GRAND VALLEY

Town of Grand Valley Operating Budget 2025

Stormwater System and Storm Water Management Ponds Projects

Grand Valley's storm water infrastructure grows with each new subdivision. The requirements for maintaining this infrastructure and decreasing storm water pollution are also growing.

At this time, the Public Works department is responsible for maintaining storm water infrastructure. In conjunction with RJ Burnside engineers, Public Works must inspect, report and carry out work throughout the storm water system.

In 2023, the inspection results demonstrated that there is significant catch-up work needed to rehabilitate the Town's storm water infrastructure. The report presented the following issues, as stated in the 2024 budget:

Mayberry Drive – wet pond:

- Regrade/repair scour holes in forebay downstream of both the east and west inlet headwalls; add larger size rip rap (Burnside will confirm, but likely nominal size 250 mm) on filter cloth; remove eroded material.
- Remove vegetation, filter cloth, clear stone and vegetation around low flow outlet structure; clear the catchbasin grating once vegetation is removed; place 150 mm dia. rip rap around outlet structure.
- Remove excessive vegetation growth around the inlet to the high flow outlet structure on the pond slope.
- Existing grade behind the west inlet headwall is to be raised to be level with the top of the concrete headwall.
- Inspection rails (also called pedestrian barricades) at two large headwalls to be upgraded to a guard. (If Mount Haven is being completed in 2024 which doesn't have anything right now, it may be worthwhile to do these at the same time).
- Install at least one additional warning sign that covers all the CLI-ECA requirements. An example had been previously provided to the Town. It must be done before October 2025 to meet CLI-ECA requirements and therefore could be delayed until 2025 if needed.
- Evaluate potential dead trees in the pond block in the spring/summer. Remove if dead. Consider replacement trees in the future.
- Remove minor amounts of debris

Ritchie Drive – dry pond:

- Remove debris at outlet structure; repair settlement and DICB inlet and add rip rap
- Remove excessive vegetation at storm sewer inlet headwall

- Remove ties around the trunks of trees connected to tree stakes on trees planted on the pond backslope
- Install at least one warning sign to meet CLI-ECA requirements. An example has been previously provided to the Town. This must be completed by October 2025.
- Chain link fencing at 25 and 27 Ritchie boardering the SWM block does not extend all the way to ROW limits (stops along the house). The Town could consider installing all the way to the ROW.

WWTP – wet pond:

- Orifice control plate in manhole is out of place and is to be re-installed
- Excessive vegetation is to be removed around horizontal perforated outlet pipe at the pond outlet in order to inspect the outlet pipe condition
- Maintenance drain valve was found to be open during the inspection and is to be closed to ensure the proper operation of the pond; exercise the drain valve to confirm its operation
- Excessive growth of cattails throughout the pond should be removed to check the pond bottom condition and restore the pond storage
- Install one warning signs to meet CLI-ECA requirements. An example has been previously provided to the Town. This must be completed by October 2025.

Mount Haven – wetland pond (dry conditions during inspection):

- Orifice flow control plate with 130 mm dia. opening missing in outlet control manhole – to be installed
- Install guard on headwall at pond inlet sewer location
- Replace broken valve box cover on pond drain valve and exercise pond drain valve
- Install warning sign. The CLI-ECA mandates signage. It must be done before Oct 2025 to meet CLI-ECA requirements.
- No obvious/defined access route to the facility.

Jenkins Street – dry pond:

- Remove buildup of sand/sediment in low flow swale and restore swale
- Remove buildup of sand at overflow point onto downstream roadway, behind outlet catchbasin structure and restore the overflow swale
- Remove phragmites invasive vegetation
- Install at least one warning sign. The CLI-ECA mandates signage. It must be done before Oct 2025 to meet CLI-ECA requirements.
- Monitor flat catchbasin inlet grate and if blockages or debris is having to be removed, we recommend replacement with raised beehive grate
  Note: We believe the sediment is coming from the Condo Snow Dumping from their road/parking area. The Town should confirm that's the case by seeing where they are dumping snow this winter. Perhaps some discussions with the condo can be made to try to mitigate this from happening.

Taylor Drive – wet pond:

- Remove excessive plant growth and sediment accumulated around outlet control structure to restore the water level in the pond to the level of the openings in the structure
- Regrade/repair scour hole in forebay downstream of inlet headwall; remove eroded material; add larger size rip rap (Burnside will confirm, but likely nominal size 250 mm) on filter cloth at the transition from the headwall apron to the forebay slope
- Install additional warning sign to meet CLI-ECA requirements. Example has been provided to the Town. Must be done before Oct 2025.
- Remove excessive natural woody growth/trees on pond upland slopes
- Remove excessive plant growth, including invasive phragmites, around the perimeter of the pond at and just above the normal water level
- Inspection rails at one large headwall to be upgraded to a guard. (If Mount Haven is being completed in 2024 which doesn't have anything right now, it may be worthwhile to do these at the same time).
- Armour stone retaining walls on the upper slopes have drops exceeding 0.6 m; suggest raising the grade at the base of the stones to reduce the drop to less than 0.6 m wherever possible.
- Note: Burnside to provide correspondence to Developer to advise of increased sediment load and to clean-out the pond based on Mayberry Phase 3A subdivision agreement. Screen shot below for quick reference.

Stormwater Management System

51. All infrastructure required to manage stormwater that is being discharged from this subdivision was previously provided to the Town by the Taylor Drive subdivision (Mayberry Hills, Phase 1). It is hereby acknowledged by the Town that no further infrastructure is required for this purpose. However, it is acknowledged by the Owner that notwithstanding best efforts to control erosion and sediment filtration on site, there is likely to be loading placed upon the Taylor Drive facility that exceeds normal usage.

    Accordingly;

a) The Owner agrees to promptly remove problematic depositions of sediment from the Taylor Drive pond that have originated from the subject lands. Determination of the severity and source of the problem are at the sole discretion of the Town.

b) Prior to assumption of the works, the Owner shall make arrangements to remove sediments and clean the Taylor Drive Storm Water Management System to the satisfaction of the Town.

Budget

In 2024, Public Works were able to accomplish some of these tasks. However, several items remain outstanding, and a proposal for outsourcing the work will be presented in 2025. Funds in the budget will be spent on upgraded signage to meet legislative requirements, engineering time for the annual report, infrastructure repairs, property taxes and the required Asset Inventory to be completed by engineers.

Funding Sources

At this time, all storm water costs are paid through the tax levy. Consideration of a storm water levy and a storm water reserve fund will be presented in the future.

Amounts presented in the budget are based on estimates provided by Burnside and staffing costs estimated by Public Works to perform the work from the 2023 inspections and prepare the year-end inspections and reports required by the Province.