



Township of Oro-Medonte

# Urbanized Stormwater Management System Annual Performance Report 2024

(Prepared in accordance with Ministry of Environment, Conservation and Parks' Consolidated Linear Infrastructure Environmental Compliance Approval (#126-S701), Schedule E, Section 5).

Period Covering: January 1, 2024 to December 31, 2024

February 3, 2025

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## 1 Introduction

The Township of Oro-Medonte (Township) has prepared this report to satisfy the reporting requirements of Ministry of Environment, Conservation and Parks (MECP) Consolidated Linear Infrastructure Environmental Compliance Approvals (CLI-ECAs) Schedule E, Section 5, as outlined below and covers the period January 1, 2024 to December 31, 2024.

In 2022, CLI-ECAs were first introduced to modernize the approach to municipal linear infrastructure permissions concerning sanitary sewage conveyance and stormwater management. They include pre-authorization conditions and design criteria similar in scope to municipal drinking water to reduce the burden on municipalities, developers, and the MECP, while imposing a consistent set of conditions intended to improve environmental protection in sewage and stormwater system design, construction, and operations across Ontario.

The Township of Oro-Medonte's first CLI-ECA (#126-S701) for the Urbanized Stormwater Management System (Authorized System) was issued on January 11, 2023. Previous to this, all compliance and maintenance requirements for Stormwater Management Facilities (SWMFs) and associated infrastructure were outlined in Environmental Compliance Approvals (ECAs) issued specifically to each facility.

## 2 Compliance Reporting Requirement

Schedule E, Section 5.2 of the CLI-ECA requires the Township to prepare performance reports on a calendar year basis and submit them to the Director on or before April 30th of the calendar year following the reported period. The report shall contain, but is not limited to, the following information pertaining to the reporting period:

- 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;
- Includes a summary and interpretation of environmental trends based on all monitoring information and data for the previous five (5) years;
- Includes a summary of any operating problems encountered and corrective actions taken;
- 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;
- Includes a summary of the calibration and maintenance carried out on all monitoring equipment;
- Includes a summary of any complaints related to the Sewage Works received during the reporting period and any steps taken to address the complaints;

- 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;
- Includes a summary of all spills or abnormal discharge events;
- Includes a summary of actions taken, including timelines, to improve or correct performance of any aspect of the Authorized System; and
- Includes a summary of the status of actions for the previous reporting year.

## **2.1 Availability of the Urban Stormwater Management Annual System Performance Report**

In accordance with Schedule E, Section 5.3 of the CLI-ECA, a copy of the Annual Stormwater Management System Performance Report is available to the public, free of charge from the following outlets:

- Township of Oro-Medonte’s website ([www.oro-medonte.ca](http://www.oro-medonte.ca)); and,
- Public request at the Municipal Office located at 148 Line 7 South, Oro-Medonte.

The public is advised of the report’s availability and how to obtain a copy, without charge, on the Township of Oro-Medonte’s website through annual public reporting to Council and on the stormwater dedicated landing page.

## **3 Stormwater Management Facility Descriptions**

SWMFs are designed to protect downstream infrastructure from flooding by temporarily storing runoff and improving water quality by trapping pollutant-laden sediment in runoff from urban drainage areas. The centralized collection of polluted sediments in these facilities helps to prevent their release into rivers, streams, and lakes where they can degrade water quality, harm aquatic life, and adversely impact downstream recreational areas.

As of December 31, 2024, there are fifty-four (54) SWMFs operated by the Township of Oro-Medonte, comprised of dry ponds, wet ponds, and low-impact developments (LIDs). These facilities collect, transmit and treat stormwater before reaching their ultimate receivers in the Lake Simcoe and Eastern Georgian Bay watersheds.

Dry ponds detain water for a short period of time (less than 48 hours) to allow particles and pollutants picked up along the way to settle and reduce stormwater peak flow rates.

Wet ponds hold a permanent pool of water that stores stormwater runoff while releasing it back into the environment at a controlled rate. These types of facilities provide

**URBANIZED STORMWATER MANAGEMENT SYSTEM  
ANNUAL PERFORMANCE REPORT 2024**



treatment through extended retention time which allows for the settling of suspended solids and contaminants.

LIDs are land planning and engineering design strategies used to prevent and/or mitigate erosion, sedimentation and pollution caused by stormwater runoff. They are features that mimic natural water cycles by increasing stormwater infiltration into the soil where it is filtered and absorbed by plants and/or specialized filter media.

The Township of Oro-Medonte SWMF inventory of the Authorized System is outlined below in Table 1.

**Table 1: Stormwater Management Facility Inventory Table**

SWMF ID	Facility Name	Stormwater Management Facility Type
PND0001	Houben Subdivision (Sherwood Forest)	Wet Pond
PND0002	Guthrie Industrial Subdivision	Wet Pond
PND0003	Hastings Estates Subdivision	Dry Pond
PND0004	Arbourwood Estates	Wet Pond
PND0005	Sprucewood Estates	Dry Pond
PND0006	Audobon Estates	Dry Pond
PND0007	Audubon Estates	Dry Pond
PND0010	Heights of Moonstone	Dry Pond
PND0011	Heights of Moonstone	Wet Pond
PND0012	Maplehill Estates	Dry Pond
PND0013	Maplehill Estates	Dry Pond
PND0014	Maplehill Estates	Dry Pond
PND0015	Homire/Isabella Estates	Wet Pond
PND0019	Edgar Estates	Dry Pond
PND0020	Orsi Subdivision (Evans)	Dry Pond
PND0021	Kade Meadows	Dry Pond
PND0022	Medonte Estates	Dry Pond
PND0023	Medonte Estates	Wet Pond
PND0024	Craighurst	Dry Pond
PND0028	Reid's Ridge	Dry Pond
PND0029	Owen Estates	Wet Pond
PND0030	Whispering Creek	Wet Pond
PND0031	Turtle River Subdivision	Wet Pond
LID0001	Shanty Bay	LID (Bioretention Cell)
LID0002	Shanty Bay	LID (Infiltration Trench)
LID0003 - LID0031	Braestone	LID (Infiltration Trench)

### 3.1 Developer Operated Facilities

There are also stormwater management facilities owned and operated by developers that will eventually be assumed by the Township once development conditions have been fulfilled. These are identified in Table 2 below.

**Table 2: Developer-Operated Facilities and Facilities with Individual ECAs**

<b>SWMF ID</b>	<b>Facility Name</b>	<b>Stormwater Management Facility Type</b>
PND0032	Kaylee Estates	Wet Pond
PND0033	Diamond Valley Estates	Wet Pond
PND0034	Diamond Valley Estates	Plunge Pool
PND0035	Diamond Valley Estates	Wet Pond
PND0036	Meadow Acres	Hybrid Pond
PND0037	East Oro Estates	Dry Pond
PND0038	Forest Heights Estates	Wet Pond
PND0039	Forest Heights Estates	Dry Pond
PND0040	Braestone	Plunge Pool
PND0041	Braestone	Ponding Area
PND0042	Braestone	Plunge Pool
PND0043	Eagles Rest	Wet Pond

### 4 Maintenance, Operation and Performance Summary

Operation and maintenance programs ensure that the infrastructure within the Authorized System is functioning correctly and effectively by continuing to meet the water quality and quantity design objectives while maintaining and protecting water resources.

The main objectives of stormwater management are:

- Protect life and property from flooding and erosion.
- Maintain water quality for ecological integrity, recreational opportunities, etc.
- Protect and maintain groundwater flow regime(s).
- Protect aquatic and fishery communities and habitats.
- Maintain and protect significant natural features.
- Protect and provide diverse recreational opportunities that coincide with the environment.

Environmental Services is available to respond twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days a year for service calls or emergencies related to the Stormwater Management Facilities that comprise the

Authorized System. Further, all Environmental Services Technicians are licenced under Ontario Regulation 129/04 (Regulation Licensing of Sewage Works Operators).

A draft Quality Management System (QMS) for the Authorized System has also been created and is in the revision and review stages. This QMS has been designed based on quality management system principles found in the Municipal Drinking Water Licensing Program and the Drinking Water Quality Management Standard.

The creation of an Operation & Maintenance Manual for all facilities was completed in 2024.

#### **4.1 Monitoring Data**

Monitoring the effectiveness of the infrastructure in the Authorized System encourages the protection and restoration of surface water and groundwater resources. Proactive monitoring allows time for issues to be found and rectified at the source and helps develop strategies to improve existing conditions and protect downstream water uses.

Environmental Services completes visual inspections of urbanized stormwater management infrastructure directly related to the Authorized System (including but not limited to inlet(s), forebay(s), weirs, aft bay(s), outlet(s), overflow(s) and outfall(s), LID features including infiltration trenches and bio-retention cells, all pipes as well as, manholes, catchbasins and culverts immediately adjacent to SWM facilities. The Township of Oro-Medonte's Operations Department staff manages the remaining conveyance and collection infrastructure such as manholes, catch basins, ditches, culverts, as well as agricultural/rural drainage (ditches, municipal drains, swales, and culverts).

CLI-ECA, Schedule E, Section 4.0 requires that the Township develop and implement a fulsome monitoring plan for the Authorized System by October 28, 2024 or within twenty-four (24) months of the date of the publication of the Ministry's monitoring guidance, whichever is later. As of December 31, 2024, the Ministry guidance document has yet to be published.

#### **4.2 Environmental Trends**

Monitoring programs, including environmental trends, are in the process of continued development. As such, future reports are envisioned to include historical data trending and expanded commentary on local and changing climate and seasonal weather patterns.

### **4.3 Operational Issues and Corrective Actions**

There were no significant operational issues or corrective actions identified in 2024. Routine operational issues were identified and addressed through the maintenance and repair completed and summarized under Section 4.4.

### **4.4 Inspections, Maintenance, and Repairs**

All inspections, maintenance and repairs carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the Authorized System are performed by Environmental Services staff or a qualified contractor who exercises due diligence in ensuring works within the Authorized System are properly operated and maintained as per the Operation & Maintenance Manual to achieve compliance with the requirements of the CLI-ECA.

At a minimum, monitoring inspections are carried out by Environmental Services staff on a bi-annual basis (spring and fall) and after significant rainfall events. For more comprehensive inspections and to aid in condition assessment, maintenance and repair project prioritization, a qualified engineering consultant has completed engineering inspections in previous years.

Results of 2024 inspections reported that the SWMFs were in 'good' and 'fair' operation based on the inspection evaluation criteria established by Environmental Services. Bathymetric surveys were also completed at PND0004 (Arbourwood Estates) on 2024/03/12, and PND0011 (Heights of Moonstone) on 2024/04/22 with the results of these surveys assisting in the formulation of future work plans.

Maintenance and repairs conducted on the Authorized System during this reporting period are outlined below in Table 3.



**Table 3: 2024 Maintenance and Repair Summary Table**

<b>Date</b>	<b>Facility</b>	<b>Maintenance Details</b>
2024/06/04	PND0004 Arbourwood Estates	Installed water level rod.
2024/06/04	PND0011 Heights of Moonstone	Installed water level rod.
2024/06/04	PND0015 Hormire/Isabella Estates	Installed water level rod.
2024/06/04	PND0030 Whispering Creek	Installed water level rod.
2024/06/05	PND0031 Turtle River	Installed water level rod.
2024/07/02 & 2024/07/14	PND0004 Arbourwood Estates	Cleared debris from outlet grate.
2024/07/04	PND0013 & PND0014 Maplehill Estates	Pond catchbasins and adjacent catchbasins cleanout.
2024/07/04	PND0012 Maplehill Estates	Catchbasin, connecting pipe and flow spreader cleanout.
2024/09/18	PND0023 Medonte Estates	Remove debris, redistribute rip rap to cover exposed areas.
2024/09/30	PND0021 Kade Meadows Subdivision	Minor regrading as a result of the previous year work and seed.
2024/10/03	PND0019 Edgar Estates	Vegetation removal, reinstated positive drainage and energy dissipation surfaces. Site restoration with sod and seeding.
2024/10/03	PND0010 Heights of Moonstone	Vegetation removal, reinstated positive drainage and energy dissipation surfaces. Site restoration with topsoil and seeding.
2024/10/03	PND0007 Audubon Estates	Vegetation removal, primary outlet pipe replaced, reinstated positive drainage and energy dissipation surfaces, seed and install access route and gate.
2024/10/29	PND0021 Kade Meadows Subdivision	Outlet catchbasin cleanout.
2024/11/27	PND0029 Owen Estates	Vegetation removal, additional stone to weir between forebay/bio-retention cell, resurface access road.

Based on ongoing inspections, the following future maintenance needs for those current facilities identified in Table 1: Stormwater Management Facility Inventory Table are outlined below in Table 4. Work plans, start dates and priorities will be confirmed pending 2025/2026 budget approval.

**Table 4: Future Maintenance Summary Table**

Facility	Required Maintenance
PND0003 Hastings Estates	The main cell is heavily vegetated with a low flow channel not visible/defined. Emergency overflow not defined. The outflow channel is heavily vegetated and poorly flowing. The existing drainage channel bypassing facility at the rear. Potential opportunity for water quality improvement pending discussions with LSRCA.
PND0004 Arbourwood Estates	Repair erosion around the inlet structure and forebay berm. Restore loss of vegetation at various locations around the facility. Future consideration will be given to alternative outlet structure designs due to the outlet catch basin being prone to blockages. Environmental Services increased inspection frequency to 'monthly' to keep clear. The bathymetric survey performed in March 2024 confirmed the facility is 23% full.
PND0010 Heights of Moonstone	Observe water flows in the facility to determine if minor regrading is necessary to direct flow to the centre channel.
PND0011 Heights of Moonstone Subdivision	A Bathymetric Survey completed April 2024 confirmed some side slope slumping has occurred, but overall capacity is as per design. Minor erosion around inlet, enhance with additional rip rap. Water flow short-circuiting the forebay berm. Invasive species (goldfish and others) are visible in the facility.
PND0023 Heights of Medonte Estates	Lengthen the storage basin and associated centre flow channel for additional storage capacity.
PND0031 Turtle River	The facility appears shallow with heavy algae growth. A bathymetric survey should be completed to confirm depth.
LID0001 Shanty Bay	The cell is poorly draining, and surface vegetation is an ongoing maintenance concern. Flush underdrain to confirm no blockages. The geotextile layer and sock may be plugged. Consider replacing it with a stone choker layer. Consider alternative surface vegetation.

**4.5 Monitoring Equipment Calibration Activities**

There is no monitoring equipment located in the Authorized System that requires calibration or maintenance.

## 4.6 Complaints

There were no complaints in 2024.

## 4.7 Alterations to the Authorized System

The following alterations to the Authorized System were processed for the reporting period as follows:

- Braestone Phase 1 (all stages) was assumed by the Township on 2024/09/11 adding twenty-nine (29) infiltration trench LIDs (LID0003 – LID0031) to the inventory of SWM facilities.
- Craighurst North (Craighurst Crossing) infrastructure currently under construction, consisting of storm sewers, catchbasins, ditches, culverts, as well as one (1) stormwater management wet pond (PND0044) and ten (10) infiltration trench LIDs (LID0049—LID0058) and two (2) bio-retention swale LIDs (LID0059 & LID0060) was authorized.

## 4.8 Spills and Abnormal Discharge Events

Any spills or discharge events that occur are recorded and addressed in accordance with Part X of the Environmental Protection Act, Ontario Regulation 675 (as amended) and reported with notification (by telephone, and in writing) to the MECP Spills Action Centre, the Medical Officer of Health, and the MECP District Manager, as applicable.

One spill/abnormal discharge occurred in 2024, related to 1937 Horseshoe Valley Road East discharge of grey water to Vine Street ditch. In consultation with the Ministry of the Environment, Conservation & Parks (MECP) and the Simcoe District Health Unit (SMDHU), and Township of Oro-Medonte Building Department, the Chief Building Official issued an Order to Remedy Unsafe Sewage System on 2024/07/11. The owner has since remedied the situation, and no further discharges have been observed.

## 4.9 Authorized System Performance Improvements

Performance improvements for the Authorized System have been summarized in Section 4.4 (Inspections, Maintenance, and Repairs) of this report. In 2024, the main focus of performance improvement was related to SWMF restoration to the intended design. This work enhances the longevity and performance of SWMFs. Under Section 4.4, Table 4 outlines future maintenance needs. As noted previously, work plans, start dates and priorities will be confirmed pending 2025/2026 budget approval.

#### **4.10 Status of Actions from Previous Reporting Year**

As a result of the maintenance work performed in 2023 on facilities 1, 5, 6, 12, 13, 14, 21, 23, and 26, regular inspections were able to be more comprehensive and thorough as barriers to access throughout the facilities have been improved. While performance monitoring is not yet implemented, water flow through these facilities has noticeably improved, while other issues such as damaged outlet structures, localized ponding and improved erosion control has been resolved. Further, as these facilities have been moved from fair condition to good, regular grass cutting has been implemented to prolong the condition.

#### **5 Financial Planning**

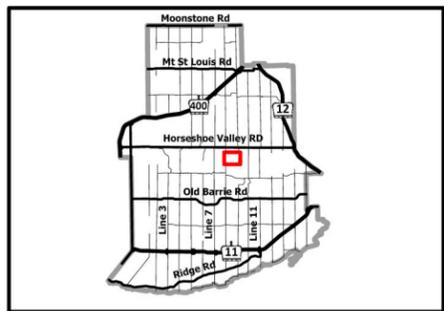
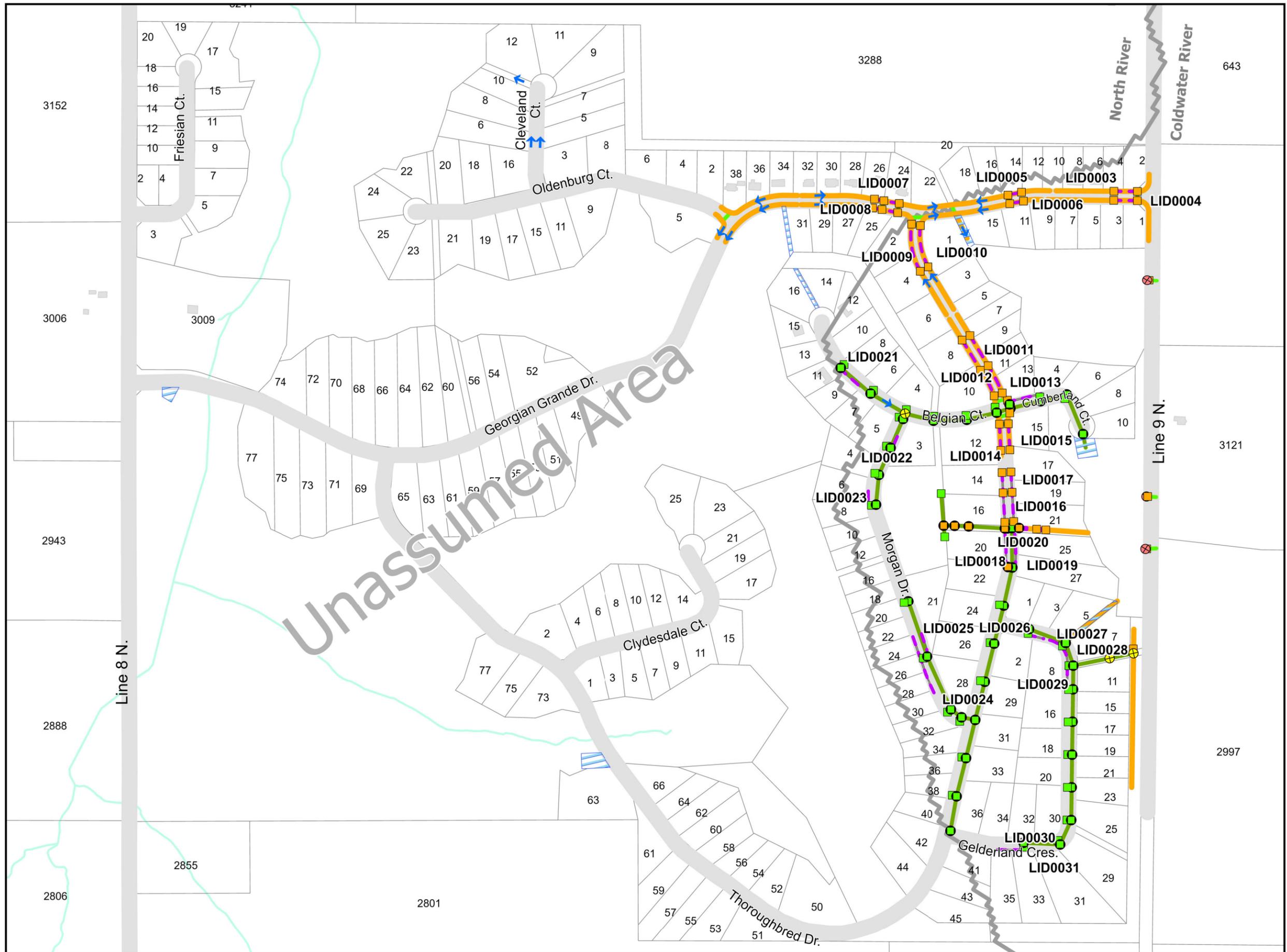
The operation and maintenance of the Authorized System is supported through capital and operating budget allocations approved by the Township's Council and funded by the municipal tax base (property taxes).

#### **6 Conclusion**

The Township of Oro-Medonte believes that this report satisfies the reporting requirements of Schedule E, Section 5.2 of the CLI-ECA (#126-S701).

Any questions regarding this report should be directed to Environmental Services.

## **Appendix A – Urbanized Stormwater Management System Infrastructure Maps**



**Legend**

- Culvert
- Gravity Pipe
- Perforated Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Catch Basin
- Catch Basin Manhole
- Ditch Inlet Catch Basin
- Ditch Inlet Manhole
- ⊗ Manhole
- ⊕ Perforated Riser
- ↑ Flow Direction
- ▨ Easement
- ⊕ Subwatershed

**SWM Facility Type**

- Infiltration Trench

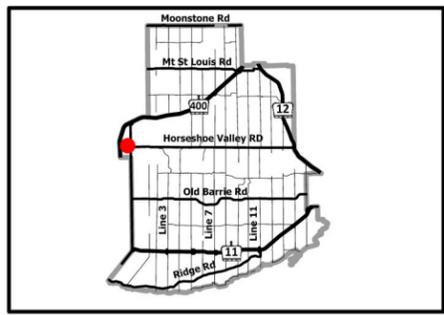
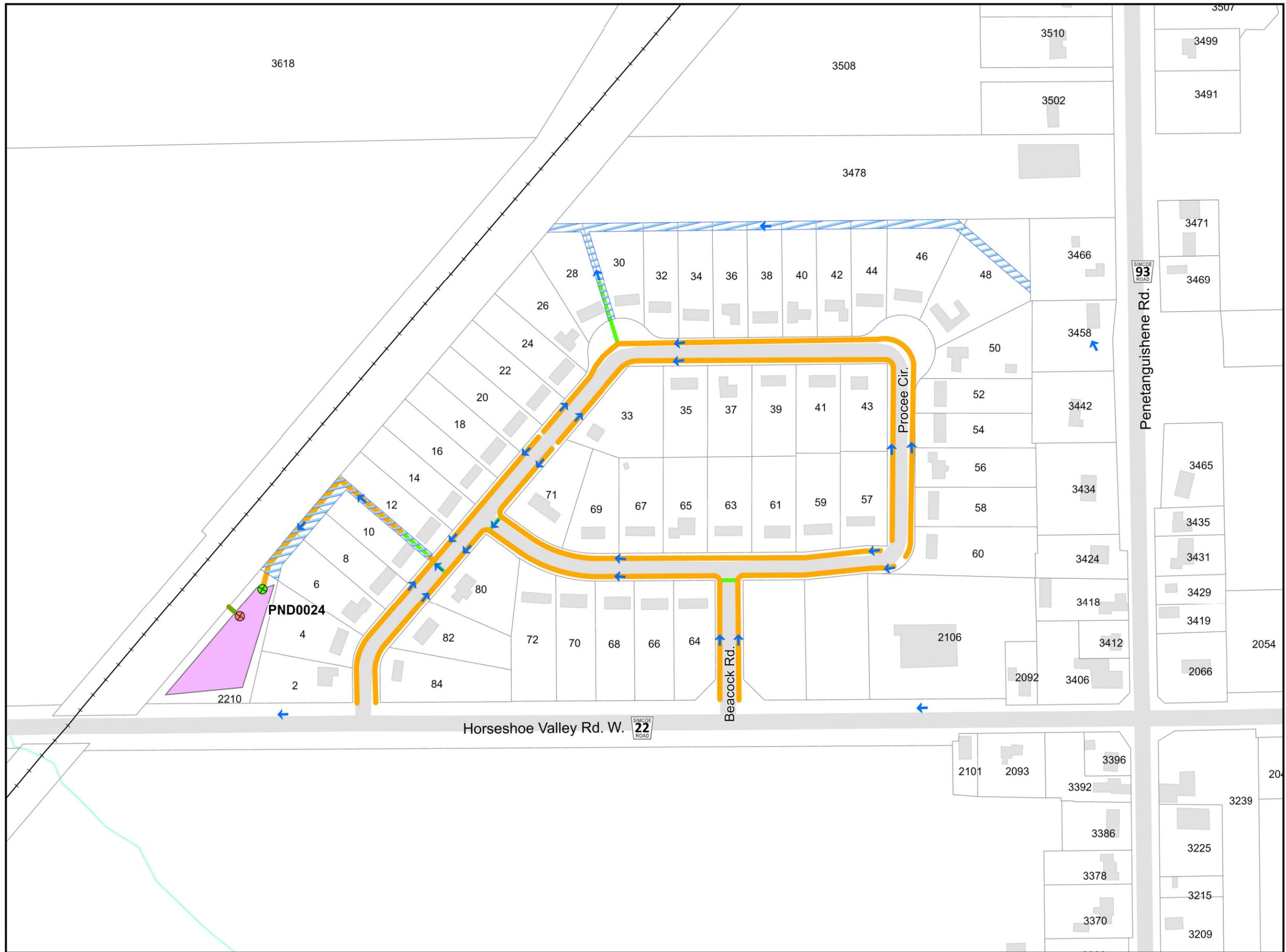
Subwatersheds: Coldwater River and North River

**Urbanized Stormwater System  
Braestone**

January 2025

Township of  
**Oro-Medonte**  
Proud Heritage, Exciting Future

Scale: 0 50 100 150 200 m



- Culvert
- Gravity Pipe
- Open Channel
- SWM Facility Inlet
- SWM Facility Outlet
- Flow Direction
- Easement
- SWM Facility Type**
- Dry Pond

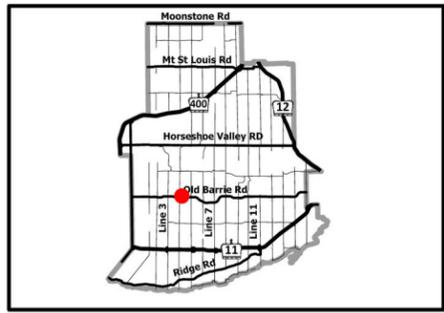
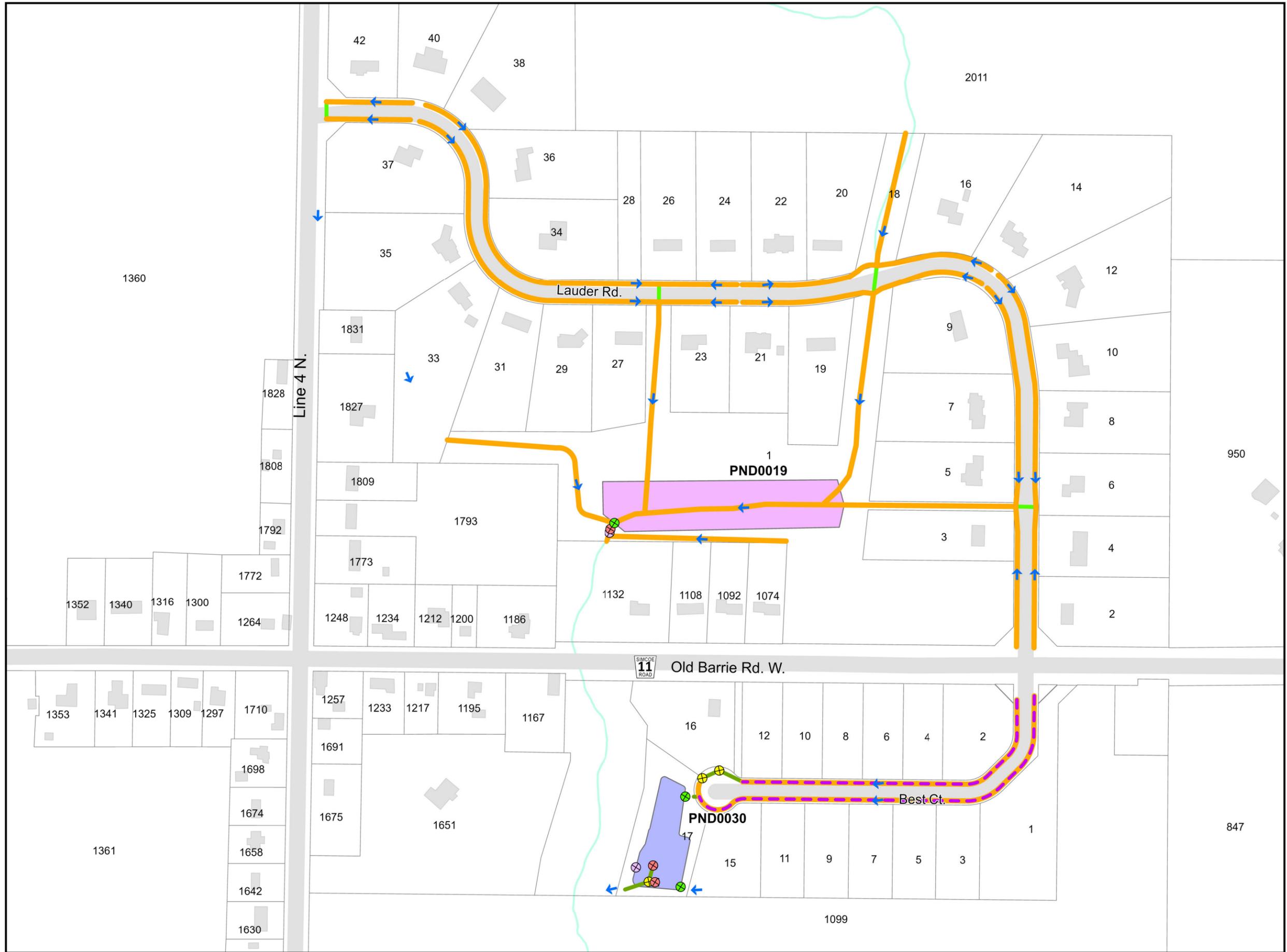
Subwatershed: Matheson Creek

**Urbanized Stormwater System  
Craighurst Estates**

January 2025

**Township of  
Oro Medonte**  
Proud Heritage, Exciting Future

Scale: 0, 25, 50, 75, 100 meters



Subwatershed: Willow Creek

- Culvert
- Gravity Pipe
- Perforated Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Catch Basin
- ⊗ Manhole
- ⊕ Perforated Riser
- ⊕ Overflow Point
- ↑ Flow Direction

SWM Facility Type

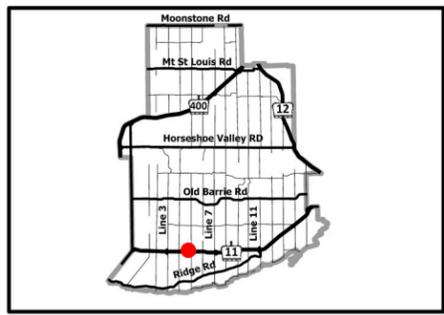
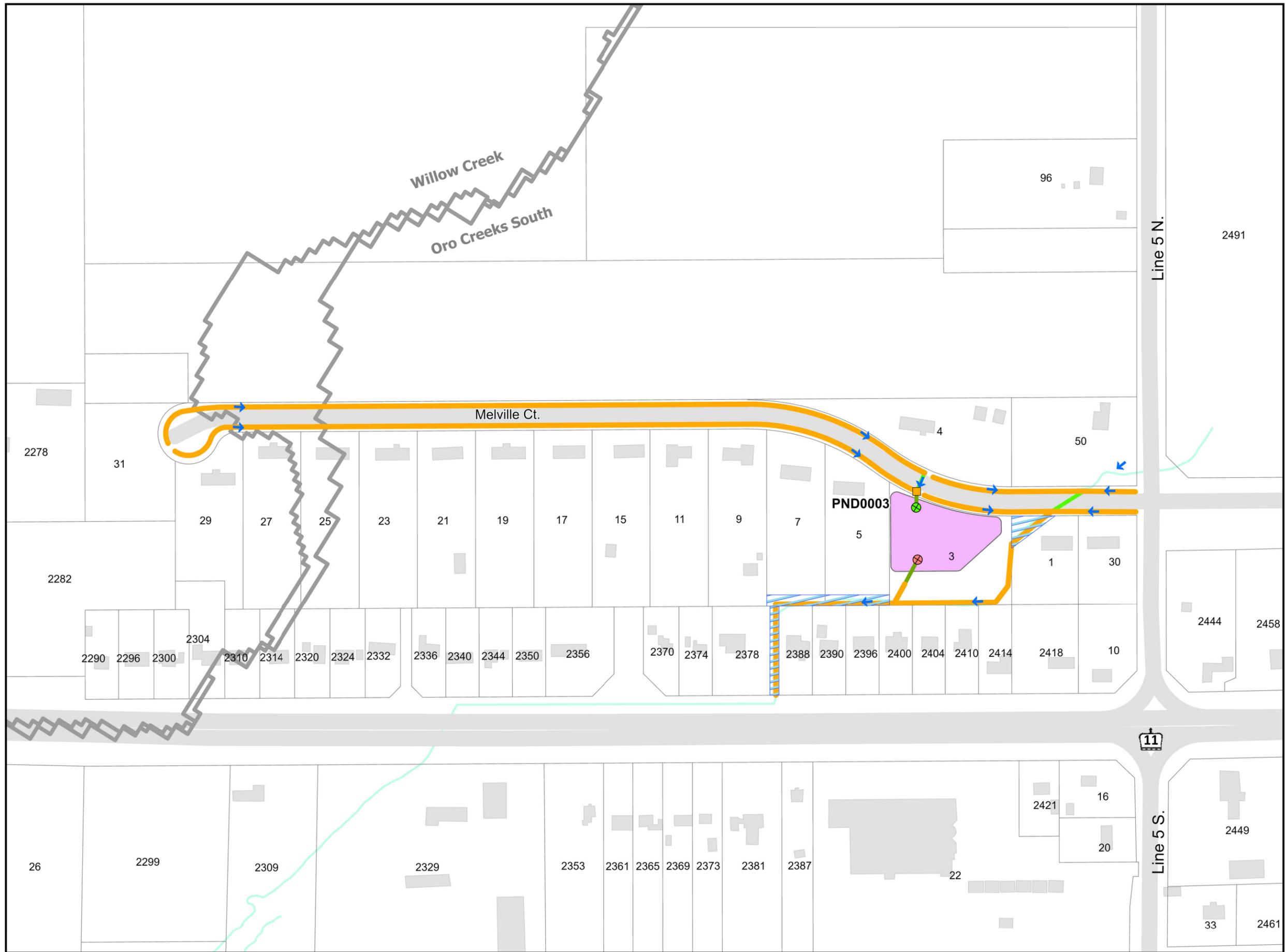
- ▭ Dry Pond
- ▭ Wet Pond

Urbanized Stormwater System  
 Edgar Estates/  
 Whispering Creek  
 January 2025

Township of  
**Oro Medonte**  
 Proud Heritage, Exciting Future

Scale: 0, 25, 50, 75, 100 meters





**Legend**

- Culvert
- Gravity Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Ditch Inlet Catch Basin
- ↑ Flow Direction
- ▨ Easement
- ⊞ Subwatershed
- SWM Facility Type**
- Dry Pond

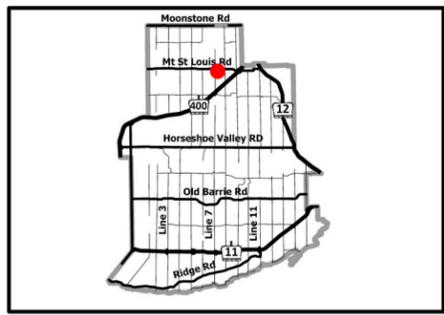
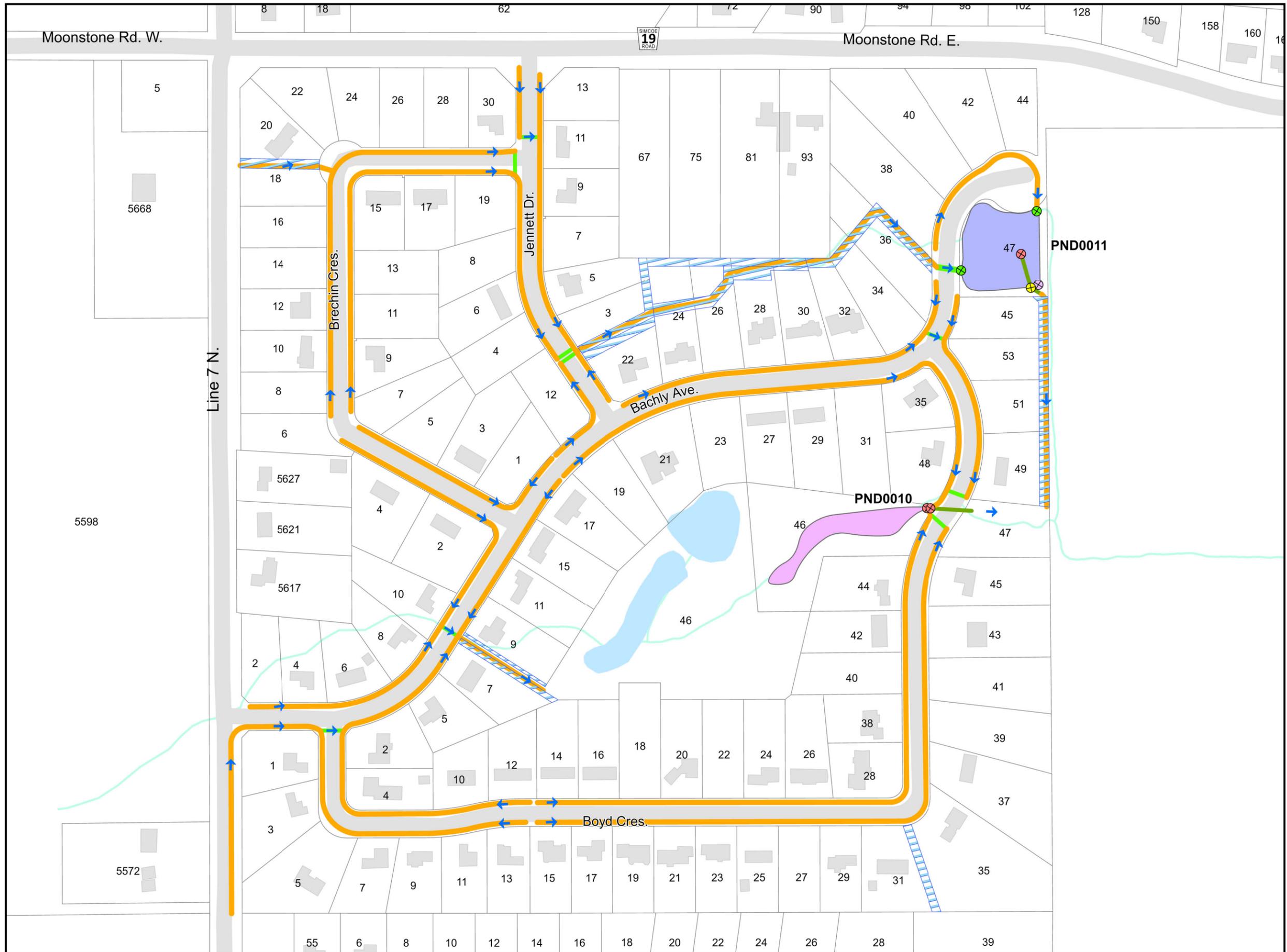
Subwatersheds: Willow Creek and Oro Creeks South

**Urbanized Stormwater System  
Hastings Estates**

January 2025

Township of  
**Oro Medonte**  
Proud Heritage, Exciting Future

Scale: 0 to 100 meters



- Culvert
- Gravity Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- ⊗ Manhole
- ⊕ Perforated Riser
- ⊕ Overflow Point
- ↑ Flow Direction
- ▨ Easement

SWM Facility Type

- ▭ Dry Pond
- ▭ Wet Pond

Subwatershed: Coldwater River

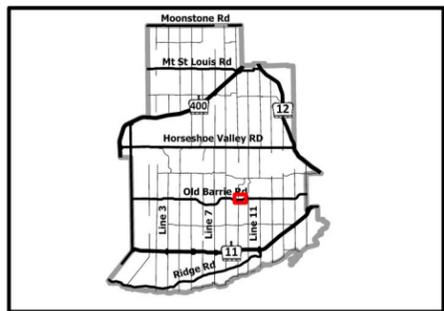
**Urbanized Stormwater System  
Heights of Moonstone**

January 2025

Township of  
**Oro-Medonte**  
Proud Heritage, Exciting Future

m

0 25 50 75 100



Subwatershed: Oro Creeks North

- Culvert
- Gravity Pipe
- Perforated Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Catch Basin
- ⊕ Overflow Point
- ↑ Flow Direction
- ▨ Easement

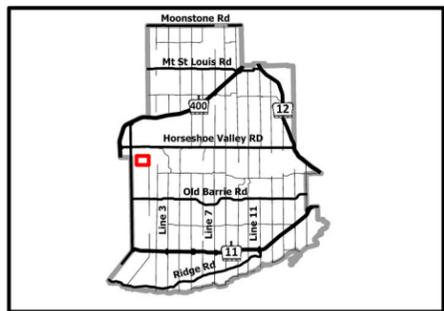
SWM Facility Type

- ▭ Dry Pond
- ▭ Wet Pond

Urbanized Stormwater System  
**Houben/  
 Sprucewood Estates**  
 January 2025

Township of  
**Oro Medonte**  
*Proud Heritage, Exciting Future*

North arrow and scale bar (0, 50, 100, 150 meters).



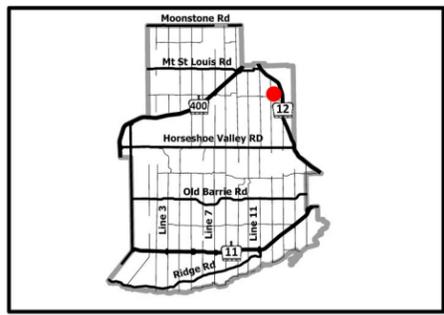
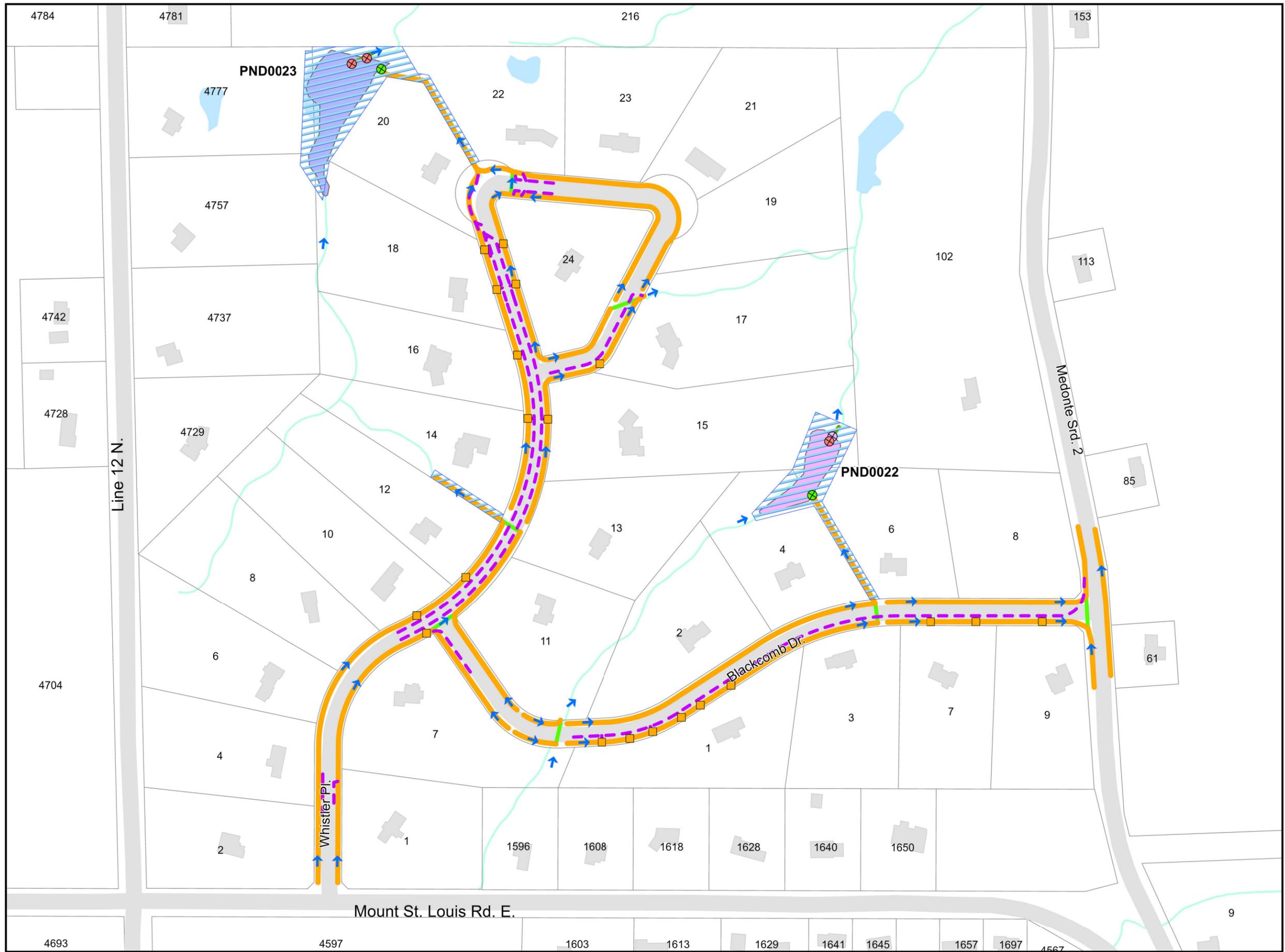
Subwatershed: Matheson Creek

- Culvert
- Gravity Pipe
- Perforated Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Catch Basin
- Catch Basin Manhole
- Ditch Inlet Catch Basin
- Ditch Inlet Manhole
- ⊗ Manhole
- ⊕ Perforated Riser
- ⊕ Overflow Point
- ↑ Flow Direction
- ▨ Easement
- SWM Facility Type
- ◡ Dry Pond

**Urbanized Stormwater System  
Maplehill Estates**  
January 2025

Township of  
**Oro Medonte**  
Proud Heritage, Exciting Future

Scale: 0, 50, 100, 150 meters



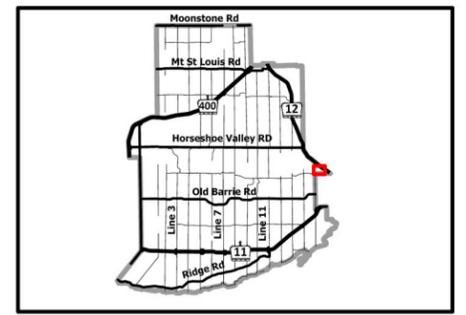
- Culvert
- Gravity Pipe
- Perforated Pipe
- Open Channel
- SWM Facility Inlet
- SWM Facility Outlet
- Ditch Inlet Catch Basin
- Perforated Riser
- Overflow Point
- Flow Direction
- Easement
- SWM Facility Type**
- Dry Pond
- Wet Pond

Subwatershed: North River

Urbanized Stormwater System  
**Medonte Estates**  
 January 2025

Township of  
**Oro Medonte**  
*Proud Heritage, Exciting Future*

Scale: 0, 25, 50, 75, 100 meters

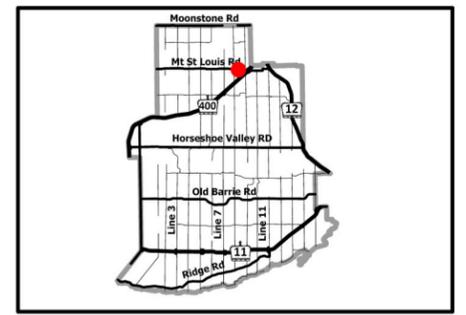
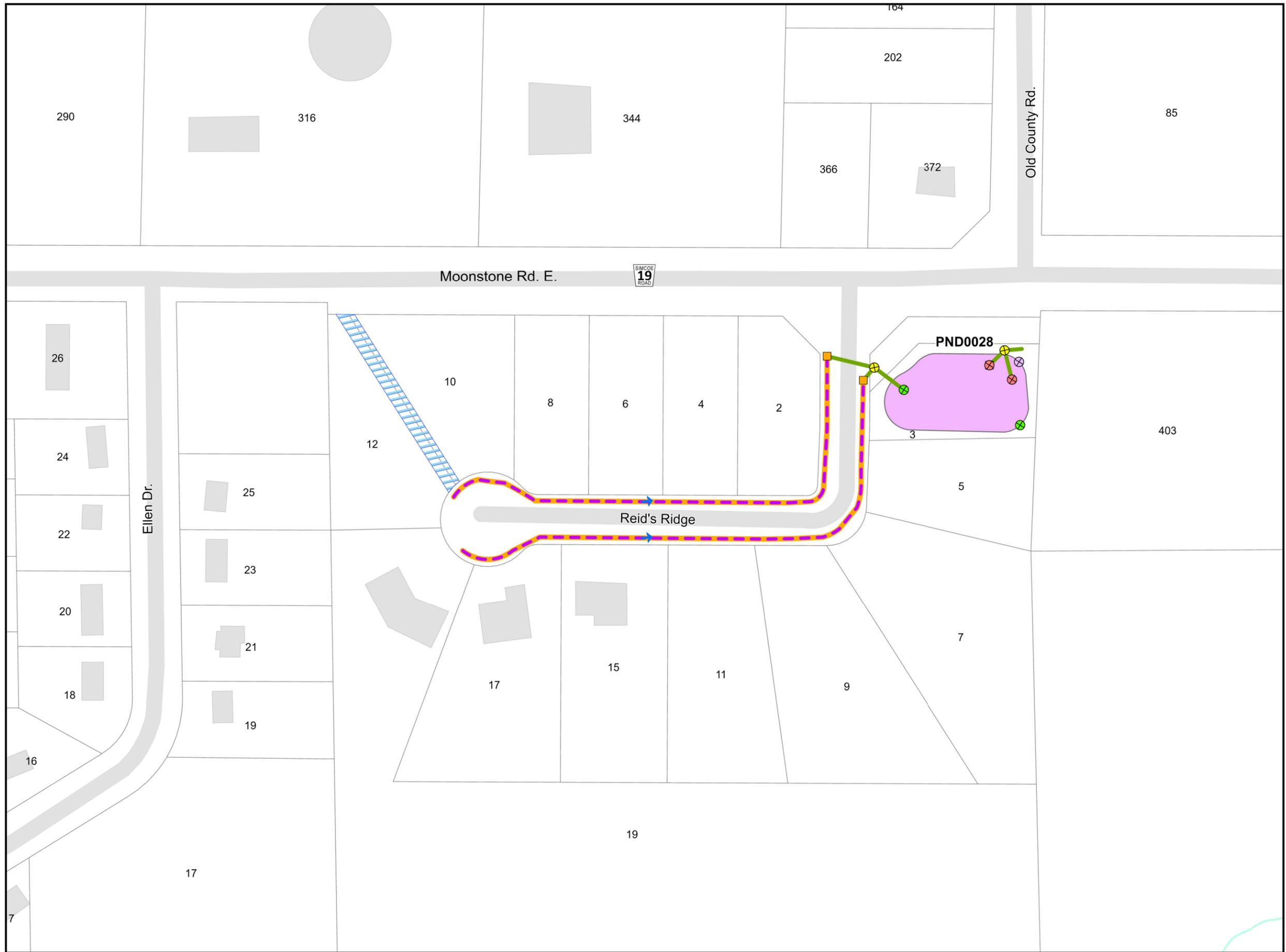


- Culvert
- Gravity Pipe
- Perforated Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Catch Basin
- Ditch Inlet Catch Basin
- ⊗ Manhole
- ⊕ Overflow Point
- ↑ Flow Direction
- ▨ Easement
- SWM Facility Type
- Dry Pond

Subwatershed: North River

Urbanized Stormwater System  
**Orsi Subdivision/  
 Kade Meadows**  
 January 2025

Township of  
**Oro Medonte**  
*Proud Heritage, Exciting Future*

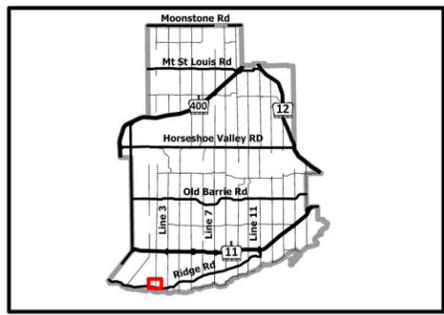
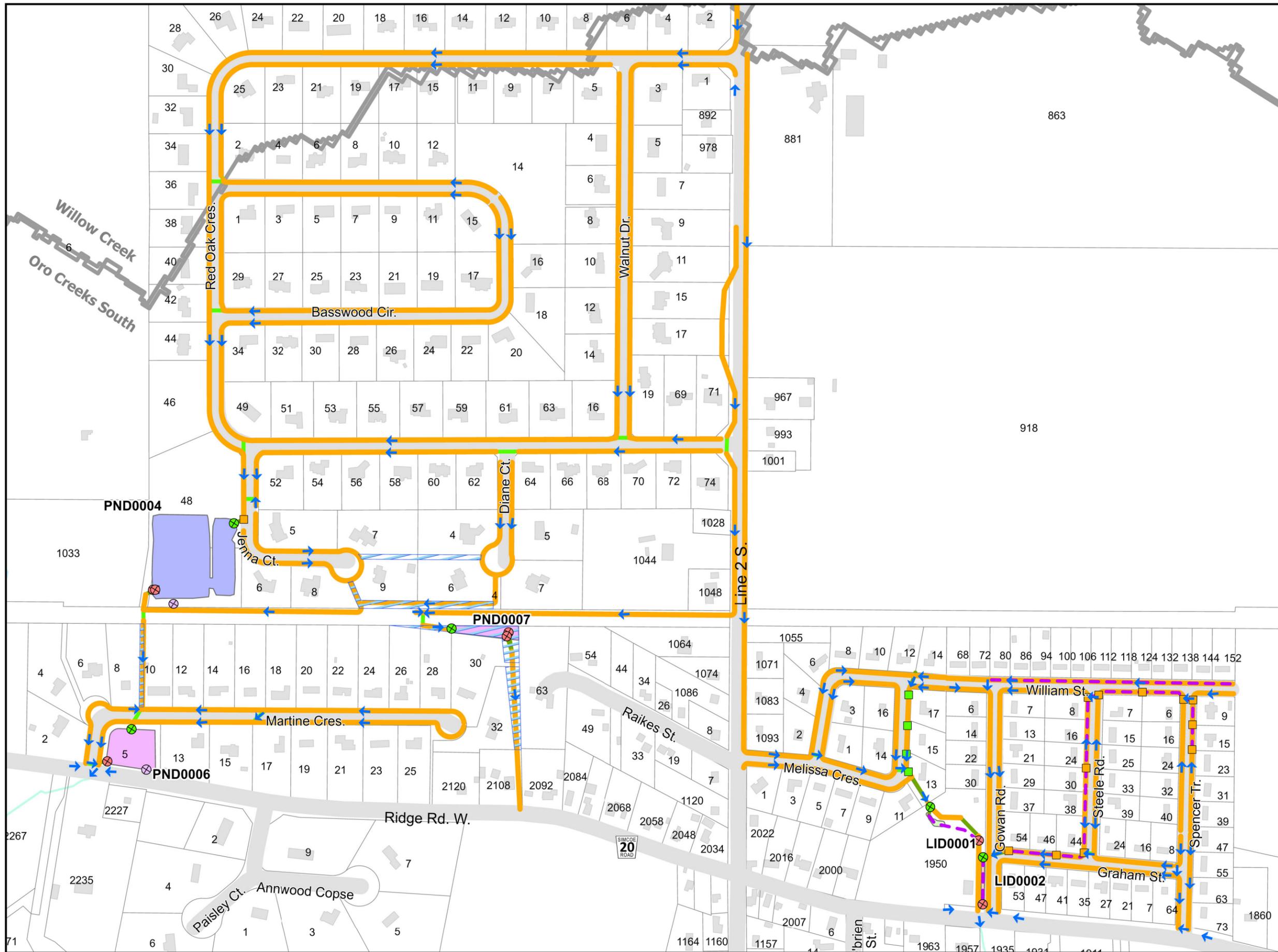


- Gravity Pipe
- Perforated Pipe
- Open Channel
- SWM Facility Inlet
- SWM Facility Outlet
- Catch Basin
- Ditch Inlet Catch Basin
- Manhole
- Perforated Riser
- Overflow Point
- Flow Direction
- Easement
- SWM Facility Type**
- Dry Pond

Subwatershed: Coldwater River

**Urbanized Stormwater System**  
**Reid's Ridge**  
 January 2025

Township of  
**Oro Medonte**  
*Proud Heritage, Exciting Future*



- Culvert
- Gravity Pipe
- Perforated Pipe
- Open Channel
- SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Catch Basin
- Ditch Inlet Catch Basin
- ⊗ Manhole
- ⊕ Overflow Point
- ↑ Flow Direction
- ▨ Easement
- ⊞ Subwatershed

SWM Facility Type

- Bioretention
- Dry Pond
- Infiltration Trench
- Wet Pond

Subwatersheds: Willow Creek and Oro Creeks South

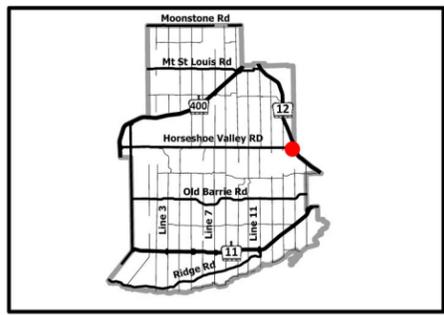
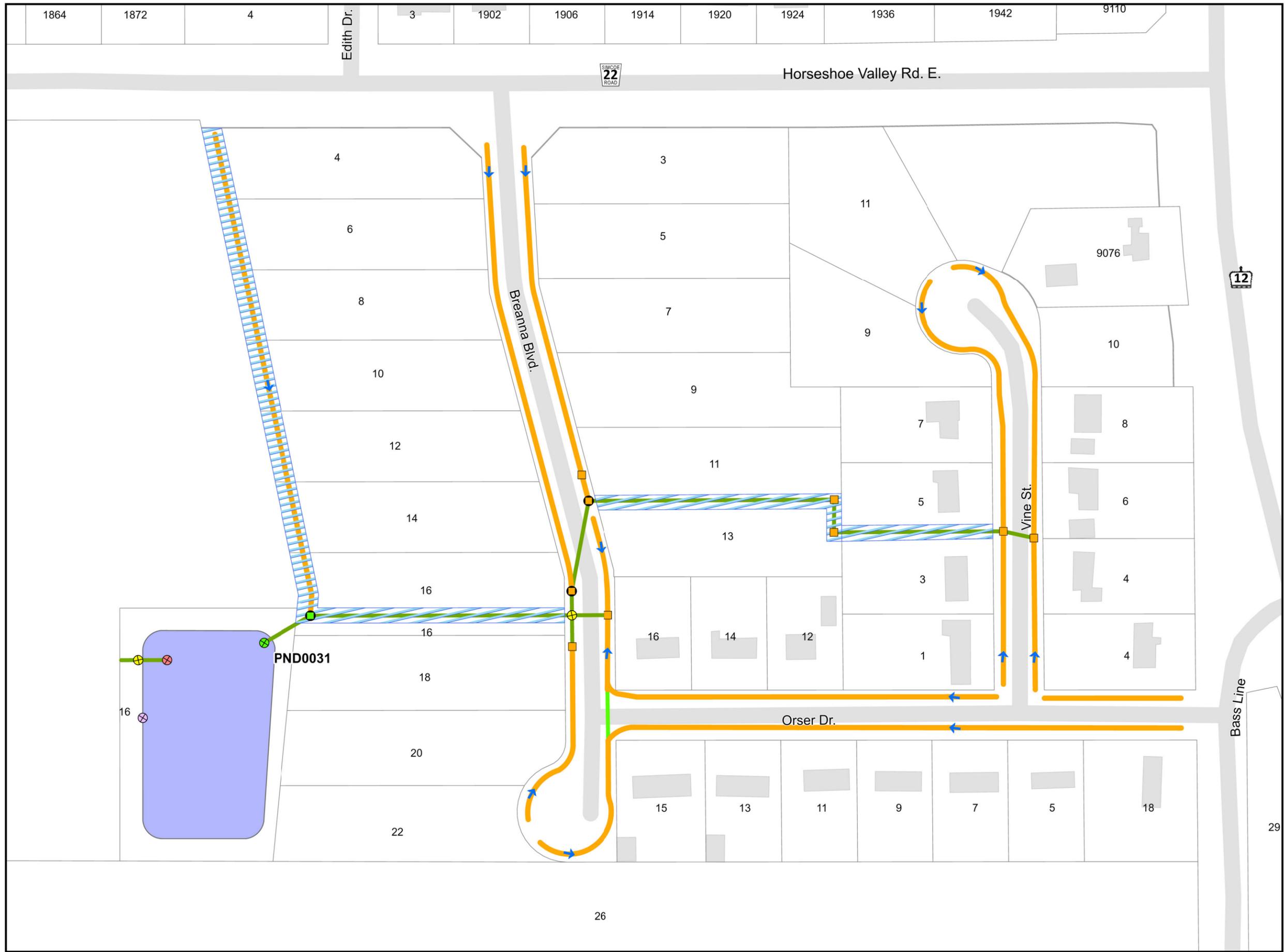
## Urbanized Stormwater System Shanty Bay

January 2025

**Township of  
Oro-Medonte**  
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m  
0 50 100 150





- Culvert
- Gravity Pipe
- Open Channel
- ⊕ SWM Facility Inlet
- ⊕ SWM Facility Outlet
- Catch Basin Manhole
- Ditch Inlet Catch Basin
- Ditch Inlet Manhole
- ⊗ Manhole
- ⊕ Overflow Point
- ↑ Flow Direction
- ▨ Easement
- SWM Facility Type
- ▭ Wet Pond

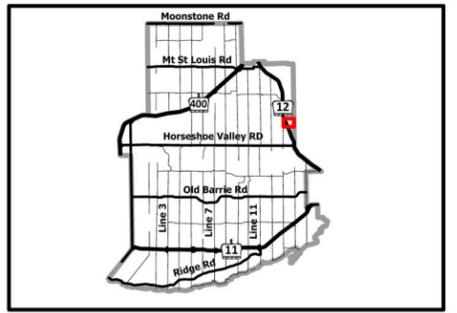
Subwatershed: North River

**Urbanized Stormwater System**  
**Turtle River**  
 January 2025

Township of  
**Oro Medonte**  
 Proud Heritage, Exciting Future

m

0 10 20 30 40 50



- Gravity Pipe
- Open Channel
- SWM Facility Inlet
- SWM Facility Outlet
- Catch Basin
- Catch Basin Manhole
- Ditch Inlet Catch Basin
- Manhole
- Perforated Riser
- Overflow Point
- Flow Direction
- Easement
- SWM Facility Type**
- Wet Pond

Subwatershed: North River

**Urbanized Stormwater System  
Heights of Moonstone**  
January 2025

Township of  
**Oro-Medonte**  
Proud Heritage, Exciting Future