. Pre-development is defined as the more stringent of the two following scenarios: 1) a site’s existing condition, or 2) as defined by the local municipality. 6. Major Development has the same meaning as in the Lake Simcoe Protection Plan, 2009. 7. Currently, the approved tool by LSRCA for calculating the water balance is the Thornthwaite-Mather Method. Other tools agreed upon by relevant approval agencies (e.g., LSRCA, municipality, or Ministry) may also be acceptable, subject to written acceptance by the Director. 8. Maximum Extent Possible means maximum achievable Stormwater volume control through retention and LID filtration engineered/landscaped/technical Stormwater practices, given the site constraints ^[11]. 9. Information pertaining to LSRCA’s Recharge Compensation Program and Phosphorus Offsetting Policy is available on LSRCA’s website (lsrca.on.ca), or in “Water Balance Recharge Policy for the Lake Simcoe Protection Plan”, dated July 2021, and prepared by Lake Simcoe Region Conservation Authority and “Phosphorus Offsetting Policy”, dated July 2021, and prepared by Lake Simcoe Region Conservation Authority.

	10. Retrofit means: 1) a modification to the management of the existing infrastructure, 2) changes to major and minor systems, or 3) adding Stormwater infrastructure, in an existing area on municipal right-of-way, municipal block, or easement. It does not include conversion of a rural cross-section into an urban cross-section. 11. Site constraints must be documented. A list of site constraints can be found in Table A2. 12. Tools for calculating phosphorus budgets may include the Ministry’s Phosphorus Tool, the Low Impact Development Treatment Train Tool developed in partnership by TRCA, LSRCA, and Credit Valley Conservation (CVC), or other tools agreed upon by the LSRCA and other relevant approval agencies including the municipality. 13. Possible to look at combined grey infrastructure and LID system capacity jointly. 14. Local needs include requirements for water quality, erosion, and/or water balance retrofits identified by the owner through ongoing operation and maintenance of the stormwater system, including inspection of local receiving systems and the characterization of issues requiring remediation through retrofit controls. 15. All studies shall conform with Ministry policies. If any conclusions in the studies negate policy, then the project will require a direct submission to the Ministry for review through an application pertaining to a Schedule C Notice.
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Table A2. Stormwater Management Practices Site Constraints

Site Constraints	
a)	Shallow bedrock ^[1] , areas of blasted bedrock ^[2] , and Karst;
b)	High groundwater ^[1] or areas where increased infiltration will result in elevated groundwater levels which can be shown through an appropriate area specific study to impact critical utilities or property (e.g., susceptible to flooding);
c)	Swelling clays ^[3] or unstable sub-soils;
d)	Contaminated soils (e.g., brownfields);
e)	High Risk Site Activities including spill prone areas;
f)	Prohibitions and or restrictions per the approved Source Protection Plans and where impacts to private drinking water wells and /or Vulnerable Domestic Well Supply Areas cannot be appropriately mitigated;
g)	Flood risk prone areas or structures and/ or areas of high inflow and infiltration (I/I) where wastewater systems (storm and sanitary) have been shown through technical studies to be sensitive to groundwater conditions that contribute to extraneous flow rates that cause property flooding / Sewer back-ups;
h)	For existing municipal rights-of-way infrastructure (e.g., roads, sidewalks, utility corridor, Sewers, LID, and trails) where reconstruction is proposed and where surface and subsurface areas are not available based on a site-specific assessment completed by a QP;
i)	For developments within partially separated wastewater systems where reconstruction is proposed and where, based on a site-specific assessment completed by a QP, can be shown to: i Increase private property flood risk liabilities that cannot be mitigated through design; ii Impact pumping and treatment cost that cannot be mitigated through design; or

iii	Increase risks of structural collapse of Sewer and ground systems due to infiltration and the loss of pipe and/or pavement support that cannot be mitigated through design.
j)	Surface water dominated or dependent features including but not limited to marshes and/or riparian forest wetlands which derive all or a majority of their water from surface water, including streams, runoff, and overbank flooding. Surface water dominated or dependent features which are identified through approved site specific hydrologic or hydrogeologic studies, and/or Environmental Impact Statements (EIS) may be considered for a reduced volume control target. Pre-consultation with the MECP and local agencies is encouraged;
k)	Existing urban areas where risk to water distribution systems has been identified through assessments to meet applicable drinking water requirements, including Procedures F-6 and F-6-1, and substantiated by a QP through an appropriate area specific study and where the risk cannot be reasonably mitigated per the relevant design guidelines;
l)	Existing urban areas where risk to life, human health, property, or infrastructure has been identified and substantiated by a QP through an appropriate area specific study and where the risk cannot be reasonably mitigated per the relevant design guidelines;
m)	Water reuse feasibility study has been completed to determine non-potable reuse of Stormwater for onsite or shared use;
n)	Economic considerations set by infrastructure feasibility and prioritization studies undertaken at either the local/site or municipal/system level ^[4] .
Footnote: 1. May limit infiltration capabilities if bedrock and groundwater is within 1m of the proposed Facility invert per Table 3.4.1 of the LID Stormwater Planning and Design Guide (2010, V1.0 or most recent by TRCA/CVC). Detailed assessment or studies are required to demonstrate infiltration effects and results may permit relaxation of the minimum 1m offset. 2. Where blasting is more localized, this constraint may not be an issue elsewhere on the property. While infiltration-based practices may be limited in blasted rock areas, other forms of LID, such as filtration, evapotranspiration, etc., are still viable options that should be pursued. 3. Swelling clays are clay soils that is prone to large volume changes (swelling and shrinking) that are directly related to changes in water content. 4. Infrastructure feasibility and prioritization studies should comprehensively assess Stormwater site opportunities and constraints to improve cost effectiveness, environmental performance, and overall benefit to the receivers and the community. The studies include assessing and prioritizing municipal infrastructure for upgrades in a prudent and economically feasible manner.	

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Appendix B – Stormwater Management Facility List

Stormwater Management Facilities

Facility ID	Service Location	Description
SWP1	Arrowhead Ph 1-6	Dry Pond
SWP2	Arrowhead Phase 7	Wet Pond
SWP3	Chase Meadows	Wet Pond
SWP4	Parkway Estates	Wet Pond
SWP5	Malyon Estates	Dry Pond with Stormceptor
SWP6	St. Andrews Firehall	Dry Pond with Stormceptor
SWP7	Fenton Farms	Wet Pond
SWP8	Township Office/OPP	Dry Pond
SWP9	East Industrial Park	Wet Pond
SWP10	EMS Station	Dry Pond
SWP11	Glenco	Wet Pond
SWP12	John Chase	Wet Pond
SWP13	Long Sault Drain	Dry Pond
SWP14	Ingleside Medical Clinic	StormTech Sc740
SWP15	Stonegate	Wet Pond

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Appendix C - Significant Drinking Water Threat Assessment Report

	Stormwater Management Facilities Significant Drinking Water Threat Assessment	2025-Mar-11 Rev #01
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1. Introduction

This Significant Drinking Water Threat Assessment Report has been prepared in accordance with the requirements of Environmental Compliance Approval #186-S701 for the Township of South Stormont Stormwater Management Systems.

2. Facility Description

2.1. SWP1 – Arrowhead Estates (Phase 1-6)

Facility Type:	SWP1 - Stormwater Management Dry Pond
Location:	45.033734, -74.872122
Watershed/Sub-Watershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.034088, -74.871793
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm Quantity:	10—yr storm
Reference ECA(S):	5256-73PGZW
Reference Works as part of Treatment Train:	
Brief Description:	Dry pond with a bottom outlet pipe with a diameter of 450 millimetres ditch discharging into a ditch inlet manhole; a 600 millimetre by 1200 millimetre ditch inlet manhole with the bottom of the grate opening at 0.75 metres from the bottom of the pond, outletting into a 900 millimetre diameter pipe; a 12 metre long, 900 millimetre diameter pipe emptying into a ditch via a rip rap area; a 3 metre by 1.5 metre rip area as per OPSD 810.01
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	6,637 cubic metres of storage capacity

2.2. SWP2 – Arrowhead Estates (Phase 7)

Facility Type:	SWP2 - Stormwater Management Wet Pond
Location:	45.034974, -74.878517
Watershed/Subwatershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.035189, -74.878372
Catchment Area:	2.41 ha
Level of Treatment for Suspended Solids:	Level 2 (70% suspended solids removal)
Level of Volume Control:	
Design Storm Quantity:	100-yr Storm
Reference ECA(s):	9409-9YVKNX
Brief Description:	Wet pond with a sediment forebay servicing Matthew Kieran Crescent and an easement, receiving inflow from storm sewers, discharging via an existing County Road 36 Roadside ditch, ultimately to the Raisin River; catchment area 2.41 hectares.
Receive Emergency Sanitary Overflows:	No

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Notes/Additional Information:	Permanent pool volume 143 cubic metres, extended detention volume 99 cubic metres, total storage volume 367 cubic metres, total depth 1.4m at permanent pool volume	

2.3. SWP3 – Chase Meadows

Facility Type:	SWP3 - Stormwater Management Wet Pond
Location:	45.034156, -74.884061
Watershed/Subwatershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.033969, -74.883390
Catchment Area:	11.5 ha
Level of Treatment for Suspended Solids:	Level 2 (70% suspended solids removal)
Level of Volume Control:	
Design Storm Quantity:	100-yr storm
Reference ECA(s):	2903-9BUQE9
Reference Works as part of Treatment Train:	
Brief Description	Wet pond with a sediment forebay, draining via an existing ditch on County Road 36 and existing 600 mm diameter culvert under Road 36 to South Branch of the Raisin River and the St. Lawrence River; catchment area 11.5 hectares
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Permanent pool volume 1385 cubic metres, extended detention volume 465 cubic metres, total storage volume 3100 cubic metres, total depth 3.3m at permanent pool volume

2.4. SWP4 – Parkway Estates

Facility Type:	SWP4 - Stormwater Management Wet Pond
Location:	45.039679, -74.910800
Watershed/Subwatershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.039402, -74.912348
Catchment Area:	28.42 ha
Level of Treatment for Suspended Solids:	Level 2 (70% suspended solids removal)
Level of Volume Control:	
Design Storm Quantity:	100-yr storm
Reference ECA(s):	7828-93MM94
Reference Works as part of Treatment Train:	
Brief Description	Wetland with an open ditch inlet into a forebay, discharging into existing roadside ditches prior to falling into the St. Lawrence River; one (1) 200mm diameter bottom draw outlet pipe with perforated raised section capped, located in a plunge pool area of the pond to discharge extended detention volume into a 600mmX1200mm grated catchbasin/control manhole complete with a 173mm diameter orifice inlet having invert elevation at 78.80m ASL (permanent water level), for a controlled flow rate ranging from 0.0cu.m./s to 0.028cu.m./sec; one (1) 450mm diameter outlet pipe, from a catchbasin outlet/outfall from the control manhole into an approximately 4.5m wide 1.5m deep roadside ditch, ultimately to discharge into an existing

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	open ditch/water course, a 3.6m wide X 600mm deep emergency spillway protected with stone riprap to provide for high water storms in case of blockage of the normal outlets, to discharge into the existing water course.	
Receive Emergency Sanitary Overflows:	No	
Notes/Additional Information:	Total volume of 7969 cubic metres at 1.3m depth, permanent pool volume of 1902 cubic metres, extended detention volume of 1180 cubic metres	

2.5. SWP5 – Malyon Estates

Facility Type:	SWP5 - Stormwater Management Dry Pond
Location:	45.095014, -74.807817
Watershed/Subwatershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to Main Branch of the Raisin River
Outlet Location:	45.095187, -74.808316
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm Quantity:	
Reference ECA(s):	
Reference Works as part of Treatment Train:	
Brief Description	Hydrocarbon Separator "CDS Model 2015-4.c"
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Capable of treating 83% of annual runoff

2.6. SWP6 – St. Andrews Fire Hall

Facility Type:	SWP6 - Stormwater Management Dry Pond
Location:	45.095736, -74.793837
Watershed/Subwatershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to Main Branch of Raisin River
Outlet Location:	45.095858, -74.793594
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm Quantity:	
Reference ECA(s):	
Reference Works as part of Treatment Train:	
Brief Description	
Receive Emergency Sanitary Overflows:	
Notes/Additional Information:	

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2.7. SWP7 – Fenton Farms

Facility Type:	SWP7 - Stormwater Management Wet Pond
Location:	45.038033, -74.872120
Watershed/Subwatershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.037934, -74.871809
Catchment Area:	5.56 ha
Level of Treatment for Suspended Solids:	Level 3 (80%, Enhanced)
Level of Volume Control:	
Design Storm Quantity:	100-year storm
Reference ECA(s):	4382-C7HKNN
Reference Works as part of Treatment Train:	
Brief Description	Wet pond with sediment forebay, located on Block 45, an inlet structure consisting of a 675 millimetre diameter storm inlet pipe and a concrete headwall, an outlet structure comprised of a 150 millimetre pipe complete with a 66 millimetre diameter orifice and a 450 millimetre diameter outlet pipe complete with a 300 millimetre diameter orifice, allowing a maximum discharge of 165.15 litres per second under the 100- year storm event to the side ditch of County Road 36.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Storage volume of 712 cubic metres, extended detention volume of 222 cubic metres, total storage volume of 1321 cubic metres including permanent pool depth of 2.5m

2.8. SWP8 – Township Office

Facility Type:	SWP8 - Stormwater Management Dry Pond
Location:	45.030230, -74.889014
Watershed/Subwatershed:	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.030061, -74.888674
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm Quantity:	
Reference ECA(s):	
Reference Works as part of Treatment Train:	
Brief Description	
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

2.9. SWP9 – East Industrial Park Wet Pond

Facility Type:	Wet Pond
Location:	45.038460, -74.838911
Watershed/Subwatershed:	St. Lawrence River

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Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.038788, -74.839201
Catchment Area:	11.48 ha
Level of Treatment for Suspended Solids:	80% Removal
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	186-S701
Brief Description:	Stormwater is directed towards the facility via roadside ditches with the quality and quantity treatment provided by the facility forebay, storage volumes and outlet controls (weirs & orifices). A 104 mm diameter orifice, and a broad-crested weir will be used to control the flow to allowable levels
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Permanent pool storage 662 m ³ , extended detention volume of 462 m ³ . Total depth at permanent pool volume (Forebay) 1.05m

2.10. SWP10 – EMS Station – Long Sault Dry Pond

Facility Type:	Dry Pond
Location:	45.038132, -74.903447
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of Discharge:	Surface Discharge to South Branch of Raisin River
Outlet Location:	45.038137, - 74.903356
Catchment Area:	0.2 ha
Level of Treatment for Suspended Solids:	70%
Level of Volume Control:	
Design Storm:	100-year storm
Reference ECA(s):	
Brief Description:	Surface water collected through a series of on-site swales directed to the pond. Pond discharge is controlled through 75mm orifice plug in 250mmcsp, directed to roadside ditch on Moulinette Road.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

2.11. SWP11 – Glenco Subdivision Wet Pond

Facility Type:	Wet Pond
Location:	45.1222955, -74.821458
Watershed/Subwatershed	Raisin River/St. Lawrence River
Receiver of Discharge:	Surface discharge to Bonville Drain
Outlet Location:	45.122436, -74.821357
Catchment Area:	8.2 ha
Level of Treatment for Suspended Solids:	80%
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	
Brief Description:	Stormwater will be directed through open ditches to the forebay, open ditch to pond and then outlet. The outlet of the stormwater management facility features a

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single ditch inlet with outlet storm sewer into the Bonville Drain. A 275mm diameter orifice installed on the outlet pipe will be used to control both storm events to acceptable levels.

Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Based on the stage-storage characteristics of the pond, the extended storage represents a water depth of 160mm above the permanent pool and provides an extended storage volume of 271.47 m3. The proposed 85mm diameter orifice will provide an extended storage detention time of 24.4 hours. The permanent storage represents a water depth of 150mm above the bottom of the pond and provides a permanent storage volume of 239.85 m3

2.12. SWP12 – John Chase Subdivision Wet Pond

Facility Type:	Wet Pond
Location:	45.035130, -74.881693
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of Discharge:	Surface Discharge to Forrester Branch Municipal Drain/South Branch of Raisin River
Outlet Location:	45.035397, -74.881193
Catchment Area:	10.04 ha
Level of Treatment for Suspended Solids:	80%
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	
Brief Description:	Stormwater runoff from the proposed lots is directed to a stormwater collection system (rear yard swales, rear yard catchbasins, and storm sewers) that ultimately discharge to the new wet pond consisting of 401.50m3 of extended detention storage and 1582.17m3 of permanent pool storage. A 100 mm diameter orifice, a ditch inlet (acting as a broad-crested weir) and a 385mm diameter orifice are used to control the flow to allowable levels.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

2.13. SWP13 – Long Sault Drain Dry Pond

Facility Type:	Dry Pond
Location:	45.040701, -74.894505
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.041973, -74.890087
Catchment Area:	108 ha
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	
Reference ECA(s):	7989-8L2L4V
Brief Description:	1. Dry pond having active storage volume of 24,830 m ³ complete with containment berm discharging to Forrester Branch of the South Raisin River through 900mm dia. CSP pond outlet structure.

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2. 400m long grassed offtake ditch along the south and east sides of the stormwater dry pond.
3. Off take ditch within the CNR corridor to outlet

Receive Emergency Sanitary	No
Overflows:	
Notes/Additional Information:	

2.14. SWP14 – St. Lawrence Medical Clinic Stormtech Sc740

Facility Type:	
Location:	44.996142, -74.987785
Watershed/Subwatershed	St. Lawrence River
Receiver of Discharge:	Subsurface discharge to SDG County storm sewer County Road 14
Outlet Location:	44.996 069, – 74.987846
Catchment Area:	0.44 ha
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	
Brief Description:	StormTech SC740 – Underground storage system
Receive Emergency Sanitary	No
Overflows:	
Notes/Additional Information:	

2.15. SWP15 – Stone Gate Subdivision Wet Pond

Facility Type: Wet Pond	
Location:	45.089760, – 74.774978
Watershed/Subwatershed	St.Lawrence River /Raisin River
Receiver of Discharge:	McIntosh Drain
Outlet Location:	45.090317, – 74.774730
Catchment Area:	11.56 ha
Level of Treatment for Suspended Solids:	80%
Level of Volume Control:	
Design Storm:	
Reference ECA(s):	2446-APMGUD
Brief Description:	Wet pond with sediment forebay including permanent pool volume of 1185 cu.m. discharging via (2) 450mm dia. outlet pipes to McIntosh Municipal Drain.
Receive Emergency Sanitary	No
Overflows:	
Notes/Additional Information:	

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2.16. Contact List

In the event of an incident involving the stormwater management facilities, the following Township staff should be contacted:

Derek McMillian
Director of Public Works
Township of South Stormont
dcmillan@southstormont.ca

Mark Zoppas
Manager of Environmental Services
Township of South Stormont
mark@southstormont.ca

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3. Assessment of Current Risks

A map of the existing stormwater management facilities is provided in **Figure #**.

A copy of the Source Water Protection Fact Sheet for the South Stormont Water Treatment Plant is provided in Appendix A.

8 of the stormwater facilities are within the intake protection zone of the South Stormont Water Treatment Plant. Any project that could potentially impacts the water quality released from one of these facilities needs to be assessed against the four specific requirements set out in O.Reg. 287/07 and the Rules for the completion of the Threats Assessment and Issues Evaluation components listed in the MECO's Drinking Water Threat Tables.

The Source Water Protection Area has been assessed with the following vulnerability scores (source: RRCA/SNC Drinking Water Source Protection):

Long Sault

Zone	Vulnerability Score
IPZ-1	7
IPZ-2	4.9

Newington

Vulnerable Area	Land Area by Vulnerability Score (ha)					
	10	8	7.2	6	4	2
WHPA-A	6.2	-	-	-	-	-
WHPA-B	21.5	0	-	0	-	-
WHPA-C	-	20.8	-	0	-	0
WHPA-D	-	-	-	0	47.7	0
WHPA-E	-	-	191.3	-	-	-

Finch

Vulnerable Area	Land Area by Vulnerability Score (ha)				
	10	8	6	4	2
WHPA-A	3.1	-	-	-	-
WHPA-B	206.7	0	0	-	-
WHPA-C	-	140.5	0	-	0
WHPA-D	-	-	0	320.6	0

Cornwall

Zone	Vulnerability Score
IPZ-1	8
IPZ-2	5.6

The following table provides a list of threats that need to be taken into consideration when making changes to the stormwater system within the IPZ zones of the South Stormont WTP.

Table 3-1: List of Threats

Circumstance	Description of the Threat	Vulnerable Zones that the Circumstances Apply	Chemicals Associated with the Circumstances	Risk Associated with the Circumstances and Vulnerable Zones
Where the drainage area is >100 ha and the predominant land use is high density residential.	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Aluminum or one or more of its compounds containing Aluminum, Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chloride, Chromium VI, Copper or one or more of its compounds containing Copper, Glyphosate, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, Nickel or one or more of its compounds containing Nickel, Nitrogen, one or more Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons, Phosphorus (total), Zinc or one or more of its compounds containing Zinc	Significant
Where the drainage area is >100 ha and the predominant land use is high density residential.	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1, IPZ-2, IPZ-3, WHPA-E with a score of 9	Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chromium VI, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, Nickel or one or more of its compounds containing Nickel, one or more Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons, Phosphorus (total), Zinc or one or more of its compounds	Significant
Where the drainage area is >100 ha and the predominant land use is Industrial/Commerical	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Aluminum or one or more of its compounds containing Aluminum, Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chloride, Chromium VI, Copper or one or more of its compounds containing Copper, Glyphosate, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, Nickel or one or more of its compounds containing Nickel, Nitrogen, one or more Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons, Phosphorus (total), Zinc or one or more of its compounds containing Zinc	Significant
Where the drainage area is >100 ha and the predominant land use is Industrial/Commerical	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1, IPZ-2, IPZ-3, WHPA-E with a score of 8	Arsenic or one or more of its compounds containing Arsenic, Mercury or one or more of its compounds containing Mercury	Significant



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Circumstance	Description of the Threat	Vulnerable Zones that the Circumstances Apply	Chemicals Associated with the Circumstances	Risk Associated with the Circumstances and Vulnerable Zones
Where the drainage area is >100 ha and the predominant land use is Industrial/Commerical	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1, IPZ-2, IPZ-3, WHPA-E with a score of 9	Aluminum or one or more of its compounds containing Aluminum, Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chloride, Chromium VI, Copper or one or more of its compounds containing Copper, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, Nickel or one or more of its compounds containing Nickel, Nitrogen, one or more Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons, Phosphorus (total), Zinc or one or more of its compounds containing Zinc	Significant
Where the drainage area is >100 ha and the predominant land use is Industrial/Commerical	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-2, IPZ-3, WHPA-E with a score of 8.1	Arsenic or one or more of its compounds containing Arsenic, Mercury or one or more of its compounds containing Mercury	Significant
Where the drainage area is >100 ha and the predominant land use is rural, agricultural, or low density residential.	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Aluminum or one or more of its compounds containing Aluminum, Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chloride, Chromium VI, Copper or one or more of its compounds containing Copper, Glyphosate, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, Nickel or one or more of its compounds containing Nickel, Nitrogen, one or more Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons, Phosphorus (total), Zinc or one or more of its compounds containing Zinc	Significant



Stormwater Management Facilities Significant Drinking Water Threat Assessment

2024-Nov-6
Rev #0

Circumstance	Description of the Threat	Vulnerable Zones that the Circumstances Apply	Chemicals Associated with the Circumstances	Risk Associated with the Circumstances and Vulnerable Zones
Where the drainage area is >100 ha and the predominant land use is rural, agricultural, or low density residential.	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1, IPZ-2, IPZ-3, WHPA-E with a score of 9	Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chromium VI, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, one or more Polycyclic Aromatic Hydrocarbons (PAHs)	Significant
Where the drainage area is 1 to < 10 ha and the predominant land use is high density residential.	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Arsenic or one or more of its compounds containing Arsenic, Mercury or one or more of its compounds containing Mercury	Significant
Where the drainage area is 1 to < 10 ha and the predominant land use is Industrial/Commercial	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chromium VI, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, one or more Polycyclic Aromatic Hydrocarbons (PAHs)	Significant
Where the drainage area is 10-100 ha and the predominant land use is high density residential.	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chromium VI, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, Nickel or one or more of its compounds containing Nickel, Nitrogen, one or more Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons F3 (C16-nC34)	Significant



**Stormwater Management Facilities
Significant Drinking Water Threat Assessment**

2024-Nov-6
Rev #0

Circumstance	Description of the Threat	Vulnerable Zones that the Circumstances Apply	Chemicals Associated with the Circumstances	Risk Associated with the Circumstances and Vulnerable Zones
Where the drainage area is 10-100 ha and the predominant land use is Industrial/Commercial	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Aluminum or one or more of its compounds containing Aluminum, Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chloride, Chromium VI, Copper or one or more of its compounds containing Copper, Glyphosate, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, Nickel or one or more of its compounds containing Nickel, Nitrogen, one or more Polycyclic Aromatic Hydrocarbons (PAHs), Petroleum Hydrocarbons F1 (nC6-nC10), Petroleum Hydrocarbons F4 (nC6-nC34), Petroleum Hydrocarbons F2 (nC10-nC16), Petroleum Hydrocarbons F3 (nC16-nC34), Phosphorus (total), Zinc or one or more of its compounds containing Zinc	Significant
Where the drainage area is 10-100 ha and the predominant land use is Industrial/Commercial	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1, IPZ-2, IPZ-3, WHPA-E with a score of 9	Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chromium VI, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, one or more Polycyclic Aromatic Hydrocarbons (PAHs)	Significant
Where the drainage area is 10-100 ha and the predominant land use is rural, agricultural, or low density residential.	The system is a storm water management facility designed to discharge storm water to groundwater or surface water.	IPZ-1 with a score of 10	Arsenic or one or more of its compounds containing Arsenic, Cadmium or one or more of its compounds containing Cadmium, Chromium VI, Lead or one or more of its compounds containing Lead, Mecoprop, Mercury or one or more of its compounds containing Mercury, one or more Polycyclic Aromatic Hydrocarbons (PAHs)	Significant

3.1. Procedure for the Significant Drinking Water Threat Assessment of New Facilities

1. Confirm that the infrastructure will be owned by the Municipality.
2. Consult the MECP Source Protection Information Atlas to determine if the proposed works are within the Intake Protection Zone for the South Stormont Water Treatment Plant.
 - a. If YES, proceed to evaluation of risk.
 - b. If NO, threats to the intake protection zone are not possible, and no further assessment is required.
3. Refer to the MECP Table of Threats to determine if activities associated with the proposed works meet the prescribed circumstances for further restrictions.
4. Consult the MECP's Source Protection Standard Operating Policies to identify mitigation measures and record the assessment in the attached tracking log (Appendix C).

3.2. Assessment of Alterations

In accordance with the Raisin Region Conservation Authority and South Nation Conservation Source Protection Plan, policy SEWG-7 addresses stormwater management facilities where they are a significant threat. Future facilities within the Intake Protection Zone 1 (IPZ-1) are prohibited. Development outside of IPZ-1 are to be reviewed to ensure comply with the recommendations of SEWG-7.

Refer to attached policy from the Raisin-South Nation Source Protection Region for recommendations of developments related to stormwater management facilities.

	Stormwater Management Facilities Significant Drinking Water Threat Assessment	2024-Nov-6 Rev #0
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Appendix A – Source Water Protection Fact Sheets



LONG SAULT

Drinking Water Source Protection

Ontario's Clean Water Act helps protect drinking water from source to tap by preventing contaminants from entering sources of drinking water like lakes, rivers and aquifers. Scientific studies were completed in 26 communities across our region to determine the local drinking water source. These studies also identify the activities that could adversely impact the quality of the drinking water source. The technical studies can be found in the comprehensive *Assessment Report*.

Long Sault

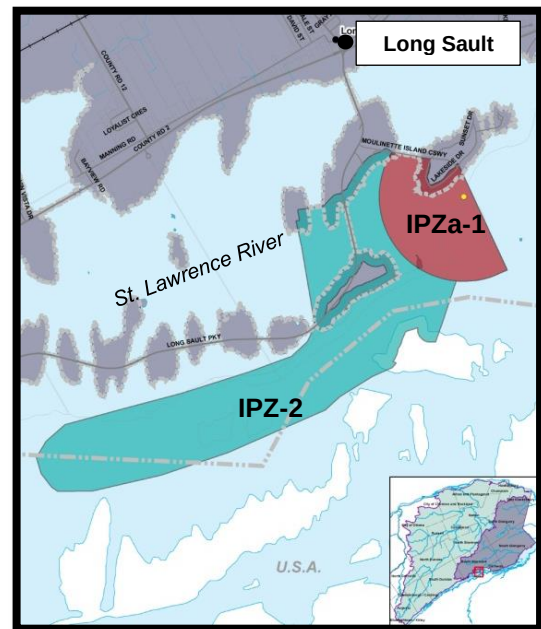
The Village of Long Sault municipal water supply and treatment facilities are located on Moulinette Island, south of the village of Long Sault. The intake is in the St. Lawrence River and is located approximately 137 m off shore. Water is drawn from a depth of approximately 8 m. The Long Sault/Ingleside Regional Water Treatment Plant is owned by the Township of South Stormont and is operated by Caneau Water and Sewage Operations Inc. This facility provides treated water to approximately 3500 residents of Long Sault, Ingleside, Wales and Osnabruck Centre.



Long Sault Intake, South Stormont

What is an Intake Protection Zone?

Surface water intakes draw raw water from rivers or lakes to provide drinking water. An Intake Protection Zone (IPZ) is an area of water or land that is located within a specific distance of an intake. Intake protection zones in smaller bodies of water may also include smaller rivers or tributaries.



Long Sault Intake Protection Zones (IPZs)

IPZ-1: This is the area closest to the intake and is the area of highest concern because contaminants entering this zone can reach the intake quickly with little or no dilution.

IPZ-2: Considered the secondary protection zone, this area is calculated based upon how far water can travel in a two-hour time period. The allocation is determined by viewing flows, wind, and transport pathways.

Vulnerability Scores

Vulnerability scores are used to indicate how at risk the drinking water source is to contamination. Scores in the Assessment Report are based upon the features of each intake. Characteristics such as the depth of the intake, distance of the intake from land, and the past water quality history affect its vulnerability. The higher the vulnerability score, the higher the level of concern for possible source water contamination, with a score of 10 being the highest score. The following table summarizes the vulnerability scores for each IPZ area.

Vulnerable Area	Vulnerability Score
IPZ-1	7
IPZ-2	4.9

Existing Water Quality

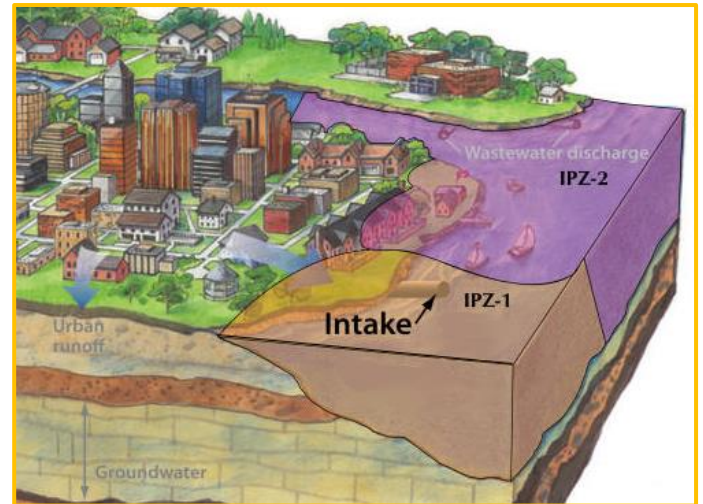
A review of water quality data from regular testing at the Long Sault intake confirms that there are no current issues or that adversely impact the source for drinking water.

Drinking Water Threats

There are certain activities which have been identified by the province as threats to drinking water sources. An activity may be considered a significant threat based on various circumstances: proximity to the well, vulnerability of the IPZ and the nature of the activity.

The following table lists the significant threat activities that pose a risk to the drinking water source in this area.

Drinking Water Threat
No significant drinking water threat activities



What is Next?

The Raisin-South Nation Source Protection Committee has completed its Source Protection Plan in consultation with local municipalities and stakeholders. This committee is made up of community members representing the public, farmers, industry, business and local municipalities.

The Source Protection Plan identifies ways to protect the quality and quantity of municipal drinking water sources in this part of eastern Ontario. The Plan addresses existing threats to drinking water and contains policies to prevent future risks.

The South Nation and Raisin Region Conservation Authorities will continue to work with municipalities and property owners to ensure local drinking water is safe.



NEWINGTON

Drinking Water Source Protection

Ontario's Clean Water Act helps protect drinking water from source to tap by preventing contaminants from entering sources of drinking water like lakes, rivers and aquifers. Scientific studies were completed in 26 communities across our region to determine the local drinking water source. These studies also identify the activities that could adversely impact the quality of the drinking water source. The technical studies can be found in the comprehensive *Assessment Report*.

Newington

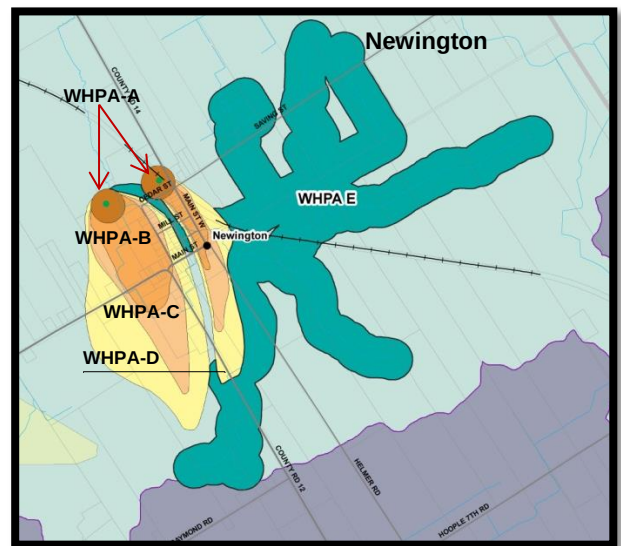
The village of Newington is located approximately 25 km northeast of Cornwall in the South Stormont Township. The Newington Well Supply is owned by the Township of South Stormont and operated by Caneau Water and Sewage Operations Inc. The Newington Well Supply contains 2 wells and serves a population of approximately 260 residents.



Drinking Well Supply, Newington

What is a Wellhead Protection Area?

A wellhead protection area (WHPA) is the area around a well where land use activities have the potential to affect the quality of water that flows into the well. The size and shape of a WHPA is determined by the amount of water being pumped and the direction and speed at which the groundwater travels through the aquifer to get to the well.



Newington Wellhead Protection Areas (WHPAs)

WHPA-A: 100 metre radius around the well. Contaminants could easily get into the drinking water.

WHPA-B: Contaminated groundwater would take less than 2 years to reach the well.

WHPA-C: Contaminated groundwater would take between 2 and 5 years to reach the well.

WHPA-D: Contaminated groundwater would take between 5 and 25 years to reach the well.

Vulnerability Scores

Vulnerability scores are used to indicate how at risk the drinking water source is to contamination. High scores mean that a contaminant could quickly get into the drinking water supply. Each WHPA has been assigned one or more vulnerability score(s) based on the characteristics of the ground overlying the aquifer. The higher the vulnerability score, the higher the concern for possible source water contamination, with a score of 10 being the highest. The following table summarizes the vulnerability scores and amount of land included in each WHPA.

Vulnerable Area	Land Area by Vulnerability Score (ha)					
	10	8	7.2	6	4	2
WHPA-A	6.2					
WHPA-B	21.5	0				
WHPA-C		20.8				0
WHPA-D					47.7	0
WHPA-E			191.3			

Existing Water Quality

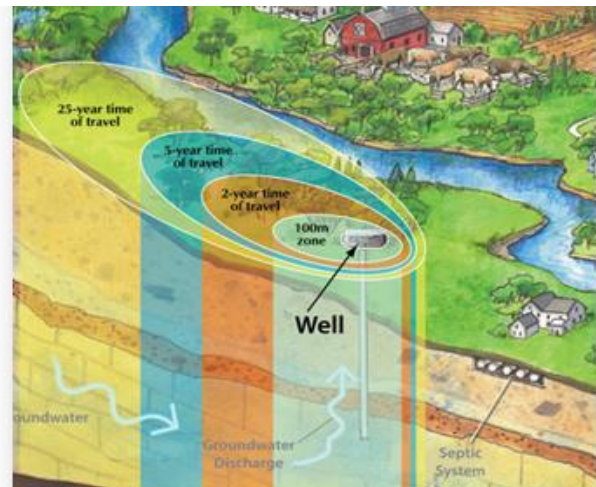
A review of water quality data gathered from regular testing at the Newington well field suggests that there are no current issues that adversely impact this source for drinking water.

Drinking Water Threats

There are certain activities which have been identified by the province as threats to drinking water sources. An activity may be considered a significant threat based on various circumstances: proximity to the well, vulnerability of the IPZ and the nature of the activity.

The following table lists the significant threat activities that pose a risk to the drinking water source in this area.

Drinking Water Threat
Waste Disposal Sites
Sewage Works
Agricultural Activities
Pesticides
Salt and Snow
Fuel
Chemicals



What is Next?

The Raisin-South Nation Source Protection Committee has completed its Source Protection Plan in consultation with local municipalities and stakeholders. This committee is made up of community members representing the public, farmers, industry, business and local municipalities.

The Source Protection Plan identifies ways to protect the quality and quantity of municipal drinking water sources in this part of eastern Ontario. The Plan addresses existing threats to drinking water and contains policies to prevent future risks.

The South Nation and Raisin Region Conservation Authorities will continue to work with municipalities and property owners to ensure local drinking water is safe.



CORNWALL

Drinking Water Source Protection

Ontario's Clean Water Act helps protect drinking water from source to tap by preventing contaminants from entering sources of drinking water like lakes, rivers and aquifers. Scientific studies were completed in 26 communities across our region to determine the local drinking water source. These studies also identify the activities that could adversely impact the quality of the drinking water source. The technical studies can be found in the comprehensive *Assessment Report*.

City of Cornwall

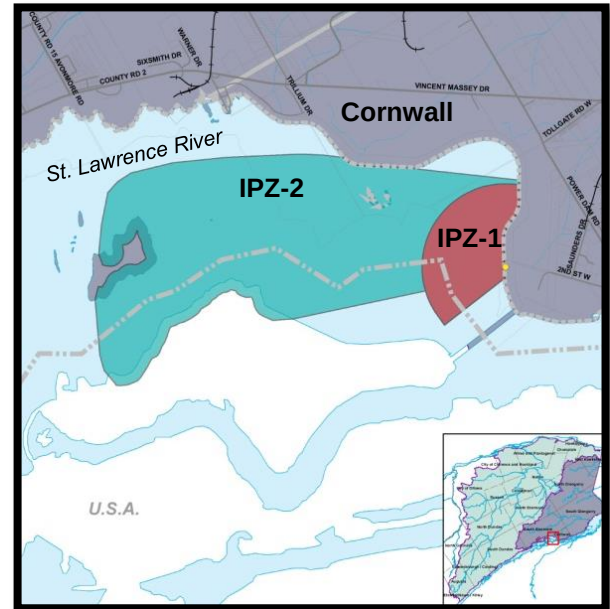
The City of Cornwall of Cornwall's municipal water supply is taken from a small lake feature, within the St. Lawrence River (Lake St. Lawrence). The intake is located in the west face of the RH Saunders Dam, within the Cornwall Dyke closure structure on north side of the dam. The depth of the water over the intake is 15 m. Raw water is piped from the intake by a gravity fed main to the water purification plant, located 3km east of the intake. Owned and operated by the City of Cornwall, the Cornwall Water Treatment Plant currently serves a population of over 47,000 residents and includes service to the communities of Rosedale Terrace and St. Andrew's West.



City of Cornwall Intake Area

What is an Intake Protection Zone?

Surface water intakes draw raw water from rivers or lakes to provide drinking water. An Intake Protection Zone (IPZ) is an area of water or land that is located within a specific distance of an intake. Intake protection zones in smaller bodies of water may also include smaller rivers or tributaries.



City of Cornwall Intake Protection Zones (IPZs)

IPZ-1: This is the area closest to the intake and is the area of highest concern because contaminants entering this zone can reach the intake quickly with little or no dilution.

IPZ-2: Considered the secondary protection zone, this area is calculated based upon how far water can travel in a two-hour time period. The allocation is determined by viewing flows, wind, and transport pathways.

Vulnerability Scores

Vulnerability scores are used to indicate how at risk the drinking water source is to contamination. Scores in the Assessment Report are based upon the features of each intake. Characteristics such as the depth of the intake, distance of the intake from land, and the past water quality history affect its vulnerability. The higher the vulnerability score, the higher the level of concern for possible source water contamination, with a score of 10 being the highest score. The following table summarizes the vulnerability scores for each IPZ area.

Vulnerable Area	Vulnerability Score
IPZ-1	8
IPZ-2	5.6

Existing Water Quality

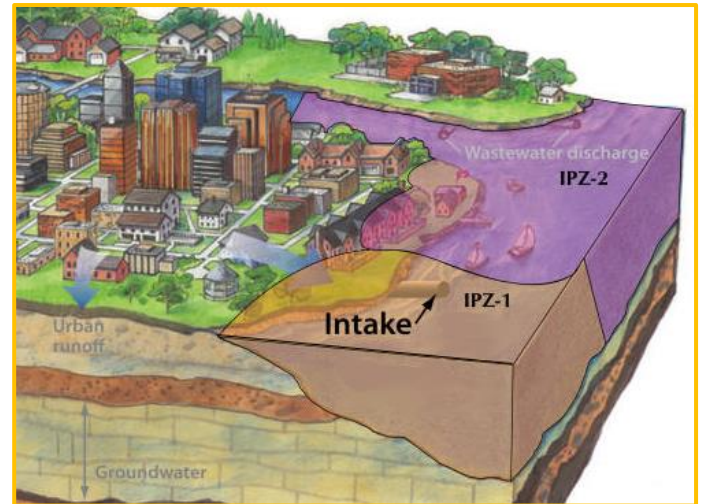
A review of water quality data from regular testing at the Cornwall intake confirms that there are no current issues that adversely impact the source for drinking water.

Drinking Water Threats

There are certain activities which have been identified by the province as threats to drinking water sources. An activity may be considered a significant threat based on various circumstances: proximity to the well, vulnerability of the IPZ and the nature of the activity.

The following table lists the significant threat activities that pose a risk to the drinking water source in this area.

Drinking Water Threat
Application of Septage
Sewage Works
Agricultural Activities
Chemicals



What is Next?

The Raisin-South Nation Source Protection Committee has completed its Source Protection Plan in consultation with local municipalities and stakeholders. This committee is made up of community members representing the public, farmers, industry, business and local municipalities.

The Source Protection Plan identifies ways to protect the quality and quantity of municipal drinking water sources in this part of eastern Ontario. The Plan addresses existing threats to drinking water and contains policies to prevent future risks.

The South Nation and Raisin Region Conservation Authorities will continue to work with municipalities and property owners to ensure local drinking water is safe.



FINCH

Drinking Water Source Protection

Ontario's Clean Water Act helps protect drinking water from source to tap by preventing contaminants from entering sources of drinking water like lakes, rivers and aquifers. Scientific studies were completed in 26 communities across our region to determine the local drinking water source. These studies also identify the activities that could adversely impact the quality of the drinking water source. The technical studies can be found in the comprehensive *Assessment Report*.

Finch

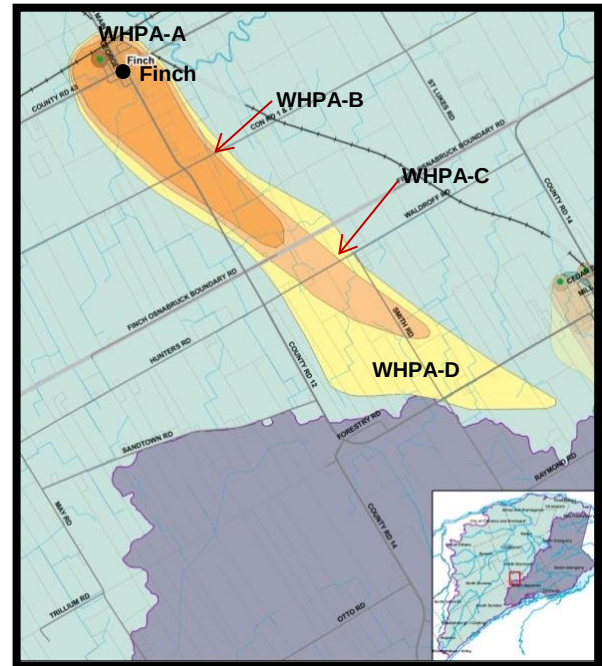
The village of Finch is located approximately 70 km southeast of Ottawa in North Stormont Township. The Finch drinking water system is owned by the Township of North Stormont and operated by the Ontario Clean Water Agency (OCWA). The well field contains 2 wells and serves a population of approximately 440 residents.



The Finch Drinking Water System

What is a Wellhead Protection Area?

A wellhead protection area (WHPA) is the area around a well where land use activities have the potential to affect the quality of water that flows into the well. The size and shape of a WHPA is determined by the amount of water being pumped and the direction and speed at which the groundwater travels through the aquifer to get to the well.



Embrun Wellhead Protection Areas (WHPAs)

WHPA-A: 100 metre radius around the well. Contaminants could easily get into the drinking water.

WHPA-B: Contaminated groundwater would take less than 2 years to reach the well.

WHPA-C: Contaminated groundwater would take between 2 and 5 years to reach the well.

WHPA-D: Contaminated groundwater would take between 5 and 25 years to reach the well.

Vulnerability Scores

Vulnerability scores are used to indicate how at risk the drinking water source is to contamination. High scores mean that a contaminant could quickly get into the drinking water supply. Each WHPA has been assigned one or more vulnerability score(s) based on the characteristics of the ground overlying the aquifer. The higher the vulnerability score, the higher the concern for possible source water contamination, with a score of 10 being the highest. The following table summarizes the vulnerability scores and amount of land included in each WHPA.

Vulnerable Area	Land Area by Vulnerability Score (ha)				
	10	8	6	4	2
WHPA-A	3.1				
WHPA-B	206.7	0	0		
WHPA-C		140.5	0		0
WHPA-D			0	320.6	0

Existing Water Quality

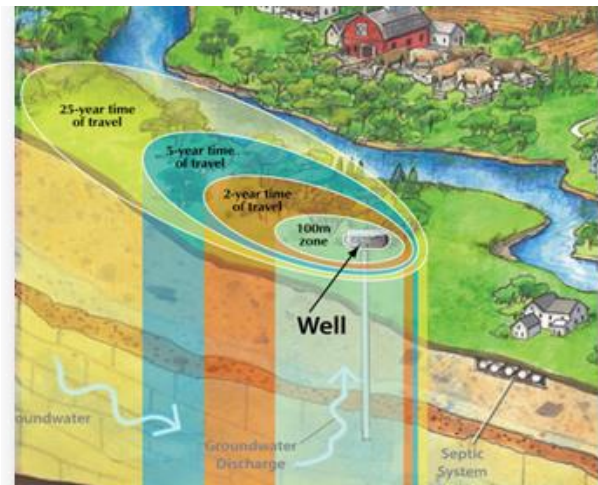
A review of water quality data gathered from regular testing at the Finch well field suggests that there are no current issues that adversely impact this source for drinking water.

Drinking Water Threats

There are certain activities which have been identified by the province as threats to drinking water sources. An activity may be considered a significant threat based on various circumstances: proximity to the well, vulnerability of the IPZ and the nature of the activity.

The following table lists the significant threat activities that pose a risk to the drinking water source in this area.

Drinking Water Threat
Waste Disposal Sites
Sewage Works
Agricultural Activities
Pesticides
Salt and Snow
Fuel
Chemicals



What is Next?

The Raisin-South Nation Source Protection Committee has completed its Source Protection Plan in consultation with local municipalities and stakeholders. This committee is made up of community members representing the public, farmers, industry, business and local municipalities.

The Source Protection Plan identifies ways to protect the quality and quantity of municipal drinking water sources in this part of eastern Ontario. The Plan addresses existing threats to drinking water and contains policies to prevent future risks.

The South Nation and Raisin Region Conservation Authorities will continue to work with municipalities and property owners to ensure local drinking water is safe.

	Stormwater Management Facilities Significant Drinking Water Threat Assessment	2024-Nov-6 Rev #0
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Appendix B – Raisin-South Nation Source Protection, Policy SEWG-7
Existing and Future Discharge from Stormwater Management Facilities

Policy SEWG-7

Existing and future discharge from stormwater management facilities

- a. Approvals under the *Ontario Water Resources Act, 1990*, for the existing operation and maintenance of stormwater management facilities and the future establishment, operation and maintenance of stormwater management facilities outside of a Wellhead Protection Area A or Intake Protection Zone 1 where stormwater discharge would be a significant drinking water threat, shall be reviewed to ensure they contain conditions to protect sources of drinking water.

If the instrument does not meet these requirements, the MOECC shall amend it to include additional terms and conditions to manage the threat. It is recommended that conditions include:

- All future facilities should be built to Enhanced Level Protection (as described in the Stormwater Management Planning and Design Manual, MOECC 2003 as amended)
- Addition of water quality criteria monitoring for the prescribed threat chemicals (pathogens, aluminum, arsenic, cadmium, chloride, chromium VI, copper, glyphosate, lead, mecoprop, mercury, nickel, nitrogen, polycyclic aromatic hydrocarbons, petroleum hydrocarbons F1 to F4, total phosphorus, zinc) in addition to regular total suspended solids monitoring requirements to help develop a baseline for effluent quality and identify spikes in contaminants for future investigation
- Ensure existing ponds are inspected yearly, and prioritize upgrades/retrofits to ponds/systems in vulnerable areas are prioritized
- Sediment volumes should be measured yearly and provided to the Ministry of the Environment and Climate Change to ensure compliance
- Naturalization around ponds to act as spill buffers
- Contain a contingency plan for catastrophic events (>100 year flood) and emergency response

Instruments that exist before the day the Plan takes effect must be reviewed and, if necessary, amended within three years.

- b. The future establishment, operation, and maintenance of a stormwater management facility is prohibited within the WHPA-A or IPZ-1 where stormwater discharges would be a significant drinking water threat. Accordingly, decisions relating to Prescribed Instruments (Environmental Compliance Approvals) must conform with these policies. In addition, decisions made by planning authorities under the *Planning Act, 1990* must conform with these policies.

These policies take effect when the Source Protection Plan takes effect.

Note: Additional policies apply. See: *MONITORING-2* and *MONITORING-3*.

	Stormwater Management Facilities Significant Drinking Water Threat Assessment	2024-Nov-6 Rev #0
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Appendix C – Significant Drinking Water Threat Assessment Log



Stormwater Management Facilities
Significant Drinking Water Threat Assessment

2024-Nov-6
Rev #0

Project Name	Significant Drinking Water Threat	Policy SWEG-7	Mitigation Measures	Date of Implementation

	Stormwater Management Facilities 2025 Annual Report Township of South Stormont	2025-March-23 Rev #0
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Appendix D Stormwater Management Facilities – Operation and Maintenance Manual (Final Draft)

OPERATION AND MAINTENANCE MANUAL

SOUTH STORMONT STORM WATER MANAGEMENT FACILITIES

CHASE MEADOWS

800 Second Street West, Cornwall, ON K6J 1H6
(613) 935-3775
evbengineering.com



PROJECT# 24127 | March 11, 2025
Prepared for The Township of South Stormont
Revision #01 – Issued for Draft



This report is respectfully submitted to the Township of South Stormont in response to the request for engineering services scope of work for the development of an Operations and Maintenance Manual for the Township's existing Stormwater Management Facilities.

Prepared By:

Adam Poapst, P.Eng.
Environmental Engineer
EVB Engineering

Reviewed By:

Marco Vincelli, P.Eng.
Sr. Municipal Engineer
EVB Engineering

This report was prepared by EVB Engineering for the Township of South Stormont in accordance with the professional services agreement. The disclosure of any information contained in this report is the sole responsibility of the intended recipient. The material in it reflects EVB's best judgement in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decision to be made based on it are the responsibility of such third parties. EVB Engineering accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report. This limitations statement is considered part of this report.

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- FIGURE 1 SWM Facilities (North-West)
- FIGURE 2 SWM Facilities (North-East)
- FIGURE 3 SWM Facilities (South-West)
- FIGURE 4 SWM Facilities (South-East)

Appendices

- APPENDIX A – Existing Environmental Compliance Approvals**
- APPENDIX B – Record Drawings**
- APPENDIX C – Inspection Checklist**
- APPENDIX D – OGS Operations & Maintenance Guidelines**
- APPENDIX E – Standard Operating Procedures**

List of Revisions

Date	Revision #	Issued For	Revision Details
2025-03-11	1	Client Review	Added

1 INTRODUCTION

This Operations and Maintenance (O&M) Manual has been prepared in accordance with the requirements of the Environmental Compliance Approval for the Township of South Stormont' existing Stormwater Management Facilities.

1.1 CHAIN OF COMMAND

Owner: The Township of South Stormont
Manager: Derek McMillian

1.2 EMERGENCY CONTACTS

Emergency	Agency	Telephone No.
General Emergencies	Police, Fire, Ambulance	911
	Environmental Officer	XX
Ministry of Environment, Conservation, and Parks	MECP (Cornwall) Fax	(613) 933-6402
	Spills Action Centre (P)	1-800-268-6060
	Spills Action Centre (F)	1-800- 268-6061
Medical Officer of Health	Eastern Ontario Health Unit (P)	(913) 933-1375
	Eastern Ontario Health Unit (F)	(913) 933-7930
Electrical	Cornwall Electric	1-800-701-9473
	Hydro One	1-888-664-9376
Laboratory	Caduceon Labs	(613) 526-0123
Utility Locates	Ontario One-Call	1-800-400-2255

For contractors (excavation, backhoes, hoe ram, bulldozers, mechanical, electrical, etc.) refer to the standing offer list.

In the event of an incident involving the stormwater management facilities, the following Township Staff should be contacted:

Derek McMillian
Director of Public Works
Township of South Stormont
dmcmillian@southstormont.ca

1.3 FACILITY DESCRIPTION

1.3.1 SWP1 – ARROWHEAD ESTATES PHASE 1-6 DRY POND

Facility Type:	Dry Pond
Location:	45.033734, -74.872122
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.034088, -74.871793
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	Quantity: 10—yr storm
Reference ECA(s):	5256-73PGZW
Reference Works as part of Treatment Train:	
Brief Description:	Dry pond with a bottom outlet pipe with a diameter of 450 millimetres ditch discharging into a ditch inlet manhole; a 600 millimetre by 1200 millimetre ditch inlet manhole with the bottom of the grate opening at 0.75 metres from the bottom of the pond, outletting into a 900 millimetre diameter pipe; a 12 metre long, 900 millimetre diameter pipe emptying into a ditch via a rip rap area; a 3 metre by 1.5 metre rip area as per OPSD 810.01
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	6,637 cubic metres of storage capacity

1.3.2 SWP2 – ARROWHEAD ESTATES PHASE 7 WET POND

Facility Type:	Wet Pond
Location:	45.034974, -74.878517
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.035189, -74.878372
Catchment Area:	2.41 ha
Level of Treatment for Suspended Solids:	Level 2 (70% suspended solids removal)
Level of Volume Control:	
Design Storm:	Quantity: 100-yr Storm
Reference ECA(s):	9409-9YVKNX
Brief Description:	Wet pond with a sediment forebay servicing Matthew Kieran Crescent and an easement, receiving inflow from storm sewers, discharging via an existing County Road 36 Roadside ditch, ultimately to the Raisin River; catchment area 2.41 hectares.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Permanent pool volume 143 cubic metres, extended detention volume 99 cubic metres, total storage volume 367 cubic metres, total depth 1.4m at permanent pool volume

1.3.3 SWP3 – CHASE MEADOWS WET POND

Facility Type:	Wet Pond
Location:	45.034156, -74.884061
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.033969, -74.883390
Catchment Area:	11.5 ha
Level of Treatment for Suspended Solids:	Level 2 (70% suspended solids removal)
Level of Volume Control:	
Design Storm:	Quantity: 100-yr storm
Reference ECA(s):	2903-9BUQE9
Reference Works as part of Treatment Train:	
Brief Description:	Wet pond with a sediment forebay, draining via an existing ditch on County Road 36 and existing 600 mm diameter culvert under Road 36 to South Branch of the Raisin River and the St. Lawrence River; catchment area 11.5 hectares.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Permanent pool volume 1385 cubic metres, extended detention volume 465 cubic metres, total storage volume 3100 cubic metres, total depth 3.3m at permanent pool volume

1.3.4 SWP4 – PARKWAY ESTATES WET POND

Facility Type:	Wet Pond
Location:	45.039679, -74.910800
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.039402, -74.912348
Catchment Area:	28.42 ha
Level of Treatment for Suspended Solids:	Level 2 (70% suspended solids removal)
Level of Volume Control:	
Design Storm:	Quantity: 100-yr storm
Reference ECA(s):	7828-93MM94
Reference Works as part of Treatment Train:	
Brief Description:	Wetland with an open ditch inlet into a forebay, discharging into existing roadside ditches prior to falling into the St. Lawrence River; one (1) 200mm diameter bottom draw outlet pipe with perforated raised section caped, located in a plunge pool area of the pond to discharge extended detention volume into a 600mmX1200mm grated catchbasin/control manhole complete with a 173mm diameter orifice inlet having invert elevation at 78.80m ASL (permanent water level), for a controlled flow rate ranging from 0.0cu.m./s to 0.028cu.m./sec; one (1) 450mm diameter outlet pipe, from a catchbasin outlet/outfall from the control manhole into an approximately 4.5m wide 1.5m deep roadside ditch, ultimately to discharge into an existing open ditch/water course, a 3.6m wide X 600mm deep emergency spillway protected with stone riprap to provide for high water storms in case of blockage of the normal outlets, to discharge into the existing water course.
Receive Emergency Sanitary Overflows:	No

Notes/Additional Information: Total volume of 7969 cubic metres at 1.3m depth, permanent pool volume of 1902 cubic metres, extended detention volume of 1180 cubic metres

1.3.5 SWP5 – MALYON ESTATES DRY POND

Facility Type:	Oil and Grit Separator (#2)
Location:	45.095014, -74.807817
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to Main Branch of the Raisin River
Outlet Location:	45.095187, -74.808316
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	
Reference ECA(s):	
Reference Works as part of Treatment Train:	
Brief Description:	Hydrocarbon Separator “CDS Model 2015-4.c”
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Capable of treating 83% of annual runoff

1.3.6 SWP6 – ST. ANDREWS FIREHALL DRY POND

Facility Type:	Dry Pond
Location:	45.095736, -74.793837
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to Main Branch of Raisin River
Outlet Location:	45.095858, -74.793594
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	
Reference ECA(s):	
Reference Works as part of Treatment Train:	
Brief Description:	Hydrocarbon Separator “Stormceptor Model STC 2000”
Receive Emergency Sanitary Overflows:	
Notes/Additional Information:	

1.3.7 SWP7 – FENTON FARMS WET POND

Facility Type:	Wet Pond
Location:	45.038033, -74.872120
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of the Raisin River
Outlet Location:	45.037934, -74.871809
Catchment Area:	5.56 ha
Level of Treatment for Suspended Solids:	Level 3 (80%, Enhanced)
Level of Volume Control:	

Design Storm:	Quantity: 100-year storm
Reference ECA(s):	4382-C7HKNN
Brief Description:	Wet pond with sediment forebay, located on Block 45, an inlet structure consisting of a 675 millimetre diameter storm inlet pipe and a concrete headwall, an outlet structure comprised of a 150 millimetre pipe complete with a 66 millimetre diameter orifice and a 450 millimetre diameter outlet pipe complete with a 300 millimetre diameter orifice, allowing a maximum discharge of 165.15 litres per second under the 100- year storm event to the side ditch of County Road 36.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Storage volume of 712 cubic metres, extended detention volume of 222 cubic metres, total storage volume of 1321 cubic metres including permanent pool depth of 2.5m

1.3.8 SWP8 – TOWNSHIP OFFICE/OPP STATION DRY POND

Facility Type:	Dry Pond
Location:	45.030230, -74.889014
Watershed/Subwatershed	St. Lawrence River / Raisin River
Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.030061, -74.888674
Catchment Area:	
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	
Reference ECA(s):	
Brief Description:	
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

1.3.9 SWP9 – EAST INDUSTRIAL PARK WET POND

Facility Type:	Wet Pond
Location:	45.038460, -74.838911
Watershed/Subwatershed	St. Lawrence River
Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.038788, -74.839201
Catchment Area:	11.48 ha
Level of Treatment for Suspended Solids:	80% Removal
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	186-S701
Brief Description:	Stormwater is directed towards the facility via roadside ditches with the quality and quantity treatment provided by the facility forebay, storage volumes and outlet controls (weirs & orifices). A 104 mm diameter orifice, and a broad-created weir will be used to control the flow to allowable levels
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Permanent pool storage 662 m ³ , extended detention volume of 462 m ³ . Total depth at permanent pool volume (Forebay) 1.05m

1.3.10 SWP10 – EMS STATION DRY POND

Facility Type:	Dry Pond
Location:	45.038132, -74.903447
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of Discharge:	Surface Discharge to South Branch of Raisin River
Outlet Location:	45.038137, – 74.903356
Catchment Area:	0.2 ha
Level of Treatment for Suspended Solids:	70%
Level of Volume Control:	
Design Storm:	100-year storm
Reference ECA(s):	
Brief Description:	Surface water collected through a series of on-site swales directed to the pond. Pond discharge is controlled through 75mm orifice plug in 250mmcsp, directed to roadside ditch on Moulinette Road.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

1.3.11 SWP11 – GLENCO SUBDIVISION WET POND

Facility Type:	Wet Pond
Location:	45.1222955, -74.821458
Watershed/Subwatershed	Raisin River/St. Lawrence River
Receiver of Discharge:	Surface discharge to Bonville Drain
Outlet Location:	45.122436, -74.821357
Catchment Area:	8.2 ha
Level of Treatment for Suspended Solids:	80%
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	
Brief Description:	Stormwater will be directed through open ditches to the forebay, open ditch to pond and then outlet. The outlet of the stormwater management facility features a single ditch inlet with outlet storm sewer into the Bonville Drain. A 275mm diameter orifice installed on the outlet pipe will be used to control both storm events to acceptable levels.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	Based on the stage-storage characteristics of the pond, the extended storage represents a water depth of 160mm above the permanent pool and provides an extended storage volume of 271.47 m ³ . The proposed 85mm diameter orifice will provide an extended storage detention time of 24.4 hours. The permanent storage represents a water depth of 150mm above the bottom of the pond and provides a permanent storage volume of 239.85 m ³

1.3.12 SWP12 – JOHN CHASE SUBDIVISION WET POND

Facility Type:	Wet Pond
Location:	45.035130, -74.881693
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of Discharge:	Surface Discharge to Forrester Branch Municipal Drain/South Branch of Raisin River
Outlet Location:	45.035397, -74.881193
Catchment Area:	10.04 ha
Level of Treatment for Suspended Solids:	80%
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	
Brief Description:	Stormwater runoff from the proposed lots is directed to a stormwater collection system (rear yard swales, rear yard catchbasins, and storm sewers) that ultimately discharge to the new wet pond consisting of 401.50m ³ of extended detention storage and 1582.17m ³ of permanent pool storage. A 100 mm diameter orifice, a ditch inlet (acting as a broad-crested weir) and a 385mm diameter orifice are used to control the flow to allowable levels.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

1.3.13 SWP13 – LONG SAULT DRAIN DRY POND

Facility Type:	Dry Pond
Location:	45.040701, -74.894505
Watershed/Subwatershed	St. Lawrence River/Raisin River
Receiver of Discharge:	Surface discharge to South Branch of Raisin River
Outlet Location:	45.041973, -74.890087
Catchment Area:	108 ha
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	
Reference ECA(s):	7989-8L2L4V
Brief Description:	1. Dry pond having active storage volume of 24,830 m³ complete with containment berm discharging to Forrester Branch of the South Raisin River through 900mm dia. CSP pond outlet structure. 2. 400m long grassed offtake ditch along the south and east sides of the stormwater dry pond. 3. Off take ditch within the CNR corridor to outlet
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

1.3.14 SWP14 – ST. LAWRENCE MEDICAL CLINIC STORMTECH SC740

Facility Type:	
Location:	44.996142, -74.987785
Watershed/Subwatershed	St. Lawrence River
Receiver of Discharge:	Subsurface discharge to SDG County storm sewer County Road 14
Outlet Location:	44.996 069, – 74.987846
Catchment Area:	0.44 ha
Level of Treatment for Suspended Solids:	
Level of Volume Control:	
Design Storm:	5/100-year storm
Reference ECA(s):	
Brief Description:	StormTech SC740 – Underground storage system
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

1.3.15 SWP15 – STONE GATE SUBDIVISION WET POND

Facility Type: Wet Pond	
Location:	45.089760, – 74.774978
Watershed/Subwatershed	St. Lawrence River /Raisin River
Receiver of Discharge:	McIntosh Drain
Outlet Location:	45.090317, – 74.774730
Catchment Area:	11.56 ha
Level of Treatment for Suspended Solids:	80%
Level of Volume Control:	
Design Storm:	
Reference ECA(s):	2446-APMGUD
Brief Description:	Wet pond with sediment forebay including permanent pool volume of 1185 cu.m. discharging via (2) 450mm dia. outlet pipes to McIntosh Municipal Drain.
Receive Emergency Sanitary Overflows:	No
Notes/Additional Information:	

2 FACILITY OPERATIONS AND MAINTENANCE

The following sections provide recommended guidelines for the operation and maintenance of the Township's stormwater management facilities. Please refer to Section 3 for monitoring requirements.

2.1 INSPECTION

Generally, for the inspection of stormwater management facilities is required to confirm the following:

WET PONDS

1. Is the pond level higher than the normal permanent pool elevation > 24 hours after a storm (or other design detention time)?
 - This could indicate blockage of the outlet by trash or sediment.
 - Visually inspect the outlet structure for debris or blockage.
2. Is the pond level lower than the normal permanent pool elevation?
 - This could indicate a blockage of the inlet.
 - Visually inspect the inlet structure for debris or blockage.
3. Is the vegetation around the pond unhealthy or dying?
 - This could indicate a poor selection of species. If occurs chronically further analysis should be conducted to identify the cause.
 - Is the pond all open water (no bulrushes or vegetation in the water)?
 - Are there areas around the pond with easy access to open water?
 - This will indicate a need for replanting the pond
4. Is there an oily sheen on the water near the inlet or outlet? Is the water frothy? Is there an unusual colouring to the water?
 - This may indicate the occurrence of an oil or industrial spill and the need for cleanup.
5. Check the sediment depth in pond.
 - This will indicate the need for sediment removal.
 - The sediment depth can be checked using a graduated pole with a flat plate attached to the bottom.
 - A marker (pole, buoy) should be placed in the pond to indicate the spot(s) where a measurement should be made.
 - A visual inspection on the pond depth can also be made if the pond is shallow and a graduated marker is located in the pond.

DRY PONDS

1. Is there standing water in the pond > 24 hours after a storm (or other design detention time)?
 - This could indicate a blockage of the outlet by trash or sediment.
 - Visually inspect the outlet structure for debris or blockage.
2. Is the pond always dry, or relatively dry within 24 hours of a storm (or other design detention time)?
 - This could indicate a blockage of the inlet or water quality/erosion control outlet which is too large.
 - Visually inspect the inlet structure for debris or blockage.
3. Is the vegetation around the pond unhealthy or dying?
 - This could indicate a poor selection of species. If occurs chronically further analysis should be conducted to identify the cause?
 - Are there areas around the pond with easy access to open water?
 - This will indicate a need for replanting the pond.
4. Is there a visible accumulation of sediment in the bottom of the pond or around the highwater line of the pond?
 - This will indicate the need for sediment removal.

An inspection checklist is contained in Appendix C, which provides guidance on things which should be observed:

- ♦ General facility appearance,
- ♦ Inlet and outlet structure conditions,
- ♦ Outlet channel appearance
- ♦ Vegetation
- ♦ Banks
- ♦ Access roads and walkways
- ♦ Perimeter fencing
- ♦ Sediment accumulation
- ♦ Sign condition
- ♦ Public safety
- ♦ Other notable features

2.1.1 STRUCTURAL COMPONENTS

Inlet and outlet structures provide an integral function to the overall efficiency of stormwater management ponds. The grates in front of the inlets and outlets should be in good condition, and any missing bolts or locks should be replaced or fixed immediately. During inspections, these structures should be checked for clogging or cracking. If the permanent pool is at a higher elevation than the design states during a period of dry weather, the outlet structures should be checked and unclogged if necessary.

Aside from clogging, pipes should also be inspected for other structural damage. This could include rusting, cracking, or leaking at the joints. These issues should be reported, assessed, and repaired, either by replacing the pipes/joints, sealing the damaged sections, or relining the pipes.

In wet ponds, water level loggers could be installed to monitor the drawdown time in the permanent pool to determine if the pond is draining properly. This would provide a comparison of the actual time compared to the calculated time and reduce the need for manual inspections of the ponds after storm events; however, the cost to purchase multiple loggers may be greater than the cost of staff inspections. Installing a level logger in newly assumed ponds would be a more efficient way to determine if the system is functioning as designed.

Dry ponds should be completely drained within 24 to 48 hours of a storm event. If there are signs of ponding water, the inlet and outlet structures should be inspected for blockages. If the inlet and outlets are in good condition, then sediment accumulation may be the cause of ponding water.

2.1.2 SAFETY

Safety features of the pond should be assessed during the inspection. Fencing surrounding the facility or structures should be inspected for any damage. Signage should be in place warning the public of the dangers of using a stormwater pond for recreational use. Confined spaces such as inlets/outlets or access manholes should be locked to discourage the public from entering.

2.1.3 ACCESS

Maintenance routes should be maintained to allow vehicles and staff easy access to conduct maintenance and inspections. If a boat is required to conduct inspections in a stormwater pond, a boat launch should also be included in the construction. Any damages to the access roads, or obstructions in the pathway, should be repaired or removed to allow for maintenance vehicles and staff to enter the facility.

Inlet and outlet structures may be accessed by placing the structures inside a chamber in the embankment. This can reduce vandalism; however, access in confined spaces should be conducted by staff with proper training. These chambers should be locked, with access ladders in good condition for easy and safe entry.

2.2 BANK STABILITY

The banks of stormwater ponds should be inspected for signs of erosion. Excess erosion can lead to an increase in sediment accumulation and eventual bank failure, increasing the cost of maintenance. Inspectors should also monitor the banks for bare areas, animal burrows, and unwanted vegetation. Bare areas should be replanted or stabilized, and unwanted growth should be removed, as trees and shrubs could cause structural damage to the facility. Animal burrows should also be destroyed, as they can ruin the integrity of the banks.

2.3 GRASS CUTTING

FREQUENCY

Generally, it is recommended that grass-cutting be limited or eliminated around SWM facilities since allowing grass to grow tends to enhance water quality and provide other benefits for wet facilities. Short grass around a wet stormwater facility provides an ideal habitat for nuisance species such as geese. Allowing the grass to grow is an effective means of discouraging geese.

Grass cutting is one maintenance activity which is solely undertaken to enhance the perceived aesthetics of the facility. The frequency of grass cutting depends on surrounding land uses, and local municipal by-laws. Therefore, grass cutting should be done as infrequently as possible, recognizing the aesthetic concerns of nearby residents.

METHODS

Grass around wet facilities should not be cut to the edge of the permanent pool. As a safety precaution, cutting should be done parallel to the shoreline with grass clippings being ejected upland to reduce the potential for organic loadings to the pond.

2.4 WEED CONTROL

FREQUENCY

Weeds are generally defined as any kind of vegetation which is unwanted in a particular area. In terms of SWMPs, weeds are generally invasive species which cannot provide the intended function of the planting strategy, or non-native species such as purple loosestrife, the spread of which is undesirable. Weed control by-laws should be consulted for local requirements. Weed control may be required annually.

METHODS

Weeding should be done by hand to prevent the destruction of surrounding vegetation. The use of herbicides and insecticides should be prohibited near SWMPs since they create water quality problems. The use of fertilizer should also be limited to minimize nutrient loadings to the downstream receiving waters.

2.5 TRASH REMOVAL

Trash removal is an integral part of SWMP maintenance. Generally, a "spring cleanup" is needed to remove trash from all surface SWMPs. Trash removal is then performed as required based on observations during regular inspections.

2.6 SEDIMENT REMOVAL

FREQUENCY

To ensure long-term effectiveness of the SWMF, the sediment that accumulates in the facility should be periodically removed. The required frequency of sediment removal is dependent on many factors including:

- ♦ Design volume
- ♦ Characteristics of the upstream catchment area (i.e. land use, level of imperviousness, etc.)

- ♦ Municipal road management practices (i.e. sanding)

For example, the oil and grit separators should be cleaned once the sediment has accumulated to 300mm or 75% of the capacity in the isolated sump.

During the planned visual inspections, observations on the sediment levels should be noted.

Bathymetric surveys can be undertaken to measure the accumulation of sediment within the facility and should be undertaken every 5 to 10 years.

METHODS

Typical grading/excavation equipment such as backhoes and in some instances hydraulic dredging should be used to remove sediment from ponds and wetlands. Certain types of backhoes and loaders have a tendency to tear up the inter-locking block on the hardened floor. Therefore, there has been a shift to using long-reach backhoes. Conventional dredging is not recommended because of the costs and potential to destroy features in the facility (i.e., vegetation and bottom grading).

Regardless of the means selected for sediment removal, the procedure should meet the requirements normally imposed by a sediment and erosion control plan (e.g., no off-site migration of sediment to roads, stormwater conveyance systems or watercourses).

DISPOSAL

Generally, sediment removed from SWMPs will not be contaminated to the point that it would be classified as hazardous waste. However, all sediment which is removed from SWMPs should be tested to determine disposal options. MOE sediment disposal requirements should be consulted for information pertaining to the exact parameters and acceptable levels for different disposal options. Most private laboratories are familiar with the disposal guidelines and can test sediment samples with these in mind.

For example, in order to deposit the sediment on land, it would need to meet inert fill requirements under Regulation 347. For landfill disposal, the sediment would have to be classified as non-hazardous, i.e., not leachate toxic according to TCLP leachate test in Regulation 347 (effective March 31, 2001).

There are three generalized disposal options:

On-site disposal

On-site disposal allows the sediment to be disposed of on any land area that is not regulated (i.e., land other than floodplain, etc.). In the planning stage of land requirements for subdivision/site plan stormwater management requirements, land can be set aside for on-site disposal of sediments to be removed from the various SWMPs. The areas that are used for sediment disposal should be landscaped to provide a natural appearance after each sediment removal operation.

Off-site disposal

It is anticipated that off-site disposal may be preferred by most developers and municipalities since off-site disposal does not reduce the developable area, landscaping/grading does not have to be performed, and there are no perceived liability/health concerns with respect to the surrounding landowners. Off-site disposal can mean disposal at a sanitary landfill or disposal at another area undergoing filling. The decision of where the material is deposited depends on the quality of the sediments and the availability and distance of the alternative fill areas.

Temporary disposal areas are recommended for surface end-of-pipe stormwater management facilities particularly those that do not have a maintenance by-pass since it provides a location for the sediment to dry before transporting it off-site. Where temporary sediment disposal areas (i.e., drying areas) are not feasible due to limited availability of land or high cost, the means of dealing with the un-dewatered sediment should be detailed in the stormwater management plan and approved by the Township.

Hazardous waste disposal

Although sediment removed from SWMPs is expected to contain contaminants (metals, bacteria, nutrients), it will not likely be classified as hazardous waste. Hazardous waste must be deposited at a hazardous waste facility. Transportation costs and disposal fees are expensive for hazardous waste since licensed haulers must be used to transport the material and there are relatively few facilities in the province.

2.6.1 NUISANCE ISSUES

Nuisance issues include the presence of waterfowl, rodents, or mosquitoes in stormwater management ponds. A high population of these species may have a negative impact on the water quality. Waterfowl (i.e. geese) are the most common nuisance species in stormwater management ponds. The feces produced by geese can contain many pathogens that create several health concerns for humans, including *Escherichia coli* (E. coli), *Cryptosporidium*, and *Giardia*. A study entitled, *Waterfowl Management in Stormwater Management Ponds* (2006), for the University of Waterloo indicated that one goose is capable of producing up to three pounds of feces per day and an average park can contain 10 to 12 droppings per square meter.

Inlets, outlets, and the surrounding area should be inspected for animal burrows to determine if there are rodents present. Animals can be trapped and burrows should be destroyed to discourage the species from returning.

To prevent mosquitoes, the area should be inspected for shallow standing water; bird houses may also be installed to attract insect eating birds. In some cities, like Ottawa and Guelph, mosquito larvae are sampled at wet ponds and tested for West Nile Virus. This type of sampling could be undertaken by the local health unit.

2.7 WINTER OPERATION

The 2003 MOECC guidelines provide recommendations for the operation of stormwater ponds during the winter months, where freezing conditions apply.

2.7.1 WET PONDS

Storage of the permanent pool is recommended to be increased by the anticipated amount of ice cover. It is also recommended that the inlet be a minimum of 450 mm in diameter with greater than 1% slope, and to avoid the use of submerged or partially submerged inlets. Submerged outlets should be placed 150 mm below the maximum expected ice level in the pond.

2.7.2 DRY PONDS

Dry ponds are typically not affected as much as wet ponds during winter/spring conditions because there is no permanent pool. Precautions can be included to prevent the pipes and orifice plates from freezing. However, dry ponds do not require special consideration for the winter conditions.

2.8 STORMTECH INSPECTION AND MAINTENANCE

The following inspection and maintenance information is from the StormTech Isolator Row Manual provided by the manufacturer.

2.8.1 MAINTENANCE

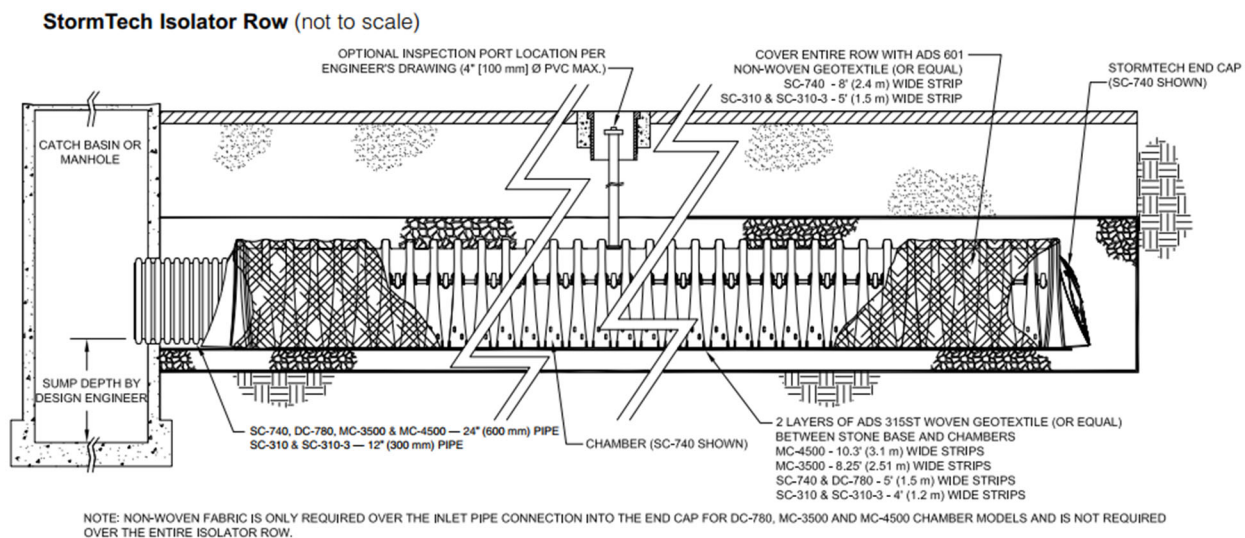
The Isolator Row was designed to reduce the cost of periodic maintenance. By “isolating” sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage

bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entries.

Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high-pressure water nozzle to propel itself down the Isolator Row while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45" are best. Most JetVac reels have 400 feet of hose allowing maintenance of an Isolator Row up to 50 chambers long. **The JetVac process shall only be performed on StormTech Isolator Rows that have AASHTO class 1 woven geotextile (as specified by StormTech) over their angular base stone.**

2.8.2 INSPECTION

An annual Inspection of the facility should be undertaken. Initially, the Isolator Row should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition. The Isolator Row incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes. If, upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3 inches throughout the length of the Isolator Row, clean-out should be performed.



2.9 HYDROCARBON SEPARATOR MAINTENANCE, INSPECTION, AND CLEANING

2.9.1 MAINTENANCE

The Hydro Carbon Separator system should be inspected at regular intervals and maintained when necessary to ensure optimum performance. The rate at which the system collects pollutants will depend more heavily on site activities than the size of the unit. For example, unstable soils or heavy winter sanding will cause the grit chamber to fill more quickly but regular sweeping of paved surfaces will slow accumulation.

2.9.2 INSPECTION

Inspection is the key to effective maintenance and is easily performed. Pollutant transport and deposition may vary from year to year and regular inspections will help ensure that the system is cleaned out at the

appropriate time. At a minimum, inspections should be performed twice per year (e.g. spring and fall) however more frequent inspections may be necessary in climates where winter sanding operations may lead to rapid accumulations, or in equipment washdown areas. Installations should also be inspected more frequently where excessive amounts of trash are expected.

The visual inspection should ascertain that the system components are in working order and that there are no blockages or obstructions in the inlet and separation screen. The inspection should also quantify the accumulation of hydrocarbons, trash, and sediment in the system. Measuring pollutant accumulation can be done with a calibrated dipstick, tape measure or other measuring instrument. If absorbent material is used for enhanced removal of hydrocarbons, the level of discoloration of the sorbent material should also be identified during inspection. It is useful and often required as part of an operating permit to keep a record of each inspection. A simple form for doing so is provided.

Access to the CDS unit is typically achieved through two manhole access covers. One opening allows for inspection and cleanout of the separation chamber (cylinder and screen) and isolated sump. The other allows for inspection and cleanout of sediment captured and retained outside the screen. For deep units, a single manhole access point would allow both sump cleanout and access outside the screen.

The CDS system should be cleaned when the level of sediment has reached 75% of capacity in the isolated sump or when an appreciable level of hydrocarbons and trash has accumulated. If absorbent material is used, it should be replaced when significant discoloration has occurred. Performance will not be impacted until 100% of the sump capacity is exceeded however it is recommended that the system be cleaned prior to that for easier removal of sediment. The level of sediment is easily determined by measuring from finished grade down to the top of the sediment pile. To avoid underestimating the level of sediment in the chamber, the measuring device must be lowered to the top of the sediment pile carefully. Particles at the top of the pile typically offer less resistance to the end of the rod than consolidated particles toward the bottom of the pile. Once this measurement is recorded, it should be compared to the as-built drawing for the unit to determine whether the height of the sediment pile off the bottom of the sump floor exceeds 75% of the total height of isolated sump.

2.9.3 CLEANING

Cleaning of a CDS system should be done during dry weather conditions when no flow is entering the system. The use of a vacuum truck is generally the most effective and convenient method of removing pollutants from the system. Simply remove the manhole covers and insert the vacuum hose into the sump. The system should be completely drained down and the sump fully evacuated of sediment. The area outside the screen should also be cleaned out if pollutant build-up exists in this area.

In installations where the risk of petroleum spills is small, liquid contaminants may not accumulate as quickly as sediment. However, the system should be cleaned out immediately in the event of an oil or gasoline spill. Motor oil and other hydrocarbons that accumulate on a more routine basis should be removed when an appreciable layer has been captured. To remove these pollutants, it may be preferable to use absorbent pads since they are usually less expensive to dispose than the oil/water emulsion that may be created by vacuuming the oily layer. Trash and debris can be netted out to separate it from the other pollutants. The screen should be power washed to ensure it is free of trash and debris.

Manhole covers should be securely seated following cleaning activities to prevent leakage of runoff into the system from above and also to ensure that proper safety precautions have been followed. Confined space entry procedures need to be followed if physical access is required. Disposal of all material removed from the CDS system should be done in accordance with local regulations. In many jurisdictions, disposal of the sediments may be handled in the same manner as the disposal of sediments removed from catch basins or deep sump manholes.

3 MONITORING PLAN

The Environmental Compliance Approvals issued for the stormwater management facilities require, at a minimum, an annual inspection of the condition of the SWM facilities to determine whether any maintenance or cleaning is required to removed remove sediment, debris and excess decaying vegetation. The ECA for the infiltration trenches in Doran Creek Estates (ECA #) also specifies that the “owner shall conduct investigations to verify the infiltration rates in the infiltration trenches, once every four months, and after each significant storm event”.

However, it is good practice to inspect the facilities on a biannual basis (spring/fall), as well as following a significant storm event (>25mm) to ensure the facility is functioning properly. As such, the following monitoring schedule should be followed for the SWM Facilities located within the Township of South Stormont. Record of the inspections should be made using the inspection form found in Appendix C.

TABLE 3-1: MONITORING FREQUENCY

Facility	Spring (Mar-Apr)	Summer (Jul-Aug)	Fall (Oct - Nov)	Significant Storm
Wet Pond	X		X	X
Dry Infiltration Pond	X		X	X

4 REPORTING REQUIREMENTS

An annual report will be prepared for the facility by April 30th of each year covering the period from January 1st to December 31st of the preceding calendar year. The annual report will contain:

- ♦ a summary of all monitoring data along with an interpretation of the data and an overview of the condition and operational performance of the Authorized System and any Adverse Effects on the Natural Environment;
- ♦ a summary and interpretation of environmental trends based on all monitoring information and data for the previous five (5) years;
- ♦ a summary of any operating problems encountered, and corrective actions taken;
- ♦ a summary of all inspections, maintenance, and repairs carried out on any major structure, equipment, apparatus, mechanism, or thing forming part of the Authorized System;
- ♦ a summary of the calibration and maintenance carried out on all monitoring equipment;
- ♦ a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints;
- ♦ a summary of all Alterations to the Authorized System within the reporting period that are authorized by this Approval including a list of Alterations that pose a Significant Drinking Water Threat;
- ♦ a summary of all Spills or abnormal discharge events;
- ♦ a summary of actions taken, including timelines, to improve or correct performance of any aspect of the Authorized System; and
- ♦ a summary of the status of actions for the previous reporting year

The reports are to be made available to the public and to the MECP Inspector, upon request.

5 RECORD KEEPING

All records, reports and information required by the ECA shall be maintained by the Town for a minimum of 10 years.

6 SOURCE WATER PROTECTION

Refer to the Township of South Stormont Stormwater Management Facilities Significant Drinking Water Threat Assessment Report for their Stormwater Systems.

7 SPILL RESPONSE PLANS

1. Purpose

This Standard Operating Procedure (SOP) outlines the required steps to report any spills that may impact stormwater management facilities in the Township of South Stormont, Ontario, Canada. The objective is to minimize environmental impacts, ensure compliance with relevant regulations, and document the spill response actions.

2. Scope

This SOP applies to all employees, contractors, and any other individuals responsible for managing spill events that could affect stormwater management facilities. It covers reporting procedures for spills that discharge directly or indirectly into stormwater systems, including municipal stormwater systems, stormwater ponds, or other drainage infrastructure.

3. References

- Ontario Water Resources Act
- Environmental Protection Act (EPA)
- Ontario Regulation 347/90 (General Waste Management)
- Ontario Regulation 203/07 (Stormwater Management Planning and Design Manual)
- Municipal By-Laws
- Spill Reporting Hotline (Ministry of the Environment, Conservation and Parks - MECP)

4. Responsibilities

- **Site Supervisor/Spill Response Team:**
Ensure spill response procedures are followed. Notify relevant authorities immediately.
- **Director of Public Works:**
Oversee compliance with regulations. Ensure spill reports are completed and submitted.
- **All Employees:**
Identify and report spills promptly to the site supervisor or spill response team.

5. Spill Identification and Immediate Response

1. Identify the Spill

- Ensure the nature of the spill is accurately assessed (e.g., hazardous materials, fuel, chemicals, oils).
- Determine if the spill has entered or could enter a stormwater management facility.

2. Contain the Spill

- Take immediate action to prevent the spill from spreading (use absorbent materials, dikes, or barriers where applicable).
- Prevent any entry of spill into storm drains or watercourses.
- Ensure that water contamination is minimized.

3. Notify the Spill Response Team

- Inform the site supervisor or designated personnel for immediate action.
- Activate the Spill Response Team if needed for large or hazardous spills.

6. Reporting the Spill

1. Report to Authorities

- **Spill Reporting Hotline:**
Call the Ministry of the Environment, Conservation and Parks (MECP) Spill Reporting Hotline at **1-800-268-6060** or **416-325-3000 (Greater Toronto Area)**.
 - Reports must be made immediately when a spill occurs that is likely to cause environmental harm, including spills to stormwater management systems.

- **Municipal Authorities:**
If the spill affects local stormwater systems, notify the municipal authorities or the local public works department.

2. Provide the Following Information:

When reporting the spill, include the following details:

- Location of the spill
- Description of the material spilled
- Quantity of the spill (estimated, if possible)
- Time and date of the spill
- Immediate actions taken to contain the spill
- Impact on stormwater management facilities
- Contact information of the reporting person

3. Document the Spill Report:

- Maintain a record of the spill report, including the reference number from the Ministry or municipal authority.
- Document all communication with the authorities regarding the spill.

7. Spill Response Actions

1. Containment and Cleanup:

- Deploy the necessary spill containment and cleanup materials to prevent further contamination.
- Ensure stormwater management facilities are protected, and prevent any contaminated materials from entering the system.

2. Monitor Stormwater Systems:

- Inspect the stormwater system to assess potential impacts from the spill.
- If contamination of the stormwater facility has occurred, initiate further cleanup efforts, including potential sampling and analysis of water quality.

3. Follow-Up Actions:

- After the spill has been contained, conduct a follow-up inspection to ensure the stormwater system is functioning properly and is not impacted by the spill.
- If necessary, arrange for additional monitoring of the stormwater facility.

8. Documentation and Reporting

1. Complete a Spill Incident Report:

- Record the details of the spill in an internal incident report.
- Include the corrective actions taken and any follow-up required (e.g., environmental monitoring, reporting to regulators).

2. Regulatory Reporting:

- Submit the required reports to the MECP if necessary, based on the scale of the spill.
- Follow up with municipal authorities regarding the status of stormwater systems.

3. Internal Review and Corrective Action:

- Conduct a review of the incident to determine root causes and corrective actions.
- Adjust procedures and implement measures to prevent recurrence.

9. Preventative Measures**1. Regular Inspections:**

- Regularly inspect all stormwater management facilities for any signs of damage or malfunction that could contribute to future spill risks.
- Conduct periodic training on spill response for all staff involved in handling hazardous materials.

2. Spill Response Plan Review:

- Ensure the spill response plan is regularly reviewed and updated to account for new risks or changes in regulations.

3. Maintenance of Stormwater Management Systems:

- Perform routine maintenance of stormwater management facilities to prevent blockage and ensure they are functional during a spill response.

10. Training**1. Employee Training:**

- All relevant personnel must be trained on the spill reporting procedures, the proper use of spill containment materials, and the importance of protecting stormwater systems.
- Training records should be maintained for all personnel.

8 PUBLIC COMPLAINT PROCEDURE

The Township of South Stormont has adopted an online complaint reporting system through the Township's website. The Township is committed to continuous improvement and open communication with the public in an approach where all complaints are dealt with fairly in a respectful, transparent manner, and as quickly as possible.

All public comments are encouraged to be submitted to the Township in writing through the website. Individuals are asked to submit the following information:

- ♦ Details of what happened;
- ♦ Where it happened;
- ♦ When did it happen;
- ♦ Who was involved;
- ♦ What was said or done;
- ♦ What kind of resolution is being sought, if any; and
- ♦ Contact information of the individuals submitting the intake form.

The Township requests that individuals include their contact information when submitting compliments, complaints, feedback and suggestions to allow staff to follow up with the individual, if necessary. All written submissions will be dealt with in a confidential manner in accordance with the *Municipal Freedom of Information and Protection Act*.

All compliments, complaints, feedback and suggestions received by the Township should receive an acknowledgment of receipt within 24 to 28 hours during regular business days. If an intake form is received on a weekend or holiday, receipt should be acknowledged by 4:30 p.m. on the next business day. If the individual has requested a response or resolution to a matter, then the acknowledgment of receipt should indicate an estimated timeline for further follow up and an indication of what the next steps may be expected.

All compliments, complaints, feedback and suggestions will be recorded and tracked upon receipt. All action, in writing or by telephone/voicemail, discussion and resolution of any matter will be included as part of this electronic record.

Complaint and feedback records will be needed for regular review and analysis to identify recurring issues and to improve customer service and satisfaction. Annually, the number of complaints/feedback, type of complaints/feedback and number of resolved complaints may be included in a public report to Council. All personal information collected in carrying out this policy will be dealt with in a confidential manner in accordance with the *Municipal Freedom of Information and Protection Privacy Act*.

Figures

APPENDIX A

Environmental Compliance Approvals

APPENDIX B

Record Drawings

APPENDIX C

Inspection Checklist



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond			
	☐ Dry Pond			
LOCATION:				
DESCRIPTION (MODEL No.):				
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:		mm	
	Rainfall 72 hours prior to inspection:		mm	
CONDITIONS:		NOTES:		
Water Colour:	☐ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☐ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☐ None	☐ Minor	☐ Moderate	☐ High
Algae:	☐ None	☐ Minor	☐ Moderate	☐ High
Debris:	☐ None	☐ Minor	☐ Moderate	☐ High
Oil/Sheen:	☐ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☐ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):			cm	
Sediment Depth:			cm	
Sediment Depth from previous inspection:			cm	
Oil Depth:			cm	
Oil Depth from previous inspection:			cm	
Is sediment visible below or above the water surface?		☐ Yes	☐ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☐ None	☐ Minor	☐ Moderate	☐ High
Sediment	☐ None	☐ Minor	☐ Moderate	☐ High
Cracking	☐ None	☐ Minor	☐ Moderate	☐ High
Damage	☐ None	☐ Minor	☐ Moderate	☐ High
Erosion	☐ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☐ None	☐ Minor	☐ Moderate	☐ High
Sediment	☐ None	☐ Minor	☐ Moderate	☐ High
Cracking	☐ None	☐ Minor	☐ Moderate	☐ High
Damage	☐ None	☐ Minor	☐ Moderate	☐ High
Erosion	☐ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:			☐ N/A	
Aquatic:	☐ Healthy	☐ Unhealthy		
Shoreline:	☐ Healthy	☐ Unhealthy		
Upland:	☐ Healthy	☐ Unhealthy		
Trees/Shrubs:	☐ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☐ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☐ Satisfactory	☐ Un-Satisfactory	_____
Fences:	☐ Satisfactory	☐ Un-Satisfactory	_____
Gates:	☐ Satisfactory	☐ Un-Satisfactory	_____
Locks:	☐ Satisfactory	☐ Un-Satisfactory	_____
Signage:	☐ Satisfactory	☐ Un-Satisfactory	_____

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☐ No

Type of Maintenance Required:

Inspected By

Date of Inspection

APPENDIX D

Operation and Maintenance Manuals

APPENDIX E

Standard Operating Procedures

	Stormwater Management Facilities 2025 Annual Report Township of South Stormont	2025-March-23 Rev #0
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Appendix E Stormwater Management Maintenance Inspection Forms - 2025



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond ☒ Dry Pond			
LOCATION:	Forest Hill Arrowhead			
DESCRIPTION (MODEL No.):	SWP1			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	1 mm	mm	
	Rainfall 72 hours prior to inspection:	1 mm	mm	
CONDITIONS:		NOTES:		
Water Colour:	☒ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☒ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☒ None	☐ Minor	☐ Moderate	☐ High
Algae:	☒ None	☐ Minor	☐ Moderate	☐ High
Debris:	☐ None	☒ Minor	☐ Moderate	☐ High
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☒ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):		90	cm	
Sediment Depth:		10	cm	
Sediment Depth from previous inspection:		10	cm	
Oil Depth:		NA	cm	
Oil Depth from previous inspection:		NA	cm	
Is sediment visible below or above the water surface?		☐ Yes	☒ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:			☐ N/A	
Aquatic:	☒ Healthy	☐ Unhealthy		
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?			☐ Yes ☒ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	N/A
Gates:	☐ Satisfactory	☐ Un-Satisfactory	N/A
Locks:	☐ Satisfactory	☐ Un-Satisfactory	N/A
Signage:	☐ Satisfactory	☐ Un-Satisfactory	N/A

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

Inspected By

April 23/25
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond			
LOCATION:	Mathew Klovon			
DESCRIPTION (MODEL No.):	SW P2			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	1 mm	mm	
	Rainfall 72 hours prior to inspection:	1 mm	mm	
CONDITIONS:		NOTES:		
Water Colour:	☒ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☒ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☒ None	☐ Minor	☐ Moderate	☐ High
Algae:	☐ None	☒ Minor	☐ Moderate	☐ High
Debris:	☐ None	☒ Minor	☐ Moderate	☐ High
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☒ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):		68	cm	
Sediment Depth:		10	cm	
Sediment Depth from previous inspection:			cm	
Oil Depth:			cm	
Oil Depth from previous inspection:			cm	
Is sediment visible below or above the water surface?		☐ Yes	☒ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☐ None	☒ Minor	☐ Moderate	☐ High
Sediment	☐ None	☐ Minor	☐ Moderate	☐ High
Cracking	☐ None	☐ Minor	☐ Moderate	☐ High
Damage	☐ None	☐ Minor	☐ Moderate	☐ High
Erosion	☐ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:			☐ N/A	
Aquatic:	☒ Healthy	☐ Unhealthy		
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☒ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	
Gates:	☐ Satisfactory	☐ Un-Satisfactory	
Locks:	☐ Satisfactory	☐ Un-Satisfactory	
Signage:	☐ Satisfactory	☐ Un-Satisfactory	

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

Inspected By

Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF		☐ Wet Pond	
		☐ Dry Pond	
LOCATION:		Chase meadows	
DESCRIPTION (MODEL No.):		SWP3	
ENVIRONMENTAL CONDITIONS:		Rainfall 24 hours prior to inspection:	20 mm
		Rainfall 72 hours prior to inspection:	20 mm
CONDITIONS:		NOTES:	
Water Colour:	☒ Clear ☐ Green ☐ Brown ☐ Other		
Foul Odour:	☒ None ☐ Minor ☐ Moderate ☐ High		
Floating Material:	☒ None ☐ Minor ☐ Moderate ☐ High		
Algae:	☐ None ☒ Minor ☐ Moderate ☐ High		
Debris:	☒ None ☐ Minor ☐ Moderate ☐ High		
Oil/Sheen:	☒ None ☐ Minor ☐ Moderate ☐ High		
Floatables:	☒ None ☐ Minor ☐ Moderate ☐ High		
Water Level Reading (from top of structure):		88	cm
Sediment Depth:		0	cm
Sediment Depth from previous inspection:			cm
Oil Depth:		—	cm
Oil Depth from previous inspection:		—	cm
Is sediment visible below or above the water surface?		☐ Yes	☒ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High		
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High		
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High		
Damage	☒ None ☐ Minor ☐ Moderate ☐ High		
Erosion	☐ None ☒ Minor ☐ Moderate ☐ High		
OUTLET			
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High		
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High		
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High		
Damage	☒ None ☐ Minor ☐ Moderate ☐ High		
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High		
INSPECTION OF VEGETATION:		☐ N/A	
Aquatic:	☒ Healthy ☐ Unhealthy		
Shoreline:	☒ Healthy ☐ Unhealthy		
Upland:	☒ Healthy ☐ Unhealthy		
Trees/Shrubs:	☐ Healthy ☐ Unhealthy	N/A	
Reseeding/Replanting Required?		☐ Yes	☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☐ Satisfactory	☒ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	NA
Gates:	☐ Satisfactory	☐ Un-Satisfactory	NA
Locks:	☐ Satisfactory	☐ Un-Satisfactory	NA
Signage:	☐ Satisfactory	☐ Un-Satisfactory	NA

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

M. J. + Jay. St Thomas
Inspected By

May 7/23
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond			
LOCATION: D.B.	David Brown			
DESCRIPTION (MODEL No.):	SWP4			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	1 mm	mm	
	Rainfall 72 hours prior to inspection:	1 mm	mm	
CONDITIONS:		NOTES:		
Water Colour:	☒ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☒ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☒ None	☐ Minor	☐ Moderate	☐ High
Algae:	☒ None	☐ Minor	☐ Moderate	☐ High
Debris:	☒ None	☐ Minor	☐ Moderate	☐ High
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☒ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):		60	cm	
Sediment Depth:		21	cm	
Sediment Depth from previous inspection:			cm	
Oil Depth:		—	cm	
Oil Depth from previous inspection:		—	cm	
Is sediment visible below or above the water surface?		☐ Yes	☒ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:			☐ N/A	
Aquatic:	☒ Healthy	☐ Unhealthy		
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?			☐ Yes ☒ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☐ Satisfactory	☒ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	NA
Gates:	☐ Satisfactory	☐ Un-Satisfactory	NA
Locks:	☐ Satisfactory	☐ Un-Satisfactory	NA
Signage:	☐ Satisfactory	☐ Un-Satisfactory	NA

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☐ No

Type of Maintenance Required:


Inspected By

April 23/25

Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Stormwater

Type of SWMF	☐ Wet Pond			
	☐ Dry Pond			
LOCATION:	Malyon estates			
DESCRIPTION (MODEL No.):	SWP5			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	1 mm	mm	
	Rainfall 72 hours prior to inspection:	1 mm	mm	
CONDITIONS:		NOTES:		
Water Colour:	☐ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☐ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☐ None	☐ Minor	☐ Moderate	☐ High
Algae:	☐ None	☐ Minor	☐ Moderate	☐ High
Debris:	☐ None	☐ Minor	☐ Moderate	☐ High
Oil/Sheen:	☐ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☐ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):			cm	
Sediment Depth:			cm	
Sediment Depth from previous inspection:			cm	
Oil Depth:		—	cm	
Oil Depth from previous inspection:		—	cm	
Is sediment visible below or above the water surface?		☐ Yes	☐ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☐ None	☐ Minor	☒ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:		☐ N/A		
Aquatic:	☒ Healthy	☐ Unhealthy		
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☒ No	



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory

Fences: ☐ Satisfactory ☐ Un-Satisfactory

Gates: ☐ Satisfactory ☐ Un-Satisfactory

Locks: ☐ Satisfactory ☐ Un-Satisfactory

Signage: ☐ Satisfactory ☐ Un-Satisfactory

NA

NA

NA

NA

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

MZ

Inspected By

April 22/25

Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond			
	☒ Dry Pond			
LOCATION:	ST Andrews fire hall			
DESCRIPTION (MODEL No.):	SWP6			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20	mm	
	Rainfall 72 hours prior to inspection:	40	mm	
CONDITIONS:		NOTES:		
Water Colour:	☐ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☐ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☐ None	☐ Minor	☐ Moderate	☐ High
Algae:	☐ None	☐ Minor	☐ Moderate	☐ High
Debris:	☐ None	☐ Minor	☐ Moderate	☐ High
Oil/Sheen:	☐ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☐ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):		0	cm	
Sediment Depth:		0	cm	
Sediment Depth from previous inspection:		0	cm	
Oil Depth:		0	cm	
Oil Depth from previous inspection:		0	cm	
Is sediment visible below or above the water surface?		☐ Yes	☒ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☐ None	☒ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:		☐ N/A		
Aquatic:	☒ Healthy	☐ Unhealthy		
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☒ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory

Fences: ☐ Satisfactory ☐ Un-Satisfactory

Gates: ☐ Satisfactory ☐ Un-Satisfactory

Locks: ☐ Satisfactory ☐ Un-Satisfactory

Signage: ☐ Satisfactory ☐ Un-Satisfactory

NA

NA

NA

NA

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

Jay St Thomas
Inspected By

May 7/25
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond	☐ Dry Pond
LOCATION:	Jenton Lane	
DESCRIPTION (MODEL No.):	SWP 8	
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20 mm
	Rainfall 72 hours prior to inspection:	20 mm
CONDITIONS:		NOTES:
Water Colour:	☒ Clear ☐ Green ☐ Brown ☐ Other	
Foul Odour:	☒ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☒ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☒ None ☐ Minor ☐ Moderate ☐ High	
Debris:	☐ None ☒ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☒ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☒ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):		70 cm
Sediment Depth:		4 cm
Sediment Depth from previous inspection:		cm
Oil Depth:		— cm
Oil Depth from previous inspection:		— cm
Is sediment visible below or above the water surface?		☐ Yes ☐ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☐ None ☒ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☐ None ☒ Minor ☐ Moderate ☐ High	
Sediment	☐ None ☒ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		☐ N/A
Aquatic:	☒ Healthy ☐ Unhealthy	
Shoreline:	☒ Healthy ☐ Unhealthy	
Upland:	☒ Healthy ☐ Unhealthy	
Trees/Shrubs:	☒ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

NA

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

M. J. Thomas
Inspected By Jay St Thomas

May 7/23
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond ☒ Dry Pond			
LOCATION:	oblique + opp			
DESCRIPTION (MODEL No.):	Sw 88			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20	mm	
	Rainfall 72 hours prior to inspection:	20	mm	
CONDITIONS:		NOTES:		
Water Colour:	☒ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☒ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☒ None	☐ Minor	☐ Moderate	☐ High
Algae:	☒ None	☐ Minor	☐ Moderate	☐ High
Debris:	☐ None	☐ Minor	☒ Moderate	☐ High
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☒ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):			cm	
Sediment Depth:			cm	
Sediment Depth from previous inspection:			cm	
Oil Depth:		—	cm	
Oil Depth from previous inspection:		—	cm	
Is sediment visible below or above the water surface?		☐ Yes	☒ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:			☐ N/A	
Aquatic:	☒ Healthy	☐ Unhealthy		
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☒ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	N A
Gates:	☐ Satisfactory	☐ Un-Satisfactory	N A
Locks:	☐ Satisfactory	☐ Un-Satisfactory	N A
Signage:	☐ Satisfactory	☐ Un-Satisfactory	N A

GENERAL COMMENTS:

Is Maintenance Required?	☒ Yes	☐ No	
Type of Maintenance Required:	shrub removal		
M. Zup		May 21/25	
Inspected By		Date of Inspection	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond			
LOCATION:	SWP 9			
DESCRIPTION (MODEL No.):	Industrial east			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	1 mm	mm	
	Rainfall 72 hours prior to inspection:	1 mm	mm	
CONDITIONS:		NOTES:		
Water Colour:	☒ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☒ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☒ None	☐ Minor	☐ Moderate	☐ High
Algae:	☐ None	☒ Minor	☐ Moderate	☐ High
Debris:	☒ None	☐ Minor	☐ Moderate	☐ High
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☒ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):		10	cm	
Sediment Depth:		0	cm	
Sediment Depth from previous inspection:		NA	cm	
Oil Depth:		0	cm	
Oil Depth from previous inspection:		0	cm	
Is sediment visible below or above the water surface?		☐ Yes	☒ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:			☐ N/A	
Aquatic:	☒ Healthy	☐ Unhealthy		
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☒ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	NA
Gates:	☒ Satisfactory	☐ Un-Satisfactory	
Locks:	☐ Satisfactory	☐ Un-Satisfactory	NA
Signage:	☐ Satisfactory	☐ Un-Satisfactory	NA

GENERAL COMMENTS:

Is Maintenance Required?	☐ Yes	☒ No	
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Type of Maintenance Required:

Mark Zeno
Inspected By

April 23/25
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond ☒ Dry Pond		
LOCATION:	EMS		
DESCRIPTION (MODEL No.):	SWPD		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20	mm
	Rainfall 72 hours prior to inspection:	20	mm
CONDITIONS:		NOTES:	
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other	None	
Foul Odour:	☒ None ☐ Minor ☐ Moderate ☐ High		
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High	N/A	
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High		
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High		
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High		
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High		
Water Level Reading (from top of structure):		0	cm
Sediment Depth:		0	cm
Sediment Depth from previous inspection:		0	cm
Oil Depth:		0	cm
Oil Depth from previous inspection:		0	cm
Is sediment visible below or above the water surface?		☐ Yes	☒ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate ☐ High
Sediment	☒ None	☐ Minor	☐ Moderate ☐ High
Cracking	☒ None	☐ Minor	☐ Moderate ☐ High
Damage	☒ None	☐ Minor	☐ Moderate ☐ High
Erosion	☒ None	☐ Minor	☐ Moderate ☐ High
OUTLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate ☐ High
Sediment	☒ None	☐ Minor	☐ Moderate ☐ High
Cracking	☒ None	☐ Minor	☐ Moderate ☐ High
Damage	☐ None	☐ Minor	☐ Moderate ☐ High
Erosion	☒ None	☐ Minor	☐ Moderate ☐ High
INSPECTION OF VEGETATION:		☐ N/A	
Aquatic:	☐ Healthy ☐ Unhealthy	N/A	
Shoreline:	☒ Healthy ☐ Unhealthy		
Upland:	☒ Healthy ☐ Unhealthy		
Trees/Shrubs:	☒ Healthy ☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

N/A

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

M3

J ST Thomas
Inspected By

May 1/25

Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF		☐ Wet Pond ☒ Dry Pond	
LOCATION:	Bonville - Sub.		
DESCRIPTION (MODEL No.):	SW P11		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20	mm
	Rainfall 72 hours prior to inspection:	20	mm
CONDITIONS:		NOTES:	
Water Colour:	☒ Clear	☐ Green	☐ Brown
Foul Odour:	☒ None	☐ Minor	☐ Moderate
Floating Material:	☒ None	☐ Minor	☐ Moderate
Algae:	☒ None	☐ Minor	☐ Moderate
Debris:	☒ None	☐ Minor	☐ Moderate
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate
Floatables:	☒ None	☐ Minor	☐ Moderate
Water Level Reading (from top of structure):		94	cm
Sediment Depth:		2	cm
Sediment Depth from previous inspection:			cm
Oil Depth:			cm
Oil Depth from previous inspection:			cm
Is sediment visible below or above the water surface?		☐ Yes	☐ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate
Sediment	☒ None	☐ Minor	☐ Moderate
Cracking	☒ None	☐ Minor	☐ Moderate
Damage	☒ None	☐ Minor	☐ Moderate
Erosion	☒ None	☐ Minor	☐ Moderate
OUTLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate
Sediment	☒ None	☐ Minor	☐ Moderate
Cracking	☒ None	☐ Minor	☐ Moderate
Damage	☒ None	☐ Minor	☐ Moderate
Erosion	☒ None	☐ Minor	☐ Moderate
INSPECTION OF VEGETATION:			☐ N/A
Aquatic:	☒ Healthy	☐ Unhealthy	New
Shoreline:	☐ Healthy	☒ Unhealthy	
Upland:	☐ Healthy	☒ Unhealthy	
Trees/Shrubs:	☐ Healthy	☒ Unhealthy	
Reseeding/Replanting Required?			☐ Yes ☐ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☐ Satisfactory ☒ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

No access

GENERAL COMMENTS:

Is Maintenance Required?

☒ Yes

☐ No

Type of Maintenance Required:

roadway needs to be installed
- planting ongoing

M. Jay St Thomas
Inspected By

May 27/25
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond ☐ Dry Pond		
LOCATION:	John Chase Sub		
DESCRIPTION (MODEL No.):	S.W.P. 12		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20	mm
	Rainfall 72 hours prior to inspection:	20	mm
CONDITIONS:		NOTES:	
Water Colour:	☐ Clear ☐ Green ☒ Brown ☐ Other		
Foul Odour:	☒ None ☐ Minor ☐ Moderate ☐ High		
Floating Material:	☒ None ☐ Minor ☐ Moderate ☐ High		
Algae:	☒ None ☐ Minor ☐ Moderate ☐ High		
Debris:	☒ None ☐ Minor ☐ Moderate ☐ High		
Oil/Sheen:	☒ None ☐ Minor ☐ Moderate ☐ High		
Floatables:	☒ None ☐ Minor ☐ Moderate ☐ High		
Water Level Reading (from top of structure):		88 83	cm
Sediment Depth:		4	cm
Sediment Depth from previous inspection:			cm
Oil Depth:		0	cm
Oil Depth from previous inspection:		0	cm
Is sediment visible below or above the water surface?		☐ Yes	☒ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate ☐ High
Sediment	☒ None	☐ Minor	☐ Moderate ☐ High
Cracking	☒ None	☐ Minor	☐ Moderate ☐ High
Damage	☒ None	☐ Minor	☐ Moderate ☐ High
Erosion	☒ None	☐ Minor	☐ Moderate ☐ High
OUTLET			
Blockage/Debris	☐ None	☐ Minor	☐ Moderate ☐ High
Sediment	☐ None	☐ Minor	☐ Moderate ☐ High
Cracking	☐ None	☐ Minor	☐ Moderate ☐ High
Damage	☐ None	☐ Minor	☐ Moderate ☐ High
Erosion	☐ None	☐ Minor	☐ Moderate ☐ High
INSPECTION OF VEGETATION:		☐ N/A	
Aquatic:	☐ Healthy ☐ Unhealthy	Just seeded	
Shoreline:	☐ Healthy ☐ Unhealthy		
Upland:	☐ Healthy ☐ Unhealthy		
Trees/Shrubs:	☐ Healthy ☐ Unhealthy		
Reseeding/Replanting Required?		☐ Yes	☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	NA
Gates:	☐ Satisfactory	☐ Un-Satisfactory	NA
Locks:	☐ Satisfactory	☐ Un-Satisfactory	NA
Signage:	☐ Satisfactory	☐ Un-Satisfactory	NA

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

M. J. S ST
Inspected By

May 7 / 25
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond ☒ Dry Pond		
LOCATION:	North of L.S.		
DESCRIPTION (MODEL No.):	SW P13		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20	mm
	Rainfall 72 hours prior to inspection:	20	mm
CONDITIONS:		NOTES:	
Water Colour:	☒ Clear	☐ Green	☐ Brown
Foul Odour:	☒ None	☐ Minor	☐ Moderate
Floating Material:	☒ None	☐ Minor	☐ Moderate
Algae:	☒ None	☐ Minor	☐ Moderate
Debris:	☒ None	☐ Minor	☐ Moderate
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate
Floatables:	☒ None	☐ Minor	☐ Moderate
Water Level Reading (from top of structure):		N/A	cm
Sediment Depth:			cm
Sediment Depth from previous inspection:			cm
Oil Depth:			cm
Oil Depth from previous inspection:			cm
Is sediment visible below or above the water surface?		☐ Yes	☒ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate
Sediment	☒ None	☐ Minor	☐ Moderate
Cracking	☒ None	☐ Minor	☐ Moderate
Damage	☒ None	☐ Minor	☐ Moderate
Erosion	☒ None	☐ Minor	☐ Moderate
OUTLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate
Sediment	☒ None	☐ Minor	☐ Moderate
Cracking	☒ None	☐ Minor	☐ Moderate
Damage	☒ None	☐ Minor	☐ Moderate
Erosion	☒ None	☐ Minor	☐ Moderate
INSPECTION OF VEGETATION:			☐ N/A
Aquatic:	☒ Healthy	☐ Unhealthy	
Shoreline:	☒ Healthy	☐ Unhealthy	
Upland:	☒ Healthy	☐ Unhealthy	
Trees/Shrubs:	☒ Healthy	☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes	☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

NA
NA
NA
NA

GENERAL COMMENTS:

Beaver removal - ongoing.

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

M. J. Jay St Thomas

Inspected By

May 7/25

Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond	☒ Dry Pond	<i>NA</i>
LOCATION:	<i>ins - medical</i>		
DESCRIPTION (MODEL No.):	<i>SWP 14</i>		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	<i>20</i>	mm
	Rainfall 72 hours prior to inspection:	<i>20</i>	mm
CONDITIONS:		NOTES:	
Water Colour:	☐ Clear	☐ Green	☐ Brown
	☐ Other		
Foul Odour:	☐ None	☐ Minor	☐ Moderate
	☐ High		
Floating Material:	☐ None	☐ Minor	☐ Moderate
	☐ High		
Algae:	☐ None	☐ Minor	☐ Moderate
	☐ High		
Debris:	☐ None	☐ Minor	☐ Moderate
	☐ High		
Oil/Sheen:	☐ None	☐ Minor	☐ Moderate
	☐ High		
Floatables:	☐ None	☐ Minor	☐ Moderate
	☐ High		
Water Level Reading (from top of structure):			cm
Sediment Depth:			cm
Sediment Depth from previous inspection:			cm
Oil Depth:			cm
Oil Depth from previous inspection:			cm
Is sediment visible below or above the water surface?		☐ Yes	☒ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate
	☐ High		
Sediment	☒ None	☐ Minor	☐ Moderate
	☐ High		
Cracking	☒ None	☐ Minor	☐ Moderate
	☐ High		
Damage	☒ None	☐ Minor	☐ Moderate
	☐ High		
Erosion	☒ None	☐ Minor	☐ Moderate
	☐ High		
OUTLET			
Blockage/Debris	☐ None	☐ Minor	☐ Moderate
	☐ High		
Sediment	☐ None	☐ Minor	☐ Moderate
	☐ High		
Cracking	☐ None	☐ Minor	☐ Moderate
	☐ High		
Damage	☐ None	☐ Minor	☐ Moderate
	☐ High		
Erosion	☐ None	☐ Minor	☐ Moderate
	☐ High		
INSPECTION OF VEGETATION:			☒ N/A
Aquatic:	☐ Healthy	☐ Unhealthy	
Shoreline:	☐ Healthy	☐ Unhealthy	
Upland:	☐ Healthy	☐ Unhealthy	
Trees/Shrubs:	☐ Healthy	☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes	☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

MZ
Inspected By *Jay St Thomas*

May 7/25
Date of Inspection



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond		
LOCATION:	Stone Gate		
DESCRIPTION (MODEL No.):	SWP15		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	20	mm
	Rainfall 72 hours prior to inspection:	20	mm
CONDITIONS:		NOTES:	
Water Colour:	☐ Clear ☒ Green ☐ Brown ☐ Other		
Foul Odour:	☒ None ☐ Minor ☐ Moderate ☐ High		
Floating Material:	☒ None ☐ Minor ☐ Moderate ☐ High		
Algae:	☒ None ☐ Minor ☐ Moderate ☐ High		
Debris:	☒ None ☐ Minor ☐ Moderate ☐ High		
Oil/Sheen:	☒ None ☐ Minor ☐ Moderate ☐ High		
Floatables:	☒ None ☐ Minor ☐ Moderate ☐ High		
Water Level Reading (from top of structure):		112	cm
Sediment Depth:		0	cm
Sediment Depth from previous inspection:			cm
Oil Depth:		-	cm
Oil Depth from previous inspection:		-	cm
Is sediment visible below or above the water surface?		☐ Yes ☒ No	
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High		
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High		
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High		
Damage	☒ None ☐ Minor ☐ Moderate ☐ High		
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High		
OUTLET			
Blockage/Debris	☐ None ☒ Minor ☐ Moderate ☐ High		
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High		
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High		
Damage	☒ None ☐ Minor ☐ Moderate ☐ High		
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High		
INSPECTION OF VEGETATION:			☐ N/A
Aquatic:	☒ Healthy ☐ Unhealthy		
Shoreline:	☒ Healthy ☐ Unhealthy		
Upland:	☒ Healthy ☐ Unhealthy		
Trees/Shrubs:	☒ Healthy ☐ Unhealthy		
Reseeding/Replanting Required?			☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

} NA

GENERAL COMMENTS:

Is Maintenance Required?

☐ Yes

☒ No

Type of Maintenance Required:

M. Zipe

Inspected By

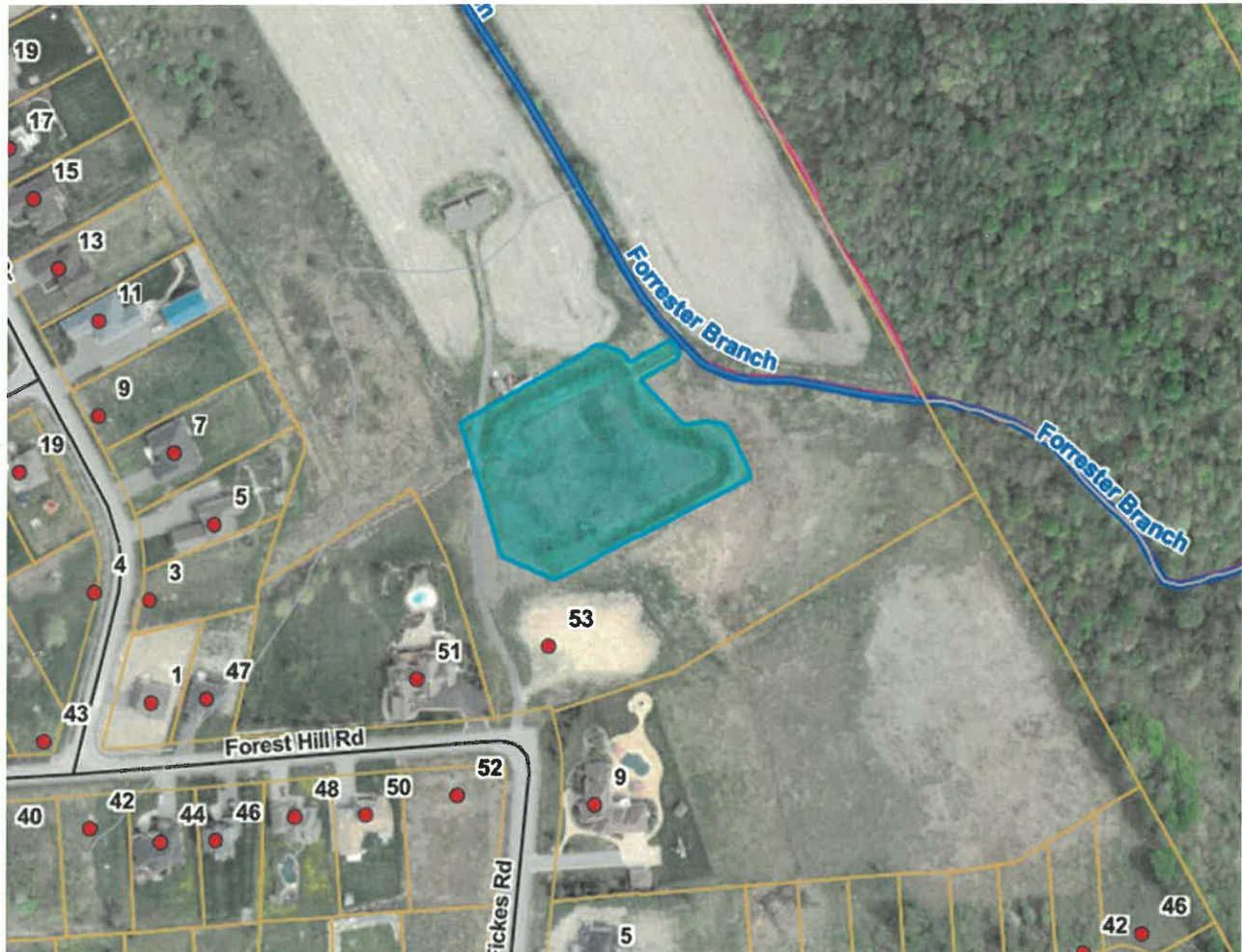
Jerry St Thomas

May 7/25

Date of Inspection



SWP1 – Arrowhead Phase 1 to 6 Dry Pond



Location Coordinates: 45.033734, -74.872122

Design Storm Quantity: 10-year Storm

Outlet: Forrester Branch to South Branch of Raisin River

Reference ECA(s): 5256-73PGZW



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

105 cm
93

Type of SWMF	☐ Wet Pond	☒ Dry Pond
LOCATION:		
DESCRIPTION (MODEL No.):		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	10 cm Snow
	Rainfall 72 hours prior to inspection:	mm
CONDITIONS:		NOTES:
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other	
Foul Odour:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High	• Frozen
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):		88 cm
Sediment Depth:		12 cm NA
Sediment Depth from previous inspection:		cm
Oil Depth:		cm
Oil Depth from previous inspection:		cm
Is sediment visible below or above the water surface?		☐ Yes ☒ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High	
Damage	☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High	
Damage	☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		☐ N/A
Aquatic:	☐ Healthy ☐ Unhealthy	
Shoreline:	☒ Healthy ☐ Unhealthy	
Upland:	☐ Healthy ☐ Unhealthy	
Trees/Shrubs:	☒ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes ☐ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

N/A
N/A
N/A

No sign

GENERAL COMMENTS:

Is Maintenance Required?

☒ Yes

☐ No

Type of Maintenance Required:

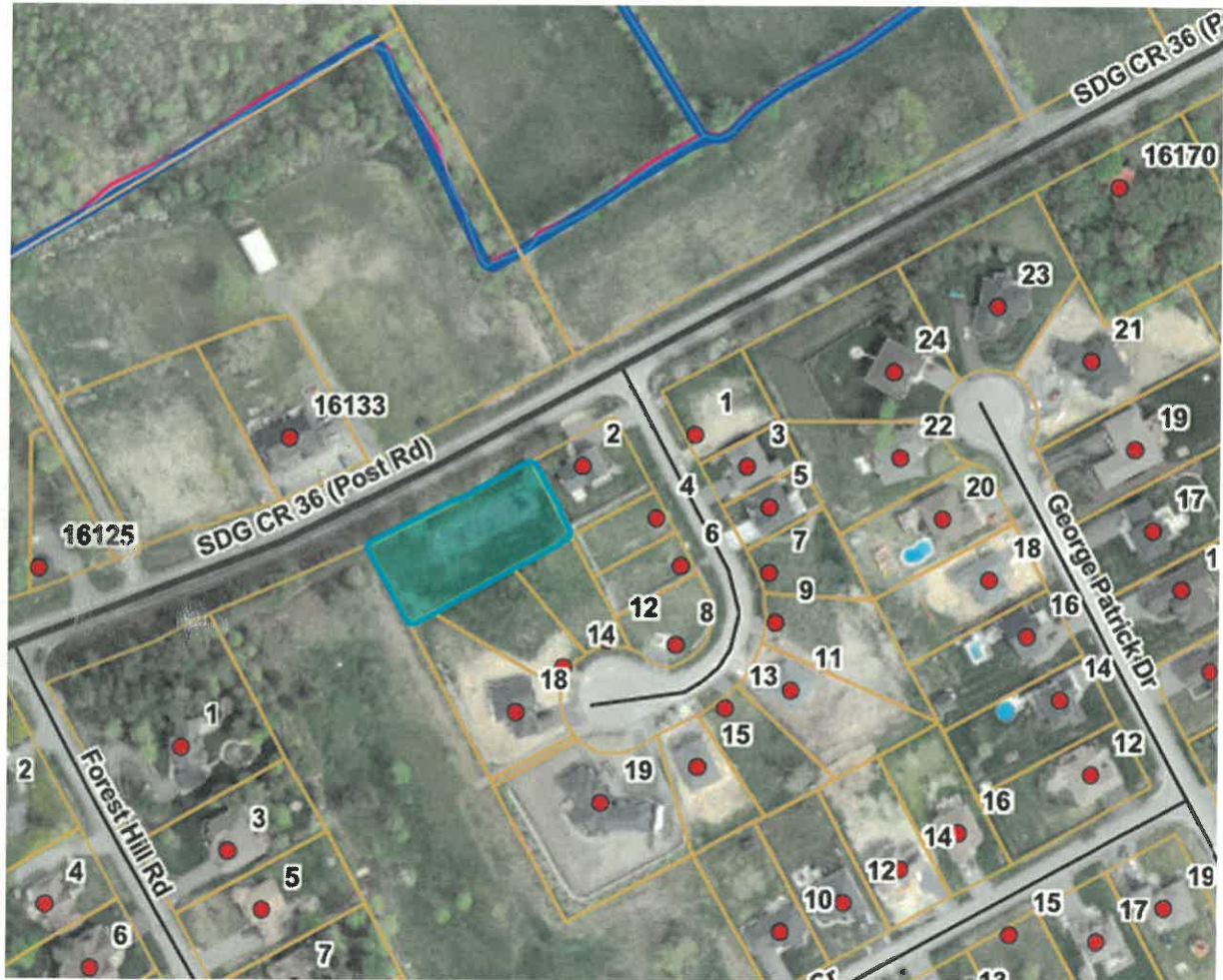
Sign installation

m.2
Inspected By

Nov 17/25
Date of Inspection



SWP2 – Arrowhead Phase 7 Wet Pond



Location Coordinates: 45.034974, -74.878517

Design Storm Quantity: 100-year Storm

Outlet: Post Rd. Ditch to Forrester Branch

Reference ECA(s): 9409-9YVKNX



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond		
LOCATION:	Arrowhead Phase 7. (Mathew Kievan)		
DESCRIPTION (MODEL No.):			
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	☒	mm
	Rainfall 72 hours prior to inspection:	☒	mm
CONDITIONS:		NOTES:	
Water Colour:	☒ Clear	☐ Green	☐ Brown
Foul Odour:	☒ None	☐ Minor	☐ Moderate
Floating Material:	☐ None	☒ Minor	☐ Moderate
Algae:	☐ None	☒ Minor	☐ Moderate
Debris:	☒ None	☐ Minor	☐ Moderate
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate
Floatables:	☐ None	☒ Minor	☐ Moderate
Water Level Reading (from top of structure):		88 cm	
Sediment Depth:		12 cm	
Sediment Depth from previous inspection:			
Oil Depth:			
Oil Depth from previous inspection:			
Is sediment visible below or above the water surface?		☐ Yes	☒ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate
Sediment	☒ None	☐ Minor	☐ Moderate
Cracking	☒ None	☐ Minor	☐ Moderate
Damage	☒ None	☐ Minor	☐ Moderate
Erosion	☒ None	☐ Minor	☐ Moderate
OUTLET			
Blockage/Debris	☒ None	☐ Minor	☐ Moderate
Sediment	☒ None	☐ Minor	☐ Moderate
Cracking	☒ None	☐ Minor	☐ Moderate
Damage	☒ None	☐ Minor	☐ Moderate
Erosion	☒ None	☐ Minor	☐ Moderate
INSPECTION OF VEGETATION:			☐ N/A
Aquatic:	☒ Healthy	☐ Unhealthy	
Shoreline:	☒ Healthy	☐ Unhealthy	
Upland:	☒ Healthy	☐ Unhealthy	
Trees/Shrubs:	☒ Healthy	☐ Unhealthy	

Reseeding/Replanting Required? ☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory
Fences:	☐ Satisfactory	☐ Un-Satisfactory
Gates:	☐ Satisfactory	☐ Un-Satisfactory
Locks:	☐ Satisfactory	☐ Un-Satisfactory
Signage:	☐ Satisfactory	☒ Un-Satisfactory

N/A
N/A
N/A

Wrong Sign.

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☒ Yes

☐ No

Replace Signage

Inspected By

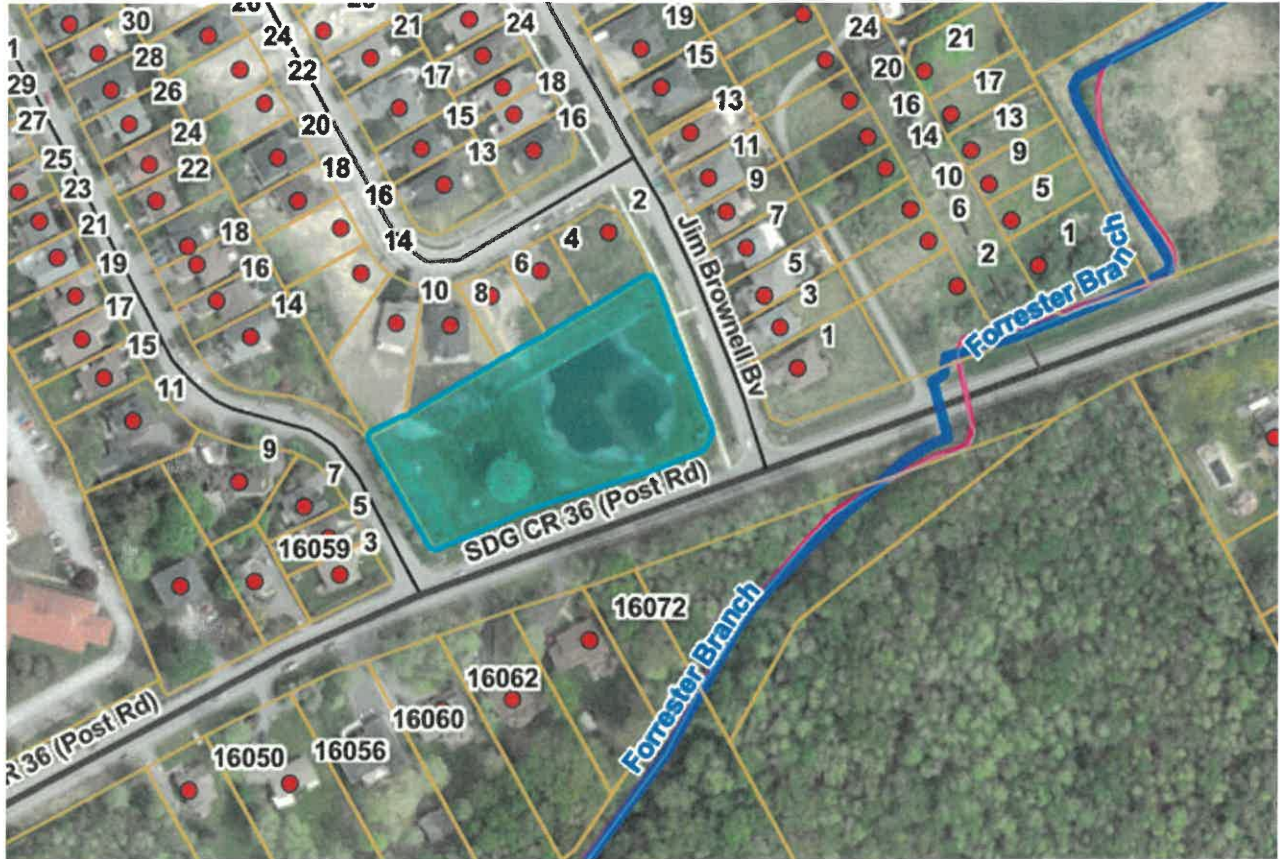
JST

Date of Inspection

Oct 27/0025



SWP3 – Chase Meadows Wet Pond



Location Coordinates: 45.034156, -74.884061

Design Storm Quantity: 100-year Storm

Outlet: Post Rd. Ditch to Forrester Branch

Reference ECA(s): 2903-9BUQE9



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond			
LOCATION:	Chase Meadows			
DESCRIPTION (MODEL No.):				
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	15	mm	
	Rainfall 72 hours prior to inspection:	15	mm	
CONDITIONS:	NOTES:			
Water Colour:	☒ Clear	☐ Green	☐ Brown	☐ Other
Foul Odour:	☒ None	☐ Minor	☐ Moderate	☐ High
Floating Material:	☐ None	☒ Minor	☐ Moderate	☐ High
Algae:	☐ None	☒ Minor	☐ Moderate	☐ High
Debris:	☒ None	☐ Minor	☐ Moderate	☐ High
Oil/Sheen:	☒ None	☐ Minor	☐ Moderate	☐ High
Floatables:	☒ None	☐ Minor	☐ Moderate	☐ High
Water Level Reading (from top of structure):		92	cm	
Sediment Depth:		1	cm	
Sediment Depth from previous inspection:			cm	
Oil Depth:			cm	
Oil Depth from previous inspection:			cm	
Is sediment visible below or above the water surface?		☐ Yes	☒ No	
STRUCTURAL COMPONENTS:				
INLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
OUTLET				
Blockage/Debris	☒ None	☐ Minor	☐ Moderate	☐ High
Sediment	☒ None	☐ Minor	☐ Moderate	☐ High
Cracking	☒ None	☐ Minor	☐ Moderate	☐ High
Damage	☒ None	☐ Minor	☐ Moderate	☐ High
Erosion	☒ None	☐ Minor	☐ Moderate	☐ High
INSPECTION OF VEGETATION:				
Aquatic:	☒ Healthy	☐ Unhealthy	☐ N/A	
Shoreline:	☒ Healthy	☐ Unhealthy		
Upland:	☒ Healthy	☐ Unhealthy		
Trees/Shrubs:	☒ Healthy	☐ Unhealthy		

Reseeding/Replanting Required?

☐ Yes

☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory
Fences:	☒ Satisfactory	☐ Un-Satisfactory
Gates:	☐ Satisfactory	☐ Un-Satisfactory
Locks:	☐ Satisfactory	☐ Un-Satisfactory
Signage:	☒ Satisfactory	☐ Un-Satisfactory

N/A
N/A

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☐ Yes ☒ No

Inspected By

Jason

Date of Inspection

Nov 4/2025.



SWP4 – Parkway Estates Wet Pond



Location Coordinates: 45.039679, -74.910800

Design Storm Quantity: 100-year Storm

Outlet: Private Drain (CN Railway) to Murray Drain

Reference ECA(s): 7828-93MM94



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond	☐ Dry Pond
LOCATION:	Brown Sub.	
DESCRIPTION (MODEL No.):		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	mm
	Rainfall 72 hours prior to inspection:	mm
CONDITIONS:	NOTES:	
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other	N A
Foul Odour:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High	
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):		cm
Sediment Depth:		SNOW cm
Sediment Depth from previous inspection:		cm
Oil Depth:		cm
Oil Depth from previous inspection:		cm
Is sediment visible below or above the water surface?		☐ Yes ☐ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High	
Damage	☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High	
Damage	☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		
Aquatic:	☐ Healthy ☐ Unhealthy	☐ N/A
Shoreline:	☐ Healthy ☐ Unhealthy	Frozen
Upland:	☐ Healthy ☐ Unhealthy	
Trees/Shrubs:	☐ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes ☐ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☐ Satisfactory ☒ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

GENERAL COMMENTS:

Brushing required to access.

Is Maintenance Required? ☒ Yes ☐ No
Type of Maintenance Required:

Brushing


Inspected By

Nov 17 / 25
Date of Inspection

**SWP5 – Malyon Estates
Dry Pond with StormCeptor**



Location Coordinates: 45.095187, -74.807817

Design Storm Quantity: N/A

Outlet: Main Branch of Raisin River

Reference ECA(s): N/A



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond	☐ Dry Pond
LOCATION: <u>Malyon Estates</u>		
DESCRIPTION (MODEL No.): <u>Stormceptor</u>		
ENVIRONMENTAL CONDITIONS:		
Rainfall 24 hours prior to inspection:		<u>15</u> mm
Rainfall 72 hours prior to inspection:		<u>15</u> mm
CONDITIONS:		NOTES:
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other	<u>N/A</u>
Foul Odour:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High	
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):		<u>75</u> cm
Sediment Depth:		<u>15</u> cm
Sediment Depth from previous inspection:		cm
Oil Depth:		cm
Oil Depth from previous inspection:		cm
Is sediment visible below or above the water surface?		☐ Yes ☒ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		
Aquatic:	☐ Healthy ☐ Unhealthy	☐ N/A
Shoreline:	☐ Healthy ☐ Unhealthy	<u>N/A</u>
Upland:	☐ Healthy ☐ Unhealthy	
Trees/Shrubs:	☐ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☒ Satisfactory ☐ Un-Satisfactory
Signage: ☒ Satisfactory ☐ Un-Satisfactory

N/A
N/A
E

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☐ Yes

☒ No

Inspected By

Gaspar

Date of Inspection

Nov 4/2025



SWP6 – St. Andrews Firehall Dry Pond with StormCeptor



Location Coordinates: 45.095736, -74.793837

Design Storm Quantity: N/A

**Outlet: South Stormont Ditch, to SDG Counties Ditch,
to CNTY Rd. 18 Drain 'B'**

Reference ECA(s): N/A



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☒ Dry Pond
LOCATION:	St. Andrews Fire hall
DESCRIPTION (MODEL No.):	
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection: 15 mm Rainfall 72 hours prior to inspection: 15 mm
CONDITIONS:	NOTES:
Water Colour: ☒ Clear ☐ Green ☐ Brown ☐ Other	N/A
Foul Odour: ☒ None ☐ Minor ☐ Moderate ☐ High	
Floating Material: ☒ None ☐ Minor ☐ Moderate ☐ High	
Algae: ☒ None ☐ Minor ☐ Moderate ☐ High	
Debris: ☒ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen: ☒ None ☐ Minor ☐ Moderate ☐ High	
Floatables: ☒ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):	63 cm
Sediment Depth:	6 cm
Sediment Depth from previous inspection:	cm
Oil Depth:	cm
Oil Depth from previous inspection:	cm
Is sediment visible below or above the water surface?	☐ Yes ☒ No
STRUCTURAL COMPONENTS:	
INLET	
Blockage/Debris: ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment: ☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking: ☒ None ☐ Minor ☐ Moderate ☐ High	
Damage: ☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion: ☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET	
Blockage/Debris: ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment: ☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking: ☒ None ☐ Minor ☐ Moderate ☐ High	
Damage: ☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion: ☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:	
Aquatic: ☒ Healthy ☐ Unhealthy	☐ N/A
Shoreline: ☒ Healthy ☐ Unhealthy	
Upland: ☒ Healthy ☐ Unhealthy	
Trees/Shrubs: ☒ Healthy ☐ Unhealthy	

Reseeding/Replanting Required? ☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☒ Satisfactory ☐ Un-Satisfactory
Signage: ☒ Satisfactory ☐ Un-Satisfactory

N/A
N/A
N/A

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☐ Yes ☐ No

Inspected By

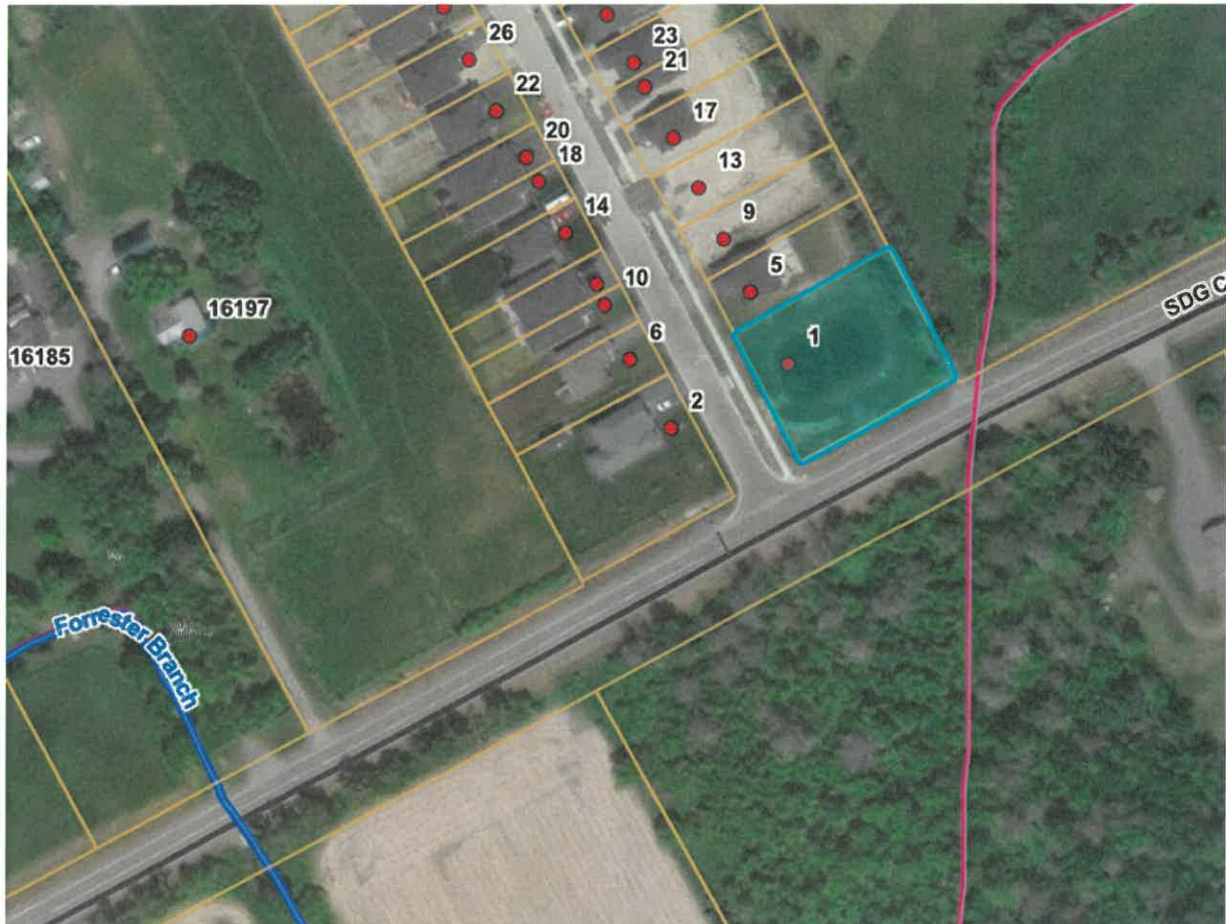
Jason

Date of Inspection

Nov 5/2025



SWP7 – Fenton Farms Wet Pond



Location Coordinates: 45.038033, -74.872120

Design Storm Quantity: 100-year Storm

Outlet: Post Road Ditch, to Constructed Drain, to Forrester Branch

Reference ECA(s): 4382-C7HKNN

**STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST**

Type of SWMF	☒ Wet Pond ☐ Dry Pond	
LOCATION:	Fenton Farms	
DESCRIPTION (MODEL No.):		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection: 15 mm Rainfall 72 hours prior to inspection: 15 mm	
CONDITIONS:	Water Colour: ☒ Clear ☐ Green ☒ Brown ☐ Other Foul Odour: ☒ None ☐ Minor ☐ Moderate ☐ High Floating Material: ☒ None ☐ Minor ☐ Moderate ☐ High Algae: ☒ None ☐ Minor ☐ Moderate ☐ High Debris: ☒ None ☐ Minor ☐ Moderate ☐ High Oil/Sheen: ☒ None ☐ Minor ☐ Moderate ☐ High Floatables: ☒ None ☐ Minor ☐ Moderate ☐ High	NOTES:
Water Level Reading (from top of structure): 153 cm		
Sediment Depth: 1 cm		
Sediment Depth from previous inspection: cm		
Oil Depth: cm		
Oil Depth from previous inspection: cm		
Is sediment visible below or above the water surface?		☐ Yes ☒ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		
Aquatic:	☒ Healthy ☐ Unhealthy	☐ N/A
Shoreline:	☒ Healthy ☐ Unhealthy	
Upland:	☒ Healthy ☐ Unhealthy	
Trees/Shrubs:	☒ Healthy ☐ Unhealthy	

Reseeding/Replanting Required? ☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☒ Satisfactory ☐ Un-Satisfactory

N/A
N/A
N/A

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☐ Yes ☒ No

Inspected By

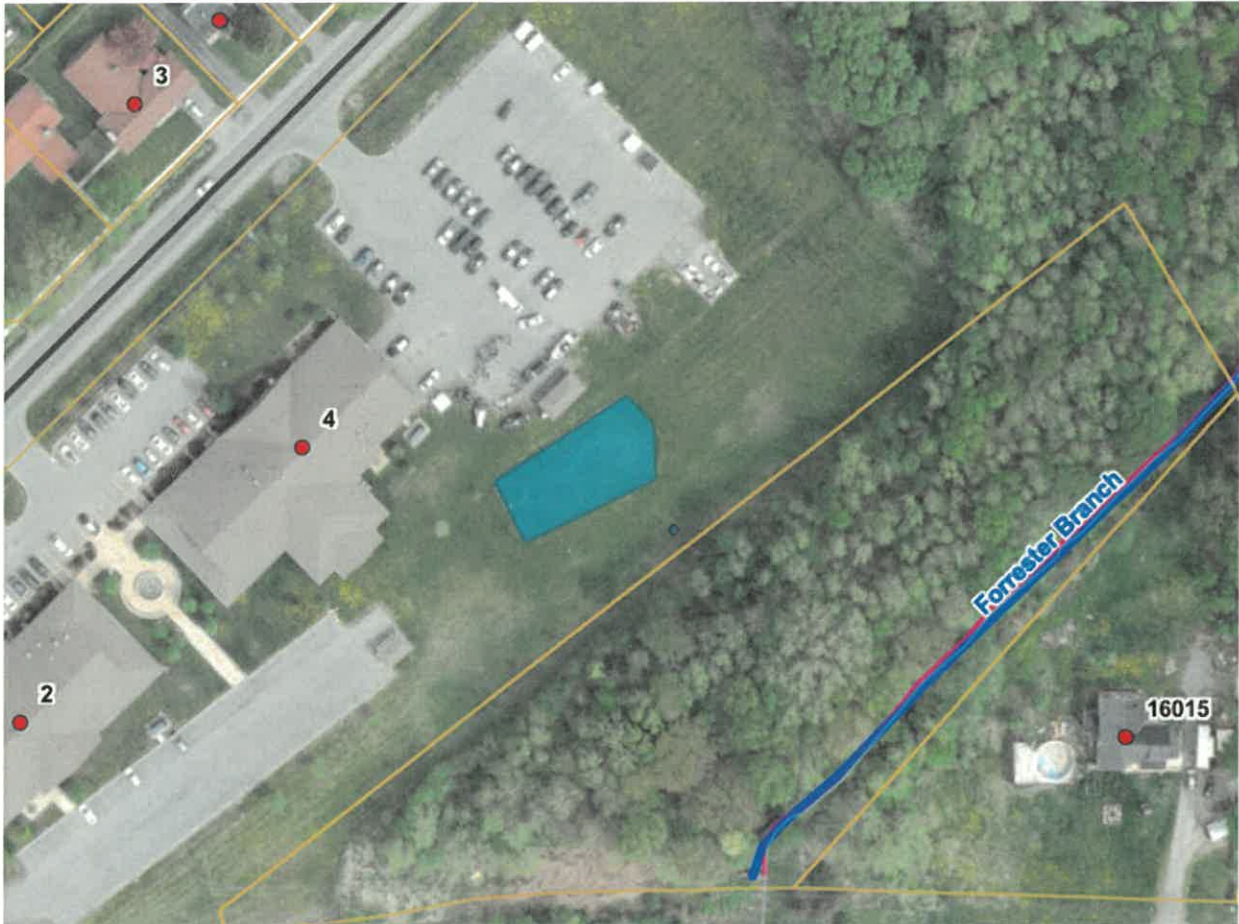
Jan 8/12

Date of Inspection

Nov. 4/2025



SWP8 – Township Office/OPP Dry Pond



Location Coordinates: 45.030230, -74.889014

Design Storm Quantity: N/A

Outlet: 60m southwest of Forrester Branch

Reference ECA(s): N/A



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond
LOCATION: Township office / OPP	
DESCRIPTION (MODEL No.):	
ENVIRONMENTAL CONDITIONS: Rainfall 24 hours prior to inspection: ϕ mm Rainfall 72 hours prior to inspection: ϕ mm	
CONDITIONS:	
NOTES:	
Water Colour: ☒ Clear ☐ Green ☐ Brown ☐ Other	
Foul Odour: ☒ None ☐ Minor ☐ Moderate ☐ High	
Floating Material: ☒ None ☐ Minor ☐ Moderate ☐ High	
Algae: ☒ None ☐ Minor ☐ Moderate ☐ High	
Debris: ☒ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen: ☒ None ☐ Minor ☐ Moderate ☐ High	
Floatables: ☒ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure): _____ cm	
Sediment Depth: _____ cm	
Sediment Depth from previous inspection: _____ cm	
Oil Depth: _____ cm	
Oil Depth from previous inspection: _____ cm	
Is sediment visible below or above the water surface? ☐ Yes ☐ No	
STRUCTURAL COMPONENTS:	
INLET	
Blockage/Debris ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment ☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking ☒ None ☐ Minor ☐ Moderate ☐ High	
Damage ☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion ☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET	
Blockage/Debris ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment ☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking ☒ None ☐ Minor ☐ Moderate ☐ High	
Damage ☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion ☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:	
Aquatic: ☒ Healthy ☐ Unhealthy	☐ N/A
Shoreline: ☒ Healthy ☐ Unhealthy	
Upland: ☒ Healthy ☐ Unhealthy	
Trees/Shrubs: ☒ Healthy ☐ Unhealthy	
Reseeding/Replanting Required? ☐ Yes ☒ No	



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☒ Satisfactory ☐ Un-Satisfactory

N/A
N/A
N/A

GENERAL COMMENTS:

Is Maintenance Required? ☒ Yes ☐ No
Type of Maintenance Required: *Tree removal*

Inspected By

98A

Date of Inspection

Oct 27/2025



SWP9 – East Industrial Park Wet Pond



Location Coordinates: 45.038460, -74.838911

Design Storm Quantity: 5/100-Year Storm

Outlet: Surface Discharge to South Branch of Raisin River

Reference ECA(s): 186-S701



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond	☐ Dry Pond
LOCATION:	<i>industrial park</i>	
DESCRIPTION (MODEL No.):		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	<i>SNOW</i> 10 cm
	Rainfall 72 hours prior to inspection:	mm
CONDITIONS:	NOTES:	
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other	<i>frozen</i>
Foul Odour:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High	
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):		cm
Sediment Depth:		<i>frozen</i> cm
Sediment Depth from previous inspection:		cm
Oil Depth:		cm
Oil Depth from previous inspection:		cm
Is sediment visible below or above the water surface?		☐ Yes ☐ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High	
Damage	☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High	
Damage	☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		
Aquatic:	☐ Healthy ☐ Unhealthy	☐ N/A
Shoreline:	☐ Healthy ☐ Unhealthy	
Upland:	☐ Healthy ☐ Unhealthy	
Trees/Shrubs:	☐ Healthy ☐ Unhealthy	

Reseeding/Replanting Required? ☐ Yes ☐ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	NA
Gates:	☒ Satisfactory	☐ Un-Satisfactory	
Locks:	☐ Satisfactory	☐ Un-Satisfactory	NA
Signage:	☒ Satisfactory	☐ Un-Satisfactory	

GENERAL COMMENTS:

Is Maintenance Required? ☐ Yes ☒ No
Type of Maintenance Required:


Inspected By

NOV 17 / 25
Date of Inspection



SWP10 – EMS Station Dry Pond



Location Coordinates: 45.038132, -74.903447

Design Storm Quantity: 100-Year Storm

Outlet: Moulinette Rd. Ditch

Reference ECA(s): N/A



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☐ Wet Pond	☒ Dry Pond
LOCATION:	EMS. Station.	
DESCRIPTION (MODEL No.):		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection:	mm
	Rainfall 72 hours prior to inspection:	mm
CONDITIONS:	NOTES:	
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other	
Foul Odour:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High	
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):		cm
Sediment Depth:		cm
Sediment Depth from previous inspection:		cm
Oil Depth:		cm
Oil Depth from previous inspection:		cm
Is sediment visible below or above the water surface?		☐ Yes ☐ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		
Aquatic:	☐ Healthy ☐ Unhealthy	☐ N/A
Shoreline:	☐ Healthy ☐ Unhealthy	
Upland:	☐ Healthy ☐ Unhealthy	
Trees/Shrubs:	☐ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory
Fences:	☐ Satisfactory	☐ Un-Satisfactory
Gates:	☐ Satisfactory	☐ Un-Satisfactory
Locks:	☐ Satisfactory	☐ Un-Satisfactory
Signage:	☒ Satisfactory	☐ Un-Satisfactory

N/A
N/A
N/A

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☐ Yes

☒ No

Inspected By

J88

Date of Inspection

Oct 27/2025



RD

SWP11 – Glenco Subdivision Wet Pond



Location Coordinates: 45.1222955, -74.821458

Design Storm Quantity: 5/100-Year Storm

Outlet: Moulinette Rd. Ditch

Reference ECA(s): N/A



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond
LOCATION:	Bonville (blanca)
DESCRIPTION (MODEL No.):	
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection: 10cm mm Rainfall 72 hours prior to inspection: Snow mm
CONDITIONS:	NOTES:
Water Colour: ☐ Clear ☐ Green ☐ Brown ☐ Other	
Foul Odour: ☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material: ☐ None ☐ Minor ☐ Moderate ☐ High	
Algae: ☐ None ☐ Minor ☐ Moderate ☐ High	NA
Debris: ☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen: ☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables: ☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):	Frozen cm
Sediment Depth:	cm
Sediment Depth from previous inspection:	cm
Oil Depth:	cm
Oil Depth from previous inspection:	cm
Is sediment visible below or above the water surface?	☐ Yes ☐ No
STRUCTURAL COMPONENTS:	
INLET	
Blockage/Debris ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment ☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking ☐ None ☐ Minor ☐ Moderate ☐ High	
Damage ☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion ☐ None ☐ Minor ☐ Moderate ☐ High	
OUTLET	
Blockage/Debris ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment ☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking ☐ None ☐ Minor ☐ Moderate ☐ High	
Damage ☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion ☐ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:	
Aquatic: ☐ Healthy ☐ Unhealthy	☐ N/A
Shoreline: ☐ Healthy ☐ Unhealthy	
Upland: ☐ Healthy ☐ Unhealthy	
Trees/Shrubs: ☐ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?	☐ Yes ☐ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☐ Satisfactory	☒ Un-Satisfactory	
Fences:	☐ Satisfactory	☒ Un-Satisfactory	NA
Gates:	☐ Satisfactory	☒ Un-Satisfactory	NA
Locks:	☐ Satisfactory	☒ Un-Satisfactory	NA
Signage:	☒ Satisfactory	☐ Un-Satisfactory	

GENERAL COMMENTS:

M.

Is Maintenance Required? ☒ Yes ☐ No

Type of Maintenance Required:

road + grading
needs to be completed

M. Zyk

Inspected By

Date of Inspection



SWP12 – John Chase Subdivision Wet Pond



Location Coordinates: 45.035130, -74.881693

Design Storm Quantity: 5/100-Year Storm

Outlet: Moulinette Rd. Ditch

Reference ECA(s): N/A



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond ☐ Dry Pond
LOCATION:	John Chase
DESCRIPTION (MODEL No.):	
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection: Snow 10 cm mm Rainfall 72 hours prior to inspection: mm
CONDITIONS:	NOTES:
Water Colour: ☐ Clear ☐ Green ☐ Brown ☐ Other	Frozen
Foul Odour: ☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material: ☐ None ☐ Minor ☐ Moderate ☐ High	
Algae: ☐ None ☐ Minor ☐ Moderate ☐ High	
Debris: ☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen: ☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables: ☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure): Frozen cm	
Sediment Depth: cm	
Sediment Depth from previous inspection: cm	
Oil Depth: cm	
Oil Depth from previous inspection: cm	
Is sediment visible below or above the water surface? ☐ Yes ☐ No	
STRUCTURAL COMPONENTS:	
INLET	
Blockage/Debris ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment ☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking ☐ None ☐ Minor ☐ Moderate ☐ High	
Damage ☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion ☐ None ☐ Minor ☐ Moderate ☐ High	
OUTLET	
Blockage/Debris ☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment ☐ None ☐ Minor ☐ Moderate ☐ High	
Cracking ☐ None ☐ Minor ☐ Moderate ☐ High	
Damage ☐ None ☐ Minor ☐ Moderate ☐ High	
Erosion ☐ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:	
Aquatic: ☐ Healthy ☐ Unhealthy	☐ N/A
Shoreline: ☐ Healthy ☐ Unhealthy	
Upland: ☐ Healthy ☐ Unhealthy	
Trees/Shrubs: ☐ Healthy ☐ Unhealthy	
Reseeding/Replanting Required? ☐ Yes ☒ N/A ☐ No	



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads:	☒ Satisfactory	☐ Un-Satisfactory	
Fences:	☐ Satisfactory	☐ Un-Satisfactory	NA
Gates:	☐ Satisfactory	☐ Un-Satisfactory	NA
Locks:	☒ Satisfactory	☐ Un-Satisfactory	NA
Signage:	☒ Satisfactory	☐ Un-Satisfactory	

GENERAL COMMENTS:

Is Maintenance Required? ☐ Yes ☒ No
Type of Maintenance Required:


Inspected By

NOV 17/25
Date of Inspection



SWP13 – Long Sault Drain Dry Pond (Forest Highlighted)



Location Coordinates: 45.040701, -74.894505

Design Storm Quantity: N/A

**Outlet: Ditch in CNR Corridor to Branch of the South
Branch Drain**

Reference ECA(s): 7989-8L2L4V

STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

Type of SWMF		☒ Wet Pond	
		☐ Dry Pond	
LOCATION:		L.S. DRAIN	
DESCRIPTION (MODEL No.):			
ENVIRONMENTAL CONDITIONS:		Rainfall 24 hours prior to inspection:	SNOW 10 cm mm
		Rainfall 72 hours prior to inspection:	mm
CONDITIONS:		NOTES:	
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other		
Foul Odour:	☐ None ☐ Minor ☐ Moderate ☐ High		
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High		
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High		
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High		
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High		
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High		
Water Level Reading (from top of structure):			cm
Sediment Depth:		frozen	cm
Sediment Depth from previous inspection:			cm
Oil Depth:			cm
Oil Depth from previous inspection:			cm
Is sediment visible below or above the water surface?		☐ Yes	☐ No
STRUCTURAL COMPONENTS:			
INLET			
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High		
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High		
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High		
Damage	☐ None ☐ Minor ☐ Moderate ☐ High		
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High		
OUTLET			
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High		
Sediment	☐ None ☐ Minor ☐ Moderate ☐ High		
Cracking	☐ None ☐ Minor ☐ Moderate ☐ High		
Damage	☐ None ☐ Minor ☐ Moderate ☐ High		
Erosion	☐ None ☐ Minor ☐ Moderate ☐ High		
INSPECTION OF VEGETATION:			
Aquatic:	☐ Healthy ☐ Unhealthy	☐ N/A	
Shoreline:	☐ Healthy ☐ Unhealthy		
Upland:	☐ Healthy ☐ Unhealthy		
Trees/Shrubs:	☒ Healthy ☐ Unhealthy		

Reseeding/Replanting Required?

☐ Yes

☐ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☐ Un-Satisfactory

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☐ Yes

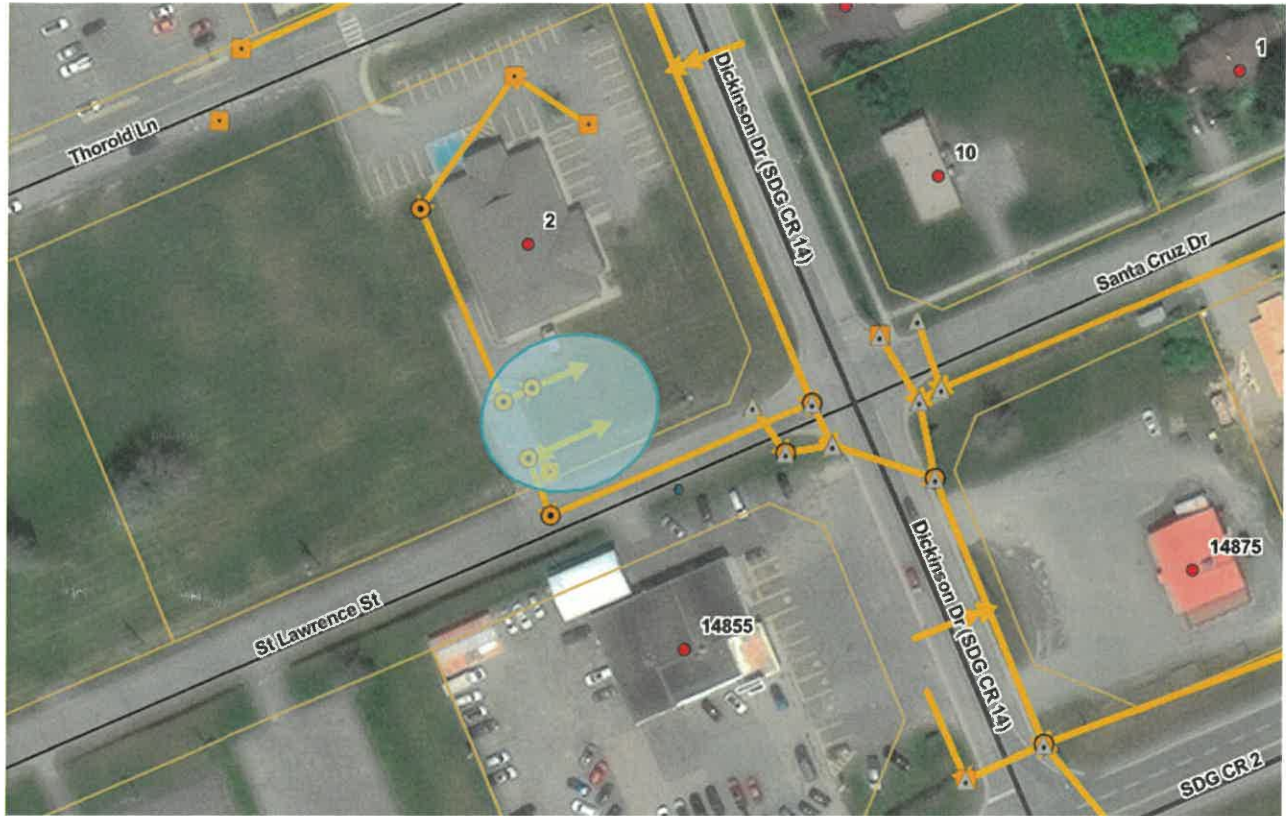
☒ No


Inspected By

NOV 17 / 25
Date of Inspection



**SWP14 – St. Lawrence Medical Clinic
Stormtech Sc740 Underground Storage**



Location Coordinates: 44.996142, -74.987785

Design Storm Quantity: 5/100-Year Storm

Outlet: Storm Network at St. Lawrence Street

Reference ECA(s): N/A

**STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST**

Type of SWMF		☐ Wet Pond
		☐ Dry Pond
LOCATION:		St. Lawrence Medical Clinic
DESCRIPTION (MODEL No.):		Stormtech Sc 740 Underground Storage
ENVIRONMENTAL CONDITIONS:		Rainfall 24 hours prior to inspection: 15 mm
		Rainfall 72 hours prior to inspection: 15 mm
CONDITIONS:		NOTES:
Water Colour:	☐ Clear ☐ Green ☐ Brown ☐ Other	
Foul Odour:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☐ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☐ None ☐ Minor ☐ Moderate ☐ High	
Debris:	☐ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☐ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☐ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure):		cm
Sediment Depth:		cm
Sediment Depth from previous inspection:		cm
Oil Depth:		cm
Oil Depth from previous inspection:		cm
Is sediment visible below or above the water surface?		☐ Yes ☐ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		
Aquatic:	☐ Healthy ☐ Unhealthy	☒ N/A
Shoreline:	☐ Healthy ☐ Unhealthy	
Upland:	☐ Healthy ☐ Unhealthy	
Trees/Shrubs:	☐ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes ☐ No



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☐ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☐ Un-Satisfactory
Signage: ☐ Satisfactory ☒ Un-Satisfactory

N/A

N/A

N/A

No Sign

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☒ Yes

☐ No

install signage

Inspected By

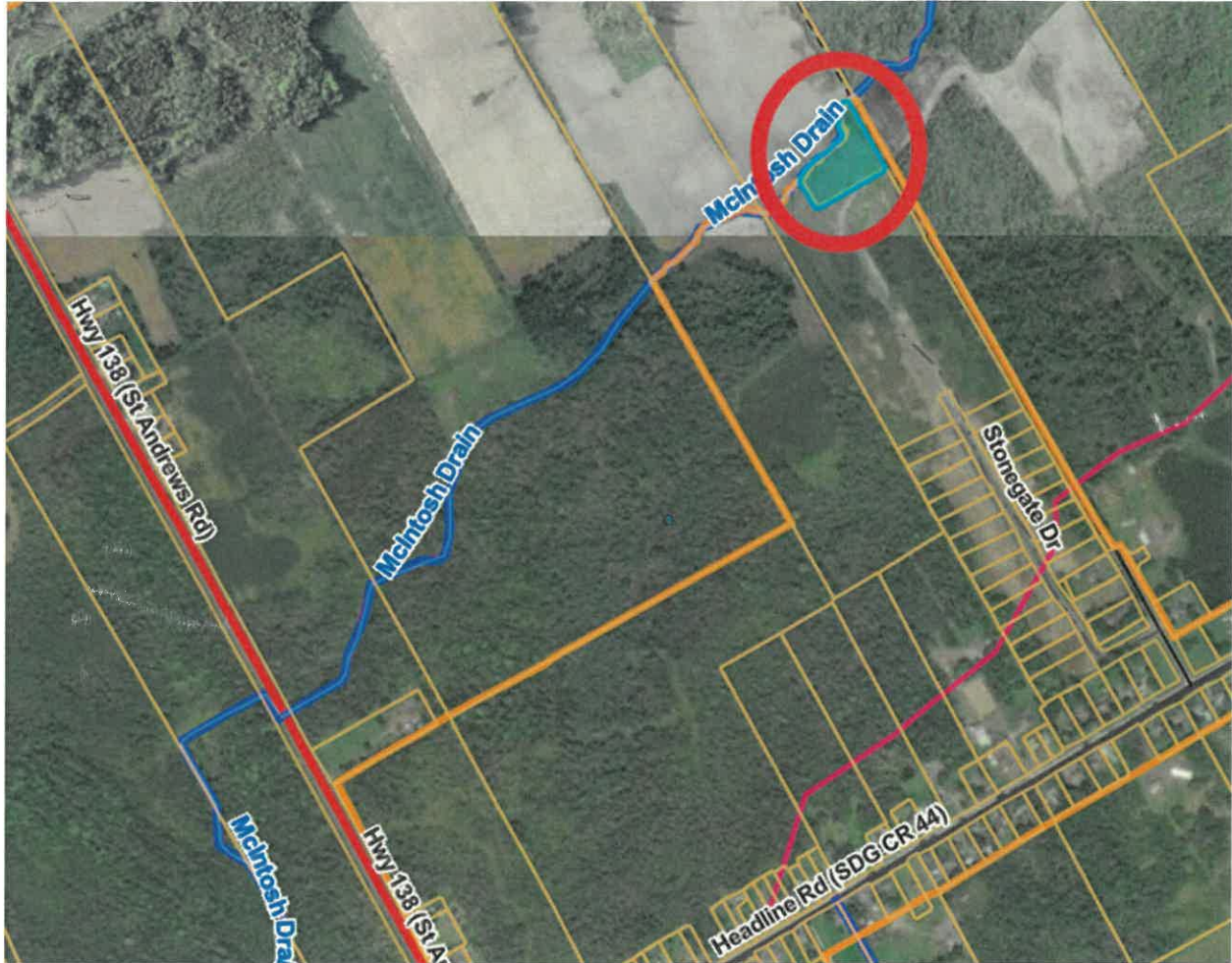
Jason

Date of Inspection

Nov 4/2025



SWP15 – Stonegate Subdivision Wet Pond



Location Coordinates: 44.996142, -74.987785

Design Storm Quantity: 5/100-Year Storm

Outlet: McIntosh Drain

Reference ECA(s): 2446-APMGUD



STORMWATER MANAGEMENT FACILITIES INSPECTION CHECKLIST

Type of SWMF	☒ Wet Pond	☐ Dry Pond
LOCATION:	Stonegate Subdivision	
DESCRIPTION (MODEL No.):		
ENVIRONMENTAL CONDITIONS:	Rainfall 24 hours prior to inspection: 15 mm	Rainfall 72 hours prior to inspection: 15 mm
CONDITIONS:	NOTES:	
Water Colour:	☒ Clear ☒ Green ☐ Brown ☐ Other	
Foul Odour:	☒ None ☐ Minor ☐ Moderate ☐ High	
Floating Material:	☒ None ☐ Minor ☐ Moderate ☐ High	
Algae:	☒ None ☐ Minor ☐ Moderate ☐ High	
Debris:	☒ None ☐ Minor ☐ Moderate ☐ High	
Oil/Sheen:	☒ None ☐ Minor ☐ Moderate ☐ High	
Floatables:	☒ None ☐ Minor ☐ Moderate ☐ High	
Water Level Reading (from top of structure): 128 cm		
Sediment Depth: 1 cm		
Sediment Depth from previous inspection:		
Oil Depth:		
Oil Depth from previous inspection:		
Is sediment visible below or above the water surface?		☐ Yes ☒ No
STRUCTURAL COMPONENTS:		
INLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
OUTLET		
Blockage/Debris	☒ None ☐ Minor ☐ Moderate ☐ High	
Sediment	☒ None ☐ Minor ☐ Moderate ☐ High	
Cracking	☒ None ☐ Minor ☐ Moderate ☐ High	
Damage	☒ None ☐ Minor ☐ Moderate ☐ High	
Erosion	☒ None ☐ Minor ☐ Moderate ☐ High	
INSPECTION OF VEGETATION:		
Aquatic:	☒ Healthy ☐ Unhealthy	☐ N/A
Shoreline:	☒ Healthy ☐ Unhealthy	
Upland:	☒ Healthy ☐ Unhealthy	
Trees/Shrubs:	☒ Healthy ☐ Unhealthy	
Reseeding/Replanting Required?		☐ Yes ☒ No



STORMWATER MANAGEMENT FACILITIES
INSPECTION CHECKLIST

OVERALL CONDITIONS:

Access Roads: ☒ Satisfactory ☐ Un-Satisfactory
Fences: ☐ Satisfactory ☐ Un-Satisfactory
Gates: ☒ Satisfactory ☐ Un-Satisfactory
Locks: ☐ Satisfactory ☒ Un-Satisfactory
Signage: ☐ Satisfactory ☒ Un-Satisfactory

N/A

No Lock
Sign not installed yet

GENERAL COMMENTS:

Is Maintenance Required?
Type of Maintenance Required:

☒ Yes

☐ No

Sign

Inspected By

Jan SL

Date of Inspection

Nov. 4/2025