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2019 Development Charges Background Study

WASTEWATER, WATER AND ROADS

Town of Collingwood

File 119015 | May 31, 2019

Document Control

File:

119015

Date:

May 31, 2019

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	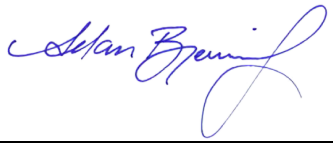
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Issue	Date	Description
1	May 31, 2019	Version for Public Consultation

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1 Introduction

The Town of Collingwood retained Tatham Engineering Limited (Tatham) to complete a background study that identifies and provides capital cost estimates to construct wastewater, water and road network projects within the Town required to accommodate future development. Information contained within this report will be incorporated in the overall 2019 Development Charges Background Study and By-Law, to be prepared by Hemson Consulting Limited (Hemson).

Development charge eligible capital projects have been identified in collaboration with Town of Collingwood staff, with consideration of planned and proposed development within the Town and a review of the following:

- Official Plan Town of Collingwood (January 2019);
- Town of Collingwood Development Standards (July 2007);
- Transportation Study Town of Collingwood (July 2012);
- Water Master Plan (Draft);
- Wastewater Master Plan (Draft);
- Servicing Study for Land Acquired under County Restructuring (dated June 1994);
- applicable Class EA Environmental Study Reports; and
- previous Development Charge studies.

This study report identifies and quantifies projects to accommodate growth and development within the Simcoe County planning horizon forecast of 2031. Also included are growth projects for build-out (ultimate conditions) within the boundaries of the Town of Collingwood; the costs of these projects are not included in the overall development charge fees and are categorized as post-period benefits. The draft Water Master Plan and the draft Wastewater Master Plan were used to determine the applicable development charge related projects within the built boundary. The Servicing Study for Land Acquired under County Restructuring report was used to determine the applicable development charge related projects outside of the built boundary. Development charge related road projects were determined based on the Transportation Study.

Land use designations specified in the Official Plan (Schedule 'A' – Land Use Plan) were used; however, the infrastructure projects were developed on the assumption that most lands currently designated Rural will eventually be developed as Residential.

For each project, the associated capital cost was estimated based on the scope of work anticipated and current construction values (as maintained in Tatham's comprehensive

construction cost database). Where appropriate, consideration was given to engineering, property acquisition, contingencies, town staff allowances and utility relocation costs, which in most cases were estimated based on comparable projects and knowledge of the corresponding study areas.

The post-period benefit for wastewater, water and road network projects will provide excess capacity to service future growth beyond the development charge horizon period of 2031. The capital costs of post-period benefit projects have been estimated with input from the Town, Hemson and applicable studies based on projected growth and the expected timing for various developments, reflecting increased demands and needs over time.

2 Wastewater Projects

The attached drawing SAN-1 in Appendix A conceptually illustrates the Town's draft wastewater master plan, showing the existing and proposed trunk wastewater collection system and projects required to accommodate future development. Wastewater projects include:

- proposed trunk sewers;
- the replacement of undersized trunk sewers;
- sewage pumping station upgrades; and
- the expansion of the Collingwood Water Pollution Control Plant.

The centre of Collingwood is serviced through south-to-north trunk sewers that discharge to the First Street and Birch Street collector sewers and ultimately to the Collingwood Water Pollution Control Plant at the north end of Birch Street.

The east end of Collingwood is serviced by trunk sewers that discharge to the St. Clair sewage pumping station. The extension of the Lakeshore trunk sewer eastward and additional sewage pumping stations are planned for servicing the existing residential area along the eastern lakeshore through a local improvement project.

The western part of Collingwood is serviced by the Highway 26 trunk sewer and the Harbour Street trunk sewer, which discharge into the Black Ash Creek sewage pumping station and the Mountain Road trunk sewer. These sewers discharge to the Water Pollution Control Plant via the Harbourview Park Interceptor. Growth in the western areas will be serviced through extensions of the Harbour Street and the Mountain Road trunk sewers, partial replacement of the Mountain Road trunk sewer, expansion of the Black Ash Creek Sewage Pumping Station and forcemain installation to the Water Pollution Control Plant.

A Class Environmental Assessment was completed in May 2011 for the expansion of the Collingwood Water Pollution Control Plant to accommodate growth. Based on updated growth forecasts and capacity limits, the expansion is expected to be required by 2032, with construction beginning in 2027, allowing a five-year construction period.

Project descriptions, estimated timing and the costs for the proposed wastewater sewer and facility projects are summarized in Appendix B: Capital Cost Estimate. Each project list also identifies values for post-period benefit, benefit to existing development, and grants, subsidies and other contributions, which reduce the development charge eligible portion of the capital cost estimates.

For wastewater sewers and facility improvements, the benefit to existing development represents the value of replacing existing municipal assets through a growth-related capital

project. We note most wastewater projects are an expansion to the existing sewer network and thus provide no benefit to existing development. Based on these principles and input from the Town and Hemson, benefit to existing values was applied accordingly.

The capital cost estimates for wastewater sewer projects within the existing municipal right-of-way were developed based on sewer installation costs, including structures and services if applicable. Based on the typical alignment and depth, estimates also include the cost to remove and reinstate the existing road and boulevards across a typical 20 m right-of-way. The oversizing of sewers to accommodate future development areas is included in the development charge projects. The oversizing costs include the incremental difference (above 300 mm nominal diameter) to supply and install the trunk sewer. The pricing was based on a combination of unit prices (developed based on similar projects from 2017 and 2018) and on the draft Wastewater Master Plan. A detailed description of each project is provided below.

Allowances have been included for updates to the Wastewater Master Plan and miscellaneous Municipal Class Environmental Assessments.

2.1 WASTEWATER SEWERS

2.1.1 Project 1: Mountain Road - Eleventh Line to the West

The extension of the Mountain Road trunk sewer from the intersection of Mountain Road and the Eleventh Line to the west is intended to service the southwest portion of the Mountain Road West Corridor Secondary Plan. The lands in this area are currently designated Rural; however, it is assumed the lands would be developed as Residential and the sewer would be located along the centreline of Mountain Road. The costs were established based on the installation of a 450 mm diameter sewer and a full road reconstruction. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

2.1.2 Project 2: North of Mountain Road - Tenth Line to the West

The lands north of Mountain Road from Silver Creek to Tenth Line will be serviced by a 450 mm diameter trunk sewer. It is assumed the lands designated Rural in this area would be developed as Residential and the sewer will be installed through the developments. The Town's development charge eligible capital costs are the incremental difference for oversizing these sewers, greater than 300 mm diameter (in that 300 mm is the minimum recommended pipe size). This project will be further refined in conjunction with the development of the Mountain Road West Corridor Secondary Plan.

2.1.3 Project 3: Black Ash Creek Trunk Main - South of Sixth Street

The extension of the Black Ash Creek trunk main will service the lands west of Black Ash Creek, south of Sixth Street. It is assumed the land designation will eventually change from Rural to

Residential and a 375 mm diameter sewer will be installed through future developments. The Town's development charge eligible capital costs are the incremental difference for oversizing these sewers, greater than 300 mm diameter. This project is considered for long range planning and is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

2.1.4 Project 4: Mountain Road - Improvements West of Balsam Street

The replacement of the Mountain Road trunk sewer west of Balsam Street will increase capacity, as required to facilitate future development, conveying wastewater to the Harbourview Park interceptor. The costs were established based on the installation of 400 m of 600 mm diameter sewer and full road reconstruction.

2.1.5 Project 5: Harbour Street - Georgian Trail to Tenth Line

The extension of the Harbour Street trunk sewer will service the lands surrounding the landfill and south of Georgian Trail. It is assumed lands currently designated Rural will eventually become Residential and the landfill site will not be redeveloped. The 525 mm diameter sewer extension will also serve the industrial lands between Harbour Street and Mountain Road. The Town's development charge eligible capital costs are the incremental difference for oversizing this sewer, greater than 300 mm diameter.

2.1.6 Project 6: Hurontario Street - Lockhart Road to Collins Street

This project consists of replacing the Hurontario Street sewer from Lockhart Road to Collins Street. The Hurontario trunk sewer will provide sewage conveyance capacity for servicing developments in the south end of Collingwood. The costing was based on installation of a 375 mm diameter sewer and full road reconstruction.

2.1.7 Project 7: Black Ash Creek Sewage Pumping Station Forcemain

This project consists of a new forcemain from the Black Ash Creek Sewage Pumping Station to the Water Pollution Control Plant to provide required capacity and redundancy. This forcemain will be installed along the Harbourview Park Trail alongside the existing Harbourview Park Interceptor. The costing was based on the draft Wastewater Master Plan. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

2.2 WASTEWATER FACILITIES

2.2.1 Project 8: Water Pollution Control Plant - Outfall Improvements

The Water Pollution Control Plant's effluent outfall needs to be extended to meet the Ministry of the Environment, Conservation and Parks requirements. The outfall extension will consist of 228

m of 900 mm diameter pipe with a multiport diffuser. The costing for this project was based on the draft Wastewater Master Plan.

2.2.2 Project 9: Water Pollution Control Plant

An expansion of the Collingwood Water Pollution Control Plant will be required to treat the projected future sewage flows generated by residential, commercial and industrial developments. Construction is expected to take approximately 5 years. As per the Municipal Class EA completed in 2011, the preferred solution is to increase capacity by 12 ML/day, resulting in a total capacity of 36.5 ML/day. A benefit to existing value was applied to this project to reflect the odour control facility that will handle odours for both the existing and future tanks. Total costing was calculated using the 2014 development charge report values and the draft Wastewater Master Plan.

The capital costs included in the development charge assumes that the 12 ML/d expansion will utilize biological aerated filters and that tertiary treatment for the full Water Pollution Control Plant capacity will be achieved with addition of membrane filters for tertiary treatment for the entire Water Pollution Control Plant capacity (Alternative 2C of the Class EA).

The currently unused Water Pollution Control Plant capacity is maintained for infilling and for potential flow from the existing commercial/industrial facilities in the Town.

2.2.3 Project 10: Black Ash Sewage Pumping Station Upgrades

An upgrade to the Black Ash Sewage Pumping station is required to accommodate growth within its tributary sewershed. This project has been tendered, and construction is expected to start in 2019. The upgrades will increase the capacity to 212 L/s with the new Black Ash Creek forcemain (Project 7). Tender pricing was used as the capital cost estimate.

3 Water Projects

The attached drawing WAT-1 in Appendix A conceptually illustrates the Town's draft master water distribution plan, outlining the existing and proposed trunk water distribution system and the projects required to accommodate future development. Such projects, which were included in the development charge project list, involve:

- watermains;
- water valves;
- reservoirs;
- booster pumping stations;
- elevated tanks; and
- the expansion of the R. A. Barker Water Treatment Plant.

Currently, most of Collingwood's water distribution system operates within pressure zone 1 with a water supply from the Water Treatment Plant and two reservoirs: the Hume Street elevated tank and the Carmichael grade level tank on Highway 26. Pressure zone 2 is supplied from the R. A. Davey Booster Pumping Station and reservoir on Poplar Sideroad that is filled from the water transmission pipeline from the Water Treatment Plant to New Tecumseth. To service growth in pressure zone 2, the Town plans to add a new Booster Pumping Station and reservoir at Stewart Road, with construction starting in 2020.

In accordance with the Municipal Class EA prepared in 2017, the Water Treatment Plant must be expanded from its rated capacity of 31 ML/day to 67 ML/day to provide the capacity for Collingwood growth while accommodating supply commitments to the Town of New Tecumseth and the Town of The Blue Mountains. A Class Environmental Assessment update is planned for 2019-2020.

Project descriptions, estimated timing and the costs for the proposed water distribution and facility projects are summarized in Appendix B: Capital Cost Estimates. Each project list also identifies values for post-period benefit, benefit to existing development, and grants, subsidies and other contributions, which reduce the development charge eligible portion of the capital cost estimates.

For watermain and valve projects, the benefit to existing has been estimated based on improvements to the Town's overall watermain distribution system. The completion of particular development charge projects will strengthen and upgrade the network to meet current standards. Benefit to Existing values are based on modelling results from the Water Master Plan and consultation with Town staff. The benefit to existing also represents the value of replacing

existing municipal assets through a growth-related capital project. The benefit to existing development for water facility projects represents the costs required to maintain and repair the facility to its original design standard. Based on these principles and input from the Town and Hemson, benefit to existing values was applied accordingly.

The capital cost estimates for watermain projects within existing municipal right-of-ways were developed based on watermain installation including hydrants and services if applicable. Based on the typical alignment and depth, estimates also include the cost to remove and reinstate half of the existing road and boulevards (across a typical 20 m right-of-way – resulting in a 10 m wide restoration). Oversizing of watermains to accommodate future development areas is included in the development charge projects. The oversizing costs include the incremental difference (above 300 mm nominal diameter) to supply and install the main. The pricing was based on a combination of unit prices (developed based on similar projects from 2017 and 2018) and on the draft Water Master Plan. A detailed description of each project is provided below.

Allowances have been included for updates to the Water Master Plan, water efficiency measures and miscellaneous Municipal Class Environmental Assessments.

3.1 WATER DISTRIBUTION

3.1.1 Project 11: Poplar Sideroad - Raglan Street to Beachwood Road

Along Poplar Sideroad, east of Raglan Street, a 300 mm diameter trunk watermain extension will service the industrial zoned lands in pressure zone 2. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.2 Project 12: Sixth Line - Poplar Sideroad to Sandford Fleming Drive

Along Sixth Line, a 300 mm diameter trunk watermain will connect the existing main at Sandford Fleming Drive to the Poplar Sideroad main and will service the industrial zoned lands on Sixth Line. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.3 Project 13: Poplar Sideroad - Summit View Subdivision to Tenth Line

A 400 mm diameter trunk watermain will extend from the Summit View development (currently under construction) along Poplar Sideroad to Tenth Line. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation. This watermain extension will supply the southwest quadrant of Collingwood.

3.1.4 Project 14: High Street - Findlay Drive to Campbell Street

On High Street, a 300 mm diameter trunk watermain will extend from the existing 400 mm diameter main at High Street and Findlay Drive connecting to the main at Campbell Street. In

addition, a 300 mm diameter watermain will connect a gap on High Street, south of Findlay Drive. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.5 Project 15: Tenth Line - Poplar Sideroad to Sixth Street

Along Tenth Line, from Poplar Sideroad to Sixth Street, a 400 mm diameter trunk watermain will supply water to the west end of Collingwood. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.6 Project 16: Tenth Line - Sixth Street to Mountain Road

A 400 mm diameter trunk watermain is proposed from Sixth Street to Mountain Road. This project forms part of the pressure zone 2 supply from the proposed Stewart Road Booster Pumping Station and Reservoir. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.7 Project 17: Sixth Street - Georgian Meadows Drive to Tenth Line

Along Sixth Street, the existing 400 mm diameter watermain will be extended (via a trunk watermain) from Georgian Meadows Drive to the proposed Tenth Line trunk watermain. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation and forms part of the pressure zone 2 supply from the proposed Stewart Road Booster Pumping Station and Reservoir.

3.1.8 Project 18: Future Secondary Plan Development - Tenth Line to Concession 11/12

An oversized 350 mm diameter trunk watermain is proposed through future developments north of Sixth Street, from Tenth Line to the Concession 11/12 border, in the Mountain Road West Corridor Secondary Plan. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.9 Project 19: Future Secondary Plan Development - Concession 11/12 to Osler Bluff Road

An oversized 350 mm diameter trunk watermain is proposed through future developments north of Sixth Street, from the Concession 11/12 border to Osler Bluff Road in the Mountain Road West Corridor Secondary Plan. This project will serve developments in pressure zone 3. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.10 Project 20: Future Secondary Plan Development - Southern Extension of Eleventh Line

A 350 mm diameter trunk watermain will extend south of the Eleventh Line and Mountain Road intersection through future developments in the Mountain Road West Corridor Secondary Plan. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.11 Project 21: Future Secondary Plan Development - Sixth Street to Mountain Road

A 350 mm diameter trunk watermain will run parallel to Tenth Line in the south west corner of the Mountain Road West Corridor Secondary Plan, east of Silver Creek, and will primarily serve the future development within pressure zone 3. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.12 Project 22: Mountain Road - Thomas Drive to Tenth Line

The existing 400 mm diameter Mountain Road trunk watermain through the Mair Mills Estates subdivision will be extended to Tenth Line. It is assumed this watermain will be installed through the Panorama Subdivision and only includes the incremental difference (above 300 mm nominal diameter) to supply and install the main.

3.1.13 Project 23: Watermain Loop along the Eleventh Line and the Georgian Trail

A 300 mm diameter trunk watermain is proposed on the Eleventh Line at Mountain Road, heading north to the Georgian Trail, then east connecting to the watermain along Tenth Line. It is assumed this watermain will be installed through development and since the watermain size is not greater than 300 mm diameter there is no development charge associated with this project.

3.1.14 Project 24: Cranberry Development to the Georgian Trail

A 300 mm diameter trunk watermain is proposed to connect the Cranberry Development watermain to the Eleventh Line / Tenth Line watermain loop (Project 23). This watermain will be installed through future Cranberry developments and since the pipe size is not greater than 300 mm diameter there is no development charge associated with this project.

3.1.15 Project 25: Harbour Street Extension to Tenth Line

A 400 mm diameter trunk watermain on Harbour Street is proposed to extend west of the current dead end and connect to the existing Tenth Line watermain. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.16 Project 26: North of First Street - Maple Street to Hickory Street

The existing 400 mm diameter trunk watermain north of First Street through the existing Shipyards development will be extended westerly to Hickory Street. It will provide additional flow to the west end of Collingwood and will be installed along the existing trail alignment.

3.1.17 Project 27: North of First Street - Hickory Street to Highway 26

A 400 mm diameter trunk main will extend the proposed main at Hickory Street and connect to the existing main at Highway 26. It will provide additional flow to the west end of Collingwood and will be installed along the existing trail alignment.

3.1.18 Project 28: Simcoe Street - Heritage Street to the Water Treatment Plant

A new 400 mm diameter trunk watermain will be installed along Huron Street, Rodney Street and Simcoe Street to replace the undersized 300 mm diameter watermain. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.19 Project 29: Highway 26 - Old Mountain Road to Carmichael Pumping Station

Along Highway 26, a new 400 mm diameter trunk watermain will be installed to replace the undersized 300 mm diameter watermain. This includes removal and restoration within half of the right-of-way to facilitate the watermain installation. This project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.20 Project 30: Sixth Street - Hurontario Street to High Street

Along Sixth Street, from Hurontario Street to High Street, a 400 mm diameter watermain will be installed replacing a 150 mm diameter watermain, increasing the overall system capacity. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.21 Project 31: High Street - Old Mountain Road to Fifth Street

Along High Street, from Old Mountain Road to Fifth Street, a 450 mm diameter watermain will be installed replacing the 300 mm diameter watermain, increasing the overall system capacity. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.22 Project 32: St. Paul Street - Side Launch Way to Hume Street

Along St. Paul Street, from Side Launch Way to Hume Street, a 400 mm diameter trunk watermain will be installed, increasing the overall system capacity. This project includes removal and

restoration within half of the right-of-way to facilitate the watermain installation; however, this project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.23 Project 33: High Street - Sixth Street to Campbell Street

Along High Street, from Sixth Street to Campbell Street, a 450 mm diameter trunk watermain will replace the existing 200 mm diameter watermain, increasing the overall system capacity. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation and a 50% benefit to existing value has been applied to account for the replacement of the existing deteriorating watermain, as per discussions with Town staff.

3.1.24 Project 34: Poplar Sideroad - Clark Street to the Summit View Subdivision

Along Poplar Sideroad, from Clark Street heading west to the Summit View Subdivision, a 200 mm diameter watermain will create connectivity. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation; however, this project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.25 Project 35: Campbell Street - Maple Street to Hurontario Street

Along Campbell Street, from Maple Street to Hurontario Street, a 200 mm diameter watermain will be installed replacing the existing 150 mm diameter watermain, enhancing fire flow and connectivity. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation.

3.1.26 Project 36: Hume Street - Pretty River Parkway to Raglan Street North

A 400 mm diameter watermain will be installed on Hume Street from the Pretty River Parkway to Raglan Street North. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation; however, this project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.1.27 Project 37: Raglan Street - Erie Street to Oliver Crescent

A 400 mm diameter watermain will be installed on Raglan Street from Erie Street to Oliver Crescent. This project includes removal and restoration within half of the right-of-way to facilitate the watermain installation; however, this project is scheduled to proceed outside of the growth period and thus the entire cost is categorized as a post-period benefit.

3.2 WATER VALVES

3.2.1 Project 38: Cranberry Trail Pressure Reducing Valve

Adjustments to the pressure reducing valve are required on Cranberry Trail East to facilitate growth in the areas around the Cranberry Development.

3.2.2 Project 39: Osler Bluff Road Pressure Reducing Valve and Decommission Booster Pumps

At the western edge of the Mountain Road West Corridor Secondary Plan, a pressure reducing valve and check valve will be installed at the zone 1 / zone 2 pressure border. The decommissioning of the Osler Bluff Road booster pumping station is included within this project, scheduled to commence after Phase 1 of the Stewart Road booster pumping station and reservoir project is complete.

3.2.3 Project 40: Mountain Road Pressure Reducing Valve and Chamber Installation

At the intersection of Mountain Road and Tenth Line, a pressure reducing valve will be installed in a chamber at the zone 1 / zone 2 pressure border.

3.2.4 Project 41: Dey Drive Check Valve

On Dey Drive, a new check valve will be installed at the zone 1 / zone 2 pressure border to supply zone 2 in an emergency. This project is paid for by a developer and therefore has no development charge value.

3.2.5 Project 42: Pretty River Check Valve

On Peel Street, a new check valve will be installed at the zone 1 / zone 2 pressure border to supply zone 2 in an emergency.

3.2.6 Project 43: Sixth Line Pressure Reducing Valve and Chamber Installation

On Sixth Line, a pressure reducing valve will be installed at the zone 1 / zone 2 pressure border to supply zone 2 in an emergency.

3.3 WATER FACILITIES

3.3.1 Project 44: Stewart Road Reservoir and Booster Pumping Station (Phase 1)

The Stewart Road booster pumping station will be required to meet local peak hour water demands and pressure requirements in the west of pressure zone 2 (north of Sixth Street and west of Tenth Line). It will be supported by a grade level reservoir with an approximate volume of 3,700 m^3 to meet the storage requirements in pressure zone 2.

3.3.2 Project 45: Stewart Road Reservoir and Booster Pumping Station (Phase 2)

Phase 2 of the Stewart Road reservoir and pumping station is scheduled to commence after the current growth period and thus the entire cost is categorized as a post-period benefit.

3.3.3 Project 46: Stewart Road Reservoir and Booster Pumping Station (Phase 3)

Phase 3 of the Stewart Road reservoir and pumping station is scheduled to commence after the current growth period and thus the entire cost is categorized as a post-period benefit.

3.3.4 Project 47: Stewart Road Ultimate Pump Upgrades

Pumping upgrades are required prior to the completion of the Stewart Road reservoir and booster pumping station Phase 3. This project is scheduled to commence after the current growth period and thus the entire cost is categorized as a post-period benefit.

3.3.5 Project 48: Decommissioning of Georgian Meadows Pumping Station

Once Phase 1 of the Stewart Road booster pumping station is commissioned, the decommissioning of the Georgian Meadows pumping station will be completed.

3.3.6 Project 49: Ted Carmichael West End Reservoir (Highway 26 West)

As outlined in the Collingwood Water Supply and Distribution System Update 2013 and the draft Water Master Plan, modifications to the Ted Carmichael West End Reservoir are required to operate it as an “in and out” reservoir, with flow filling the reservoir from the east and flowing out to the west. This will assist in maintaining adequate pressures and fire flows in the water distribution system as development proceeds west of the reservoir.

3.3.7 Project 50: New Elevated Tank

A new elevated tank is proposed to replace the tank on Hume Street. It will double the current operating volume. The location is to be determined. A 50% benefit to existing value has been applied to account for the replacement of the existing deteriorating asset.

3.3.8 Project 51: Water Treatment Plant (St. Lawrence Street)

In accordance with the draft Water Master Plan, the Water Treatment Plant requires an expansion to 67 ML/day to meet the water demands from growth in the Town of Collingwood. The Water Treatment Plant currently produces treated water for the Town of Collingwood, the Town of New Tecumseth and The Town of The Blue Mountains. As per discussions with Town staff, Collingwood is responsible to pay for 18% of the upgrades. A 12% benefit to existing has been applied to account for the maintenance costs that would be required if the Town decided not to proceed with the upgrades. The expansion will involve replacing membranes with higher capacity

membranes, installing UV disinfection equipment, expanding the clearwell, adding wastewater management facilities and expanding the low lift pumping station.

It was assumed for the calculation of the development charge eligible costs that a portion of the Water Treatment Plant expansion costs will be funded by the municipalities with water supply agreements with the Town.

4 Road Projects

Road projects include:

- improvements to collector or arterial roads as designated in the Town's Official Plan;
- intersection improvements including additional lanes, roundabouts and signalization; and
- sidewalk and trail improvements.

Project descriptions, estimated timing and costs for the proposed road, intersection and sidewalk projects are summarized in Appendix B. Each summary identifies values for post-period benefit, benefit to existing development, and grants, subsidies and other contributions, reducing the development charge eligible portion of the capital cost estimates.

For road, intersection and sidewalk projects, the benefit to existing development represents the value of replacing existing municipal assets through growth related capital project. More specifically, on substandard roads (i.e. those that are assumed to not meet current road design standards with respect to width, cross-section and/or granular type and/or depths), the benefit to existing value applied was based on the cost to replace the existing road base and asphalt at its current configuration. On existing roads constructed to an appropriate standard, the benefit to existing was assigned based on the cost to replace the asphalt surface only at its current configuration (recognizing the road base is sufficient). The conditions of the existing roads and the benefit to existing values assigned to each project, based on these principles were collaboratively established with the Town.

The capital cost estimates for road projects within existing municipal right-of-ways were developed based on the cost to remove and reinstate the existing road and boulevards (across a typical 20 m right-of-way). Sidewalk and trail projects include boulevard restoration allowances (1 m wide on both sides of the sidewalk or trail) to allow for adequate constructability and blending into the existing boulevard.

Allowances have been included in support of updates to the Transportation Master Plan and miscellaneous Municipal Class Environmental Assessments.

4.1 ROADS

4.1.1 Project 52: Highway 26 - Silver Glen Boulevard to Silver Creek Drive

Improvements to the 570 m section of Highway 26 from Silver Glen Boulevard to Silver Creek Drive will include widening the road from 2 lanes to 3 lanes. This will blend into the recent improvements on Highway 26 completed from Keith Avenue to Silver Glen Boulevard. The improvements will be constructed to an arterial standard rural cross section. This project will

service growth in the west end of Town and provide improved traffic operations along Highway 26. For the purpose of this report, we have assumed a new granular road base will be required throughout in support of the proposed improvements. The benefit to existing was calculated based on pulverizing and paving the existing roadway.

4.1.2 Project 53: Highway 26 - Keith Avenue to Silver Creek Drive

The arterial road improvements along the 3,300 m section of Highway 26 from Keith Avenue to Silver Creek Drive will upgrade the existing 3 lane rural to a 5 lane urban road cross section. The majority of this project is already constructed as a 3 lane rural cross section and the remainder is scheduled to be constructed in 2023. For the purpose of this report, we have assumed the project will re-use the granular base and binder course asphalt from the existing 3 lane roadway. The surface course asphalt will be removed along the existing road and replaced following the installation of the additional 2 lanes. The benefit to existing was based on removing and replacing of the existing 3 lane surface course asphalt. A 70% post-period benefit was included for this project as it is scheduled to proceed at the end of the growth period to service development beyond the development charge horizon period of 2031.

4.1.3 Project 54: Mountain Road - Tenth Line to Osler Bluff Road

Improvements to the 2,800 m section of Mountain Road from Tenth Line to Osler Bluff Road will include road base widening in accordance with the current 2 lane collector rural standards. For the purpose of this report, we have assumed the road was originally constructed to an appropriate standard and the road reconstruction will re-use the existing granular base from the existing roadway. The benefit to existing is based on removing and replacing the asphalt along its current alignment.

4.1.4 Project 55: Sixth Line - Poplar Sideroad to Sandford Fleming Drive.

Improvements to the 680 m section of Sixth Line from Poplar Sideroad to Sandford Fleming Drive will include road base widening in accordance with the current 2 lane collector rural standards. For the purpose of this report, we have assumed a new granular road base will be required throughout in support of the proposed improvements. The benefit to existing is based on removing and replacing the asphalt along its current alignment.

4.1.5 Project 56: Hurontario Street - Hume Street to Collins Street

The arterial road improvements to the 780 m section of Hurontario Street from Hume Street to Collins Street will consist of constructing a continuous centre turn lane throughout to better serve the abutting developments. The improvements will include satisfying the requirements of a 3 lane urban road cross section. For the purpose of this report, we have assumed the road was originally constructed to an appropriate standard and the road reconstruction will re-use the granular base

from the existing 2 lane roadway. The benefit to existing is based on removing and replacing the existing asphalt along its current alignment.

4.1.6 Project 57: Collins Street - Ste. Marie Street to Katherine Street

The collector road improvements to the 360 m section of Collins Street from Ste. Marie Street to Katherine Street will include upgrading the existing 2 lane rural road to a 2 lane urban road cross section. For the purpose of this report, we have assumed a new granular road base will be required throughout in support of the proposed improvements. The benefit to existing is based on removing and replacing the asphalt along its current alignment.

4.1.7 Project 58: High Street - Third Street to Fifth Street

The arterial road improvements along the 450 m section of High Street from Third Street to Fifth Street will consist of widening the existing 4 lane urban road to accommodate a continuous centre turn lane throughout (thus providing a continuous centre turn lane from First Street to Sixth Street). The improvements will satisfy the requirements of a 5 lane urban road cross section. For the purpose of this report, we have assumed the road was originally constructed to an appropriate standard and the road reconstruction will re-use the granular base from the existing roadway. The benefit to existing is based on removing and replacing the asphalt along its current alignment.

4.1.8 Project 59: Tenth Line - Sixth Street to Mountain Road

This collector road project will upgrade 1,240 m of Tenth Line between Sixth Street and Mountain Road from a 2 lane rural to a 2 lane urban road cross section. For the purpose of this report, we have assumed the road was originally constructed to an appropriate standard and the road reconstruction will re-use the granular base from the existing roadway. The benefit to existing is based on removing and replacing the asphalt along its current alignment.

4.1.9 Project 60: High Street - Poplar Sideroad to Tenth Street

Arterial road improvements to this 1,450 m section of High Street from Poplar Sideroad to Tenth Street will consist of widening and upgrading the 2 lane rural road to a 4 lane urban road cross section. For the purpose of this report, we have assumed a new granular road base will be required throughout in support of the proposed improvements. The benefit to existing is based on full road reconstruction of the existing roadway along its current alignment.

4.1.10 Project 61: Third Street - High Street to Birch Street

Collector road improvements to the 865 m section of Third Street for High Street to Birch Street include upgrading the 2 lane rural road to a 2 lane urban road cross section. For the purpose of this report, we have assumed a new granular road base will be required throughout in support of

the proposed improvements. The benefit to existing is based on full road reconstruction of the existing roadway along its current alignment.

4.1.11 Project 62: Cameron Street - Hurontario Street to Walnut Street

Collector road improvements to the 830 m section of Cameron Street between Hurontario Street and Walnut Street include upgrading the existing 2 lane rural road to a 2 lane urban road cross section. For the purpose of this report, we have assumed a new granular road base will be required throughout in support of the proposed improvements. The benefit to existing is based on full road reconstruction of the existing roadway along its current alignment.

4.1.12 Project 63: Mountain Road - Cambridge Street to Tenth Line (Phase 1)

Arterial road improvements to the 1,075 m section of Mountain Road from Cambridge Street to Tenth Line consist of widening the 2 lane rural road to 3 lane rural road cross section. The scope of this project will include a 5 lane bridge to facilitate future road widening. For the purpose of this report, we have assumed a new granular road base will be required throughout in support of the proposed improvements. The benefit to existing is based on removing and replacing the existing asphalt along its current alignment and the replacement of a 2 lane bridge. A post-period benefit has been applied to account for 2 lanes of the 5 lane bridge, as the road is expected to be widened to 5 lanes outside of the current growth period (project 64) and will service development beyond the development charge horizon period of 2031.

4.1.13 Project 64: Mountain Road - Cambridge Street to Tenth Line (Phase 2)

Arterial road improvements to the 1,075 m section of Mountain Road from Cambridge Street to Tenth Line consist of upgrading and widening the 3 lane rural road to a 5 lane urban road cross section. Bridge work allowances were not included as it will get replaced when the road is widened to 3 lanes (project 63). For the purpose of this report, we have assumed the project will re-use the granular base and binder course asphalt from the existing 3 lane roadway. The surface course asphalt will be removed along the existing road and replaced following the installation of the additional 2 lanes. The benefit to existing was based on removing and replacing the existing 3 lane surface course asphalt. A 70% post-period benefit was included for this project as it is scheduled to proceed at the end of the growth period to service development beyond the development charge horizon period of 2031.

4.1.14 Project 65: Peel Street - Ontario Street to Bush Street

Collector road improvements to the 930 m section of Peel Street between Ontario Street and Bush Street include upgrading the 2 lane rural road to a 2 lane urban road cross section. For the purpose of this report, we have assumed a new granular road base will be required throughout

in support of the proposed improvements. The benefit to existing is based on full road reconstruction of the existing roadway along its current alignment.

4.1.15 Project 66: Sixth Street - Tenth Line to High Street

Arterial road improvements for the 1,320 m section of Sixth Street from Tenth Line to High Street consist of widening and upgrading the road from 2 lane rural to a 3 lane urban road cross section. For the purpose of this report, we have assumed the road was originally constructed to an appropriate standard and the road reconstruction will re-use the granular base from the existing roadway. The benefit to existing is based on removing and replacing the existing asphalt along its current alignment. A 70% post-period benefit was included for this project as it is scheduled to proceed at the end of the growth period.

4.1.16 Project 67: Harbour Street Extension - Tenth Line to the Georgian Trail

This project includes constructing 525 m of new road in accordance with 2 lane rural collector standards. A 70% post-period benefit was included for this project as it is scheduled to proceed at the end of the growth period to service development beyond the development charge horizon period of 2031.

4.1.17 Project 68: Sandford Fleming Drive - Sixth Line to Highway 26

This collector road project will include extending Sandford Fleming Drive from Sixth Line intersection to a new intersection at Highway 26. The 220 m section of road will be constructed in accordance with 2 lane rural standards and 90% of this project will be funded by the Ministry of Transportation through an existing agreement. Construction is currently underway and is expected to be completed in 2019.

4.2 INTERSECTIONS

4.2.1 Project 69: Highway 26 and Sandford Fleming Drive / Beachwood Road

In conjunction with the Sandford Fleming Drive road extension (project 68), the intersection of Highway 26 and Sandford Fleming Drive / Beachwood Road will be signalized. 90% of this project will be funded by the Ministry of Transportation through an existing agreement. Construction is currently underway and is expected to be completed in 2019.

4.2.2 Project 70: Sixth Street and Oak Street

Improvements include signalization of the existing intersection. A 70% post-period benefit has been applied to this project since it is scheduled to proceed towards the end of the growth period to service development beyond the development charge horizon period of 2031.

4.2.3 Project 71: High Street and Home Depot Access

In conjunction with future commercial development on the lands abutting the Home Depot, the existing signalized Home Depot access will be converted to a right-in / right-out access and the signals will be relocated to the intersection of High Street and Third Street. The extension of Cambridge Street (to be completed as part of future commercial development) will subsequently connect to the new signalized intersection as the new west leg. 100% of this project will be paid for by the developer in accordance with the existing Site Plan Agreement.

4.2.4 Project 72: High Street and First Street (Phase 1)

Improvements include the construction of an exclusive eastbound right turn lane, converting the shared southbound through-left turn lane into an exclusive left turn lane and the construction of a shared southbound through-right lane to maintain two southbound lanes through the intersection. The signal timings are to be revised to include protected left phases for northbound and southbound lefts and eliminating the existing customized timing plans and including permitted and overlap phases for eastbound right turns.

4.2.5 Project 73: Highway 26 and Harbour Street / Balsam Street

Improvements include the construction of northbound and southbound left turn lanes, complete with permitted and protected signal phases.

4.2.6 Project 74: Mountain Road / First Street Extension and Old Mountain Road / Cambridge Street

Improvement includes the conversion of the existing exclusive westbound right turn lane into a shared through-right lane and the provision of northbound and southbound right turn lanes (thus allowing the existing shared through and right lanes to become exclusive through lanes). Improved signal timings to consider permitted and protected phases for eastbound left turns should also be considered.

4.2.7 Project 75: High Street and Third Street

Improvements include the signalization of the existing intersection and the construction of excusive northbound and southbound left turn lanes with permitted and protected phasing.

90% of the signalization cost is to be paid for by the developer, as these lights provide a direct benefit to the future commercial development on Third Street, west of High Street.

4.2.8 Project 76: High Street and Sixth Street

Improvements include the construction of an exclusive southbound right turn lane, thus creating two exclusive southbound through lanes, and the implementation of a permitted and protected phase for the eastbound left turn lane. A 70% post-period benefit has been applied to this project

since it is scheduled to proceed towards the end of the growth period to service development beyond the development charge horizon period of 2031.

4.2.9 Project 77: High Street and First Street (Phase 2)

Improvements include revising the signal timing plans to include a permitted and protected phase for the eastbound left turn lane and the construction of exclusive northbound and southbound right turn lanes.

4.2.10 Project 78: Mountain Road and Tenth Line

As per the Municipal Class EA, this project includes the construction of a two-lane roundabout with widened or flared approaches to incorporate two lanes entering per approach.

4.2.11 Project 79: High Street and Campbell Street

As per the Municipal Class EA, this project includes the construction of a two-lane roundabout with widened or flared approaches to incorporate two lanes entering per approach. A 70% post-period benefit has been applied to this project since it is scheduled to proceed towards the end of the growth period to service development beyond the development charge horizon period of 2031.

4.3 SIDEWALKS AND TRAILS

4.3.1 Project 80: Mountain Road - Tenth Line to Osler Bluff Road

A 3 m wide limestone screenings trail is proposed along Mountain Road for 2,200 m.

4.3.2 Project 81: Collins Street – Ste. Marie Street to Katherine Street

A 1.5 m wide sidewalk on both sides of Collins Street is proposed for 360 m.

4.3.3 Project 82: High Street - Third Street to Fifth Street

A 1.5 m wide sidewalk on the west side of High Street and a 3 m wide sidewalk on the east side of High Street are proposed for 435 m.

4.3.4 Project 83: Tenth Line - Sixth Street to Mountain Road

A 3 m wide limestone screenings trail is proposed along Tenth Line for 1,065 m.

4.3.5 Project 84: High Street - Poplar Sideroad to Tenth Street

A 1.5 m wide sidewalk on the east side of High Street and a 3 m wide sidewalk on the west side of High Street are proposed for 1,390 m.

4.3.6 Project 85: Third Street - Spruce Street to Cedar Street

1.5 m sidewalks are proposed on both sides of Third Street for 360 m.

4.3.7 Project 86: Cameron Street - Walnut Street to Hurontario Street

1.5 m sidewalks are proposed on both sides of Cameron Street for 840 m.

4.3.8 Project 87: Mountain Road - Cambridge Street to Tenth Line

A 3 m wide sidewalk on the south side of Mountain Road and a 1.5 m sidewalk on the north side of Mountain Road are proposed to extend for 1,050 m.

4.3.9 Project 88: Peel Street - Ontario Street to Bush Street

1.5 m sidewalks are proposed on both sides of Peel Street for 900 m.

4.3.10 Project 89: Sixth Street - Tenth Line to High Street

1.5 m sidewalks are proposed on both sides of Sixth Street for 1,295 m.

4.3.11 Project 90: Poplar Sideroad - Hurontario Street to High Street

A 3 m wide limestone screenings trail is proposed along Poplar Sideroad for 870 m.

4.3.12 Project 91: Highway 26 - Marine View Drive to Sixth Line

A 1.5 m wide sidewalk on the north side of Highway 26 and a 3 m wide sidewalk on the south side of Highway 26 are proposed for 340 m.

4.3.13 Project 92: Tenth Line - Poplar Sideroad to Sixth Street

A 3 m wide trail is proposed along Tenth Line for 1,850 m.

4.3.14 Project 93: Highway 26 - Osler Bluff Road to Silver Glen Boulevard

A 3 m wide trail is proposed along Highway 26 for 1,700 m.

4.3.15 Project 94: Second Street - High Street to Spruce Street

A 1.5 m wide sidewalk is proposed along the east side of Second Street for 250 m.

5 Summary

Through consultation with Town staff and Hemson, and following a review of applicable studies, standards and guidelines (i.e. master studies, project specific Class Environmental Assessments, the Town's Official Plan, Town Standards, developing mapping and forecasts, etc.), the previous development charge study list of capital engineering project has been updated. Engineering projects were considered as they relate to the following:

- wastewater sewer and facilities (trunk sewers, sewage pumping stations and forcemains and the Water Pollution Control Plant);
- water distribution and facilities (watermains, booster pumping stations and reservoirs and the Water Treatment Plant); and
- transportation services (roads, intersections, sidewalks and trails).

Capital cost estimates were estimated based on the scope of work anticipated and current construction values. Where appropriate, consideration was given to engineering, property acquisition, contingencies, Town staff allowances, and utility relocation costs. Recognizing that projects may vary with respect to their role and function, and who they are intended to benefit, consideration has been given to the following:

- benefit to existing developments;
- benefit to new developments;
- available funding and/or other cost contributions (as may be secured through separate development agreements or government infrastructure programs); and
- post-period development (i.e. the degree to which the project will provide benefit beyond the 2031 Simcoe County growth period).

A summary of the respective values for the noted servicing systems is provided in Table 1.

As noted, the identification of the capital projects, the contributing factors and extent of benefit have been determined based on past studies and/or consideration for future growth. As development occurs and growth is realized (or is not realized), it may be necessary to update the study methodology to reflect the current development environment. In this respect, regular updates of this study are recommended.

Table 1: Costing Summary

DESCRIPTION	GROSS CAPITAL COST ESTIMATE	POST-PERIOD BENEFIT	BENEFIT TO EXISTING	GRANTS, SUBSIDIES AND OTHER	NET CAPITAL COST ESTIMATE
Wastewater Sewers	$6,400,186	$3,735,208	$0	$0	$2,664,978
Wastewater Facilities	$95,085,000	$75,279,167	$910,000	$0	$18,895,833
Water Distribution	$35,437,200	$15,871,900	$3,068,200	$0	$16,497,100
Water Valves	$940,000	$140,000	$22,500	$50,000	$727,500
Water Facilities	$69,404,400	$5,988,500	$4,039,700	$41,615,000	$17,761,200
Roads	$64,654,900	$16,679,400	$12,003,673	$501,800	$35,470,027
Intersections	$5,072,000	$1,040,900	$0	$521,100	$3,510,000
Sidewalks & Trails	$7,300,600	$0	$1,249,600	$0	$6,051,000
TOTAL	**$284,294,286**	**$118,735,075**	**$21,293,673**	**$42,687,900**	**$101,577,638**

Appendix A:
Servicing Plans

LEGEND

SECONDARY PLAN BOUNDARY	
EX. SAN. SEWER, FORCEMAINS AND SPS	
PROPOSED LOCAL SAN. SEWER	
PROPOSED DC PROJECT	
SEWAGE PUMPING STATIONS	

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NOTES

No.	REVISION DESCRIPTION	DATE
1.	DRAFT SUBMISSION	MAY 31/19

ENGINEER STAMP

2019 DEVELOPMENT CHARGE UPDATE

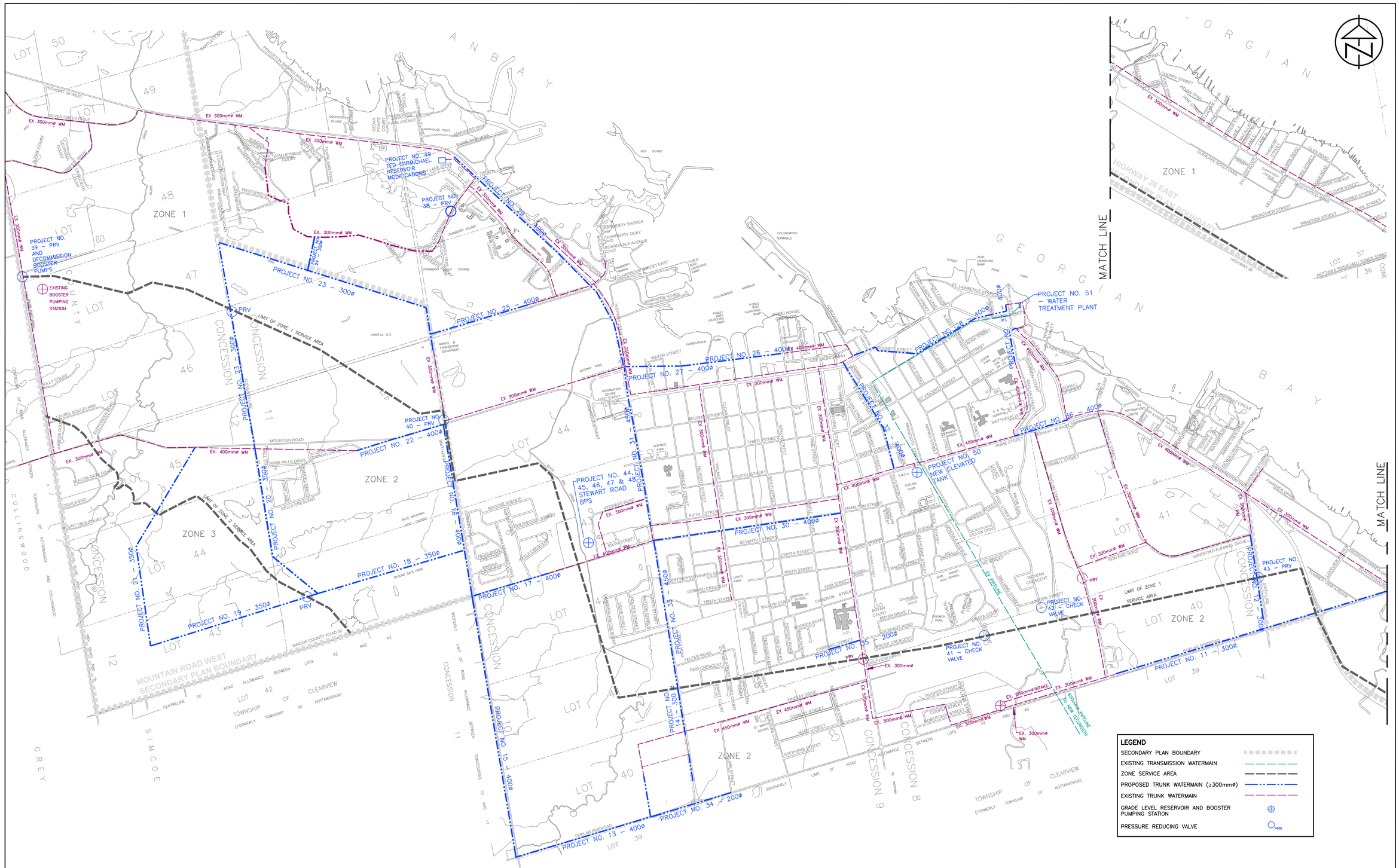
TOWN OF COLLINGWOOD

TATHAM ENGINEERING

SANITARY INFRASTRUCTURE

DESIGN: AT	FILE: 119015	DWG:
DRAWN: AT	DATE: DEC 2018	**SAN-1**
CHECK: AEB	SCALE: 1:12,500	

Drawing Name: 119015–SAN01.dwg, Plotted: May 31, 2019



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NOTES

No.	REVISION DESCRIPTION	DATE
1.	DRAFT SUBMISSION	MAY 31/19

ENGINEER STAMP

2019 DEVELOPMENT CHARGE UPDATE

TOWN OF COLLINGWOOD

WATER SERVICING INFRASTRUCTURE

TATHAM ENGINEERING

DESIGN: AT	FILE: 119015	DWG: **WAT-1**
DRAWN: AT	DATE: DEC 2018	
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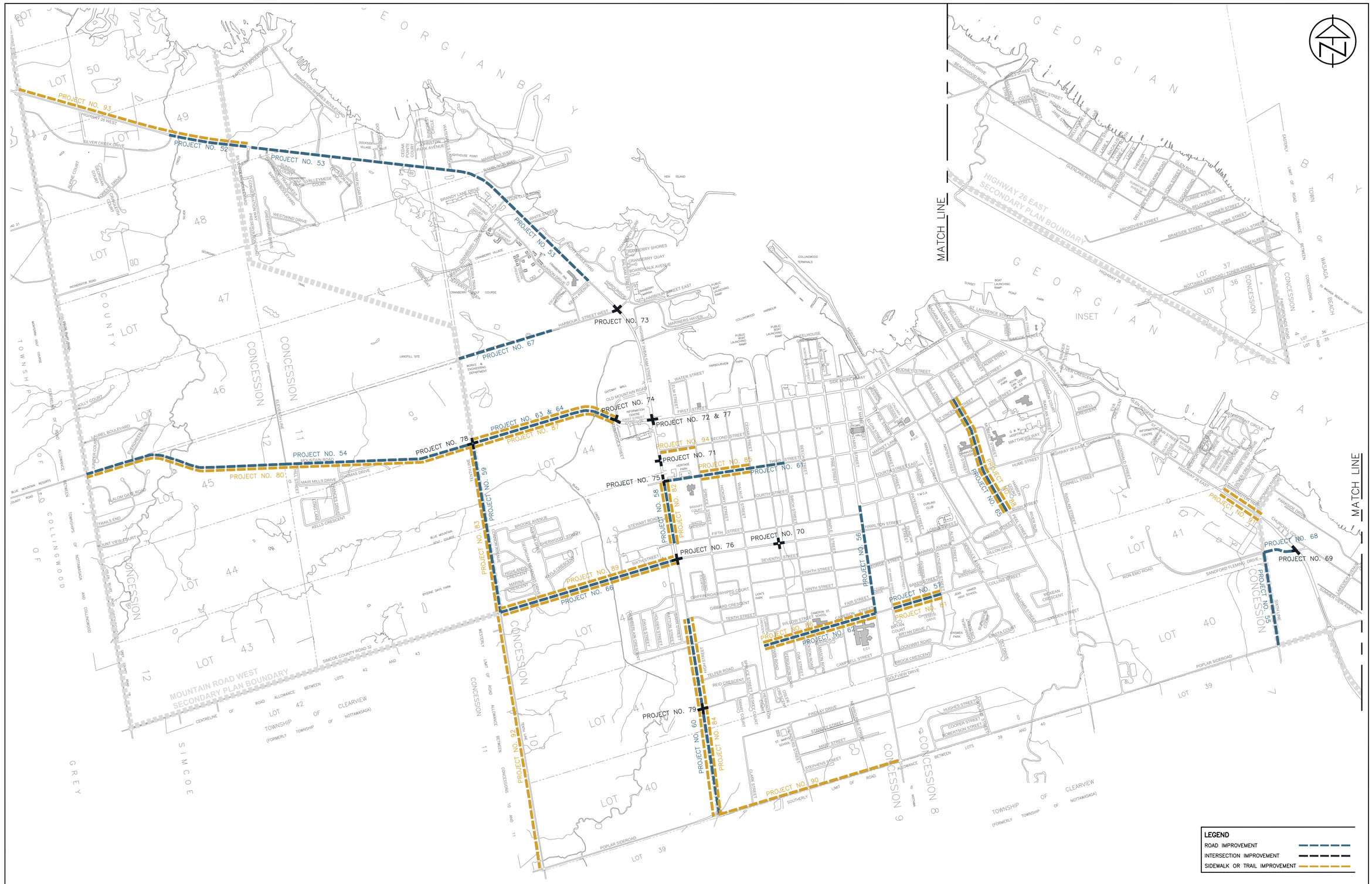
Drawing Name: 119015-WAT01.dwg, Plotted: May 30, 2019



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NOTES

No.	REVISION DESCRIPTION	DATE
1.	DRAFT SUBMISSION	MAY 31/19

ENGINEER STAMP

2019 DEVELOPMENT CHARGE UPDATE

TOWN OF COLLINGWOOD

ROAD NETWORK INFRASTRUCTURE

TATHAM ENGINEERING

DESIGN: AT	FILE: 119015	DWG: ROAD-1
DRAWN: AT	DATE: DEC 2018	
CHECK: AEB	SCALE: 1:12,500	

Drawing Name: 119015-ROAD01.dwg, Plotted: May 29, 2019

Appendix B:
Capital Cost Estimates

TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

WASTEWATER SEWERS - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	PROJECT LENGTH (m)	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST-PERIOD BENEFIT
								%	AMOUNT			
1	Mountain Road: Eleventh Line to the West	650	Extension of the existing trunk sewer	2031	$1,537,900	$0	$1,537,900	0%	$0	$1,537,900	$0	$1,537,900
2	North of Mountain Road: Tenth Line to the West	1,900	Oversizing of trunk sewer through future development	2025	$191,000	$0	$191,000	0%	$0	$191,000	$57,300	$133,700
3	Black Ash Creek Trunk Main: South of Sixth Street	900	Oversizing of trunk sewer through future development	2031	$30,200	$0	$30,200	0%	$0	$30,200	$0	$30,200
4	Mountain Road: Improvements West of Balsam Street	400	Trunk sewer to replace the existing sewer	2025	$1,095,700	$0	$1,095,700	0%	$0	$1,095,700	$1,095,700	$0
5	Harbour Street: Georgian Trail to Tenth Line	650	Extension of the existing trunk sewer	2030	$130,600	$0	$130,600	0%	$0	$130,600	$65,300	$65,300
6	Hurontario Street: Lockhart Road to Collins Street	368	Trunk sewer to replace the existing sewer	2024	$848,400	$0	$848,400	0%	$0	$848,400	$848,400	$0
7	Black Ash Creek SPS Forcemain: SPS to WPCP (along trail)	1,329	Twin forcemain to provide additional capacity	2032	$926,718	$0	$926,718	0%	$0	$926,718	$0	$926,718
			Wastewater Master Plan Update	2024 + 2029	$240,000	$0	$240,000	0%	$0	$240,000	$240,000	$0
			Miscellaneous Municipal Class EAs	Various	$150,000	$0	$150,000	0%	$0	$150,000	$150,000	$0
TOTAL					**$5,150,518**	**$0**	**$5,150,518**		**$0**	**$5,150,518**	**$2,456,700**	**$2,693,818**

(1) - Other contributions includes: grants, subsidies and other contributions attributable to new development

TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

WASTEWATER FACILITIES - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST-PERIOD BENEFIT
							%	AMOUNT			
8	Water Pollution Control Plant - Outfall Improvements	Plant Outfall Improvements	2027-2032	$1,249,668	$0	$1,249,668	0%	$0	$1,249,668	$745,568	$504,100
9	Water Pollution Control Plant	Expansion of the WPCP to increase the capacity by 12,000 m^3/day	2027-2032	$90,335,000	$0	$90,335,000	6%	$5,420,100	$84,914,900	$47,966,300	$36,948,600
10	Black Ash Sewage Pumping Station Upgrades	Increases capacity of SPS	2019	$4,000,000	$0	$4,000,000	0%	$0	$4,000,000	$4,000,000	$0
		WPCP Municipal Class EA Update & Assimilative Capacity Update	2025	$750,000	$0	$750,000	0%	$0	$750,000	$750,000	$0
TOTAL				**$96,334,668**	**$0**	**$96,334,668**		**$5,420,100**	**$90,914,568**	**$53,461,868**	**$37,452,700**

(1) - Other contributions includes: grants, subsidies and other contributions attributable to new development

TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

WATER DISTRIBUTION - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	PROJECT LENGTH (m)	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST-PERIOD BENEFIT
								%	AMOUNT			
11	Poplar Sideroad: Raglan Street to Beachwood Road	2,000	Trunk watermain extension	2026	$2,996,400	$0	$2,996,400	0%	$0	$2,996,400	$2,996,400	$0
12	Sixth Line: Poplar Sideroad to Sandford Fleming Drive	650	Trunk watermain extension	2026	$922,700	$0	$922,700	0%	$0	$922,700	$922,700	$0
13	Poplar Sideroad: Summit View to Tenth Line	700	Trunk watermain extension	2019 / 2031	$1,189,300	$0	$1,189,300	0%	$0	$1,189,300	$396,400	$792,900
14	High Street: Findlay Drive to Campbell Street	450	Trunk watermain extension	2019	$677,100	$0	$677,100	15%	$101,600	$575,500	$575,500	$0
15	Tenth Line: Poplar Sideroad to Sixth Street	1,850	Trunk watermain extension	2031	$3,005,800	$0	$3,005,800	0%	$0	$3,005,800	$0	$3,005,800
16	Tenth Line: Sixth Street to Mountain Road	1,125	Trunk watermain extension	2019	$1,361,250	$0	$1,361,250	0%	$0	$1,361,250	$1,361,250	$0
17	Sixth Street: Georgian Meadows Drive to Tenth Line	275	Trunk watermain extension	2019	$332,750	$0	$332,750	0%	$0	$332,750	$332,750	$0
18	Future Secondary Plan Development: Tenth Line to Conc. 11/12	1,000	Oversizing of trunk watermain through future development	2031	$118,600	$0	$118,600	0%	$0	$118,600	$0	$118,600
19	Future Secondary Plan Development: Conc. 11/12 to Osler Bluff Rd.	1,200	Oversizing of trunk watermain through future development	2031	$144,700	$0	$144,700	0%	$0	$144,700	$0	$144,700
20	Future Secondary Plan Development: South Extension of Eleventh Line	1,100	Oversizing of trunk watermain through future development	2031	$134,600	$0	$134,600	0%	$0	$134,600	$0	$134,600
21	Future Secondary Plan Development: Sixth Street to Mountain Road	1,450	Oversizing of trunk watermain through future development	2031	$176,000	$0	$176,000	0%	$0	$176,000	$0	$176,000
22	Mountain Road: Thomas Drive to Tenth Line	700	Trunk watermain extension	2020	$137,400	$0	$137,400	0%	$0	$137,400	$137,400	$0
23	Watermain Loop along Eleventh Line and Georgian Trail	3,300	Trunk watermain extension	2031	$0	$0	$0	0%	$0	$0	$0	$0
24	Cranberry Development to the Georgian Trail	250	Oversizing of trunk watermain through future development	2031	$0	$0	$0	0%	$0	$0	$0	$0
25	Harbour Street Extension to Tenth Line	565	Trunk watermain extension	2022	$925,100	$0	$925,100	15%	$138,800	$786,300	$786,300	$0
26	North of First Street: Maple Street to Hickory Street	785	Trunk watermain extension	2024	$1,235,100	$0	$1,235,100	15%	$185,300	$1,049,800	$1,049,800	$0
27	North of First Street: Hickory Street to Highway 26	420	Trunk watermain extension	2030	$625,900	$0	$625,900	15%	$93,900	$532,000	$532,000	$0
28	Simcoe Street: Heritage Street to Water Treatment Plant	1,365	Upsize existing watermain from 300 to 500 mm	2040	$3,115,100	$0	$3,115,100	15%	$467,300	$2,647,800	$0	$2,647,800
29	Highway 26: Old Mountain Road to Carmichael Pumping Station	2,122	Upsize existing watermain from 300 to 400 mm	2045	$4,381,700	$0	$4,381,700	0%	$0	$4,381,700	$0	$4,381,700
30	Sixth Street: Hurontario Street to High Street	1,960	Upsize existing watermain from 300 to 400 mm	2023	$3,919,800	$0	$3,919,800	15%	$588,000	$3,331,800	$3,331,800	$0
31	High Street: Old Mountain Road to Fifth Street	1,225	Upsize existing watermain from 300 to 450 mm	2030	$2,677,700	$0	$2,677,700	15%	$401,700	$2,276,000	$2,276,000	$0
32	St. Paul Street: Side Launch Way to Hume Street	830	Upsize existing watermain from 300 to 400 mm	2045	$1,724,300	$0	$1,724,300	15%	$258,600	$1,465,700	$0	$1,465,700
33	High Street: Sixth Street to Campbell Street	1,468	Upsize / add new watermain from 200 to 450 mm	2030	$2,765,900	$0	$2,765,900	50%	$1,383,000	$1,382,900	$1,382,900	$0
34	Poplar Sideroad: Clark Street to Summit View	720	Trunk watermain extension	2035	$977,800	$0	$977,800	0%	$0	$977,800	$0	$977,800
35	Campbell Street: Maple Street to Hurontario Street	220	Upsize existing watermain to 200 mm	2019	$351,800	$0	$351,800	50%	$175,900	$175,900	$175,900	$0
36	Hume Street: Pretty River Parkway to Raglan Street North	410	Upsize existing watermain to 400 mm	2035	$803,100	$0	$803,100	85%	$682,600	$120,500	$0	$120,500
37	Raglan Street: Erie Street to Oliver Crescent	250	Upsize existing watermain from 300 to 400 mm	2035	$497,300	$0	$497,300	15%	$74,600	$422,700	$0	$422,700
			Water Master Plan Update	2024 + 2029	$240,000	$0	$240,000	0%	$0	$240,000	$240,000	$0
TOTAL					**$35,437,200**	**$0**	**$35,437,200**		**$4,551,300**	**$30,885,900**		**$14,388,800**

(1) - Other contributions includes: grants, subsidies and other contributions attributable to new development

TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

WATER VALVE - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST-PERIOD BENEFIT
							%	AMOUNT			
38	Cranberry Trail PRV	Adjust settings to maintain zone 1A and feed zone 1 in emergency	2020	$40,000	$0	$40,000	0%	$0	$40,000	$40,000	$0
39	Osler Bluff Road PRV and Decommissioning Osler Booster Pumps	Create valve configuration to feed zone 1A or 2 in emergency	2025	$510,000	$0	$510,000	0%	$0	$510,000	$510,000	$0
40	Mountain Road PRV and Chamber Installation	New valve to feed Mountain Road low pressure & fire from zone 2	2025	$150,000	$0	$150,000	15%	$22,500	$127,500	$127,500	$0
41	Dey Drive Check Valve	New check valve to supply zone 2 in emergency	2019	$50,000	$50,000	$0	0%	$0	$0	$0	$0
42	Pretty River Check Valve	New check valve to supply zone 2 in emergency	2025	$50,000	$0	$50,000	0%	$0	$50,000	$50,000	$0
43	Sixth Line PRV and Chamber Installation	New valve to supply zone 2 in emergency	2035	$140,000	$0	$140,000	0%	$0	$140,000	$0	$140,000
TOTAL				**$940,000**	**$50,000**	**$890,000**		**$22,500**	**$867,500**	**$727,500**	**$140,000**

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TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

WATER FACILITIES - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST-PERIOD BENEFIT
							%	AMOUNT			
44	Stewart Road Booster Pumping Station and Reservoir (Phase 1)	Zone 2 BPS & Reservoir	2020	$5,135,900	$0	$5,135,900	0%	$0	$5,135,900	$5,135,900	$0
45	Stewart Road Booster Pumping Station and Reservoir (Phase 2)	Zone 2 BPS & Reservoir	2035	$2,740,500	$0	$2,740,500	0%	$0	$2,740,500	$0	$2,740,500
46	Stewart Road Booster Pumping Station and Reservoir (Phase 3)	Zone 2 BPS & Reservoir	2044	$2,740,500	$0	$2,740,500	0%	$0	$2,740,500	$0	$2,740,500
47	Stewart Road Ultimate Pump Upgrades	Required for Stewart Road Reservoir Phase 3	2038	$507,500	$0	$507,500	0%	$0	$507,500	$0	$507,500
48	Decommissioning Georgian Meadows BPS	Decommision BPS after Stewart Road BPS is commissioned	2022	$203,000	$0	$203,000	0%	$0	$203,000	$203,000	$0
49	Ted Carmichael West End Reservoir (Highway 26 West)	West End BPS Improvements	2020	$1,015,000	$0	$1,015,000	0%	$0	$1,015,000	$1,015,000	$0
50	New Elevated Tank (Location TBD)	Replacement of existing tank	2030	$5,887,000	$0	$5,887,000	50%	$2,943,500	$2,943,500	$2,943,500	$0
51	Water Treatment Plant (St. Lawrence Street)	Expansion and upgrade of Water Treatment Plant	2020-2025	$50,750,000	$41,615,000	$9,135,000	12%	$1,096,200	$8,038,800	$8,038,800	$0
		Miscellaneous Municipal Class EAs	2020	$225,000	$0	$225,000	0%	$0	$225,000	$225,000	$0
		Water Efficiency Measures	ongoing	$200,000	$0	$200,000	0%	$0	$200,000	$200,000	$0
TOTAL				**$69,404,400**	**$41,615,000**	**$27,789,400**		**$4,039,700**	**$23,749,700**	**$17,761,200**	**$5,988,500**

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TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

ROAD WORKS - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	ROAD CLASSIFICATION	PROJECT LENGTH (m)	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST-PERIOD BENEFIT
									%	AMOUNT			
52	Highway 26: Silver Glen Boulevard to Silver Creek Drive	Arterial	570	Widen 2 lane rural to 3 lane rural	2023	$1,562,800	$0	$1,562,800	24%	$370,400	$1,192,400	$1,192,400	$0
53	Highway 26: Keith Avenue to Silver Creek Drive	Arterial	3,300	Upgrade & widen 3 lane rural to 5 lane urban	2029	$12,060,600	$0	$12,060,600	14%	$1,641,900	$10,418,700	$3,125,600	$7,293,100
54	Mountain Road: Tenth Line to Osler Bluff Road	Arterial	2,800	Upgrade 2 lane rural to 2 lane rural	2024	$6,019,100	$0	$6,019,100	30%	$1,782,400	$4,236,700	$4,236,700	$0
55	Sixth Line: Poplar Sideroad to Sandford Fleming Drive	Collector	680	Upgrade 2 lane rural to 2 lane rural	2028	$1,619,000	$0	$1,619,000	21%	$342,200	$1,276,800	$1,276,800	$0
56	Hurontario Street: Hume Street to Collins Street	Arterial	780	Widen 2 lane urban to 3 lane urban	2022	$3,088,000	$0	$3,088,000	14%	$444,300	$2,643,700	$2,643,700	$0
57	Collins Street: Ste. Marie Street to Katherine Street	Collector	360	Upgrade 2 lane rural to 2 lane urban	2024	$1,278,500	$0	$1,278,500	14%	$178,200	$1,100,300	$1,100,300	$0
58	High Street: Third Street to Fifth Street	Arterial	450	Widen 4 lane urban to 5 lane urban	2023	$2,040,300	$0	$2,040,300	30%	$612,100	$1,428,200	$1,428,200	$0
59	Tenth Line: Sixth Street to Mountain Road	Collector	1,240	Upgrade 2 lane rural to 2 lane urban	2022	$4,187,400	$0	$4,187,400	15%	$613,600	$3,573,800	$3,573,800	$0
60	High Street: Poplar Sideroad to Tenth Street	Arterial	1,450	Upgrade & widen 2 lane rural to 4 lane urban	2024	$5,579,800	$0	$5,579,800	37%	$2,066,800	$3,513,000	$3,513,000	$0
61	Third Street: High Street to Birch Street	Collector	865	Upgrade 2 lane rural to 2 lane urban	2028	$2,993,500	$0	$2,993,500	40%	$1,197,400	$1,796,100	$1,796,100	$0
62	Cameron Street: Hurontario Street to Walnut Street	Collector	830	Upgrade 2 lane rural to 2 lane urban	2025	$2,799,000	$0	$2,799,000	36%	$1,019,000	$1,780,000	$1,780,000	$0
63	Mountain Road: Cambridge Street to Tenth Line (Phase 1)	Arterial	1,075	Widen 2 lane rural to 3 lane rural, incl. replacement of bridge	2022	$7,480,000	$0	$7,480,000	24%	$1,809,700	$5,670,300	$4,609,000	$1,061,300
64	Mountain Road: Cambridge Street to Tenth Line (Phase 2)	Arterial	1,075	Upgrade & widen 3 lane rural to 5 lane urban	2030	$3,617,300	$0	$3,617,300	0%	$0	$3,617,300	$1,085,200	$2,532,100
65	Peel Street: Ontario Street to Bush Street	Collector	930	Upgrade 2 lane rural to 2 lane urban	2026	$3,072,200	$0	$3,072,200	38%	$1,159,600	$1,912,600	$1,912,600	$0
66	Sixth Street: Tenth Line to High Street	Arterial	1,320	Widen 2 lane rural to 3 lane urban	2030	$4,761,700	$0	$4,761,700	18%	$846,800	$3,914,900	$1,174,500	$2,740,400
67	Harbour Street Extension: Tenth Line to Georgian Trail	Collector	560	Extend 2 lane rural through unopened R.O.W.	2029	$1,388,100	$0	$1,388,100	0%	$0	$1,388,100	$416,400	$971,700
68	Sanford Fleming Drive: Sixth Line to Highway 26	Collector	220	Extend 2 lane rural through unopened R.O.W.	2019	$557,600	$501,800	$55,800	0%	$0	$55,800	$55,800	$0
				Transportation Master Plan Update	2024 + 2029	$100,000	$0	$100,000	0%	$0	$100,000	$100,000	$0
				Miscellaneous Municipal Class EA's		$450,000	$0	$450,000	0%	$0	$450,000	$450,000	$0
TOTAL						**$64,654,900**	**$501,800**	**$64,153,100**		**$14,084,400**	**$50,068,700**	**$35,470,100**	**$14,598,600**

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TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

INTERSECTION IMPROVEMENTS - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST PERIOD BENEFIT
							%	AMOUNT			
69	Highway 26N and Sandford Fleming Drive / Beachwood Road	Signalization	2019	$259,000	$233,100	$25,900	0%	$0	$25,900	$25,900	$0
70	Sixth Street and Oak Street	Signalization	2030	$230,000	$0	$230,000	0%	$0	$230,000	$69,000	$161,000
71	High Street and Home Depot Access	Relocate access to 3rd Street or Cambridge Street (widening)	2023	$108,000	$108,000	$0	0%	$0	$0	$0	$0
72	High Street and First Street (Phase 1)	Additional turning lanes and revise timing	2025	$431,000	$0	$431,000	0%	$0	$431,000	$431,000	$0
73	Highway 26 and Habour Street / Balsam Street	Additional turning lanes	2023	$431,000	$0	$431,000	0%	$0	$431,000	$431,000	$0
74	Mountain Road / First Street Extension / Cambridge Street	Additional turning lanes	2024	$216,000	$0	$216,000	0%	$0	$216,000	$216,000	$0
75	High Street and Third Street	Signalization, left turn lanes and phases	2023	$703,000	$180,000	$523,000	0%	$0	$523,000	$523,000	$0
76	High Street and Sixth Street	Additional turning lane	2030	$108,000	$0	$108,000	0%	$0	$108,000	$32,400	$75,600
77	High Street and First Street (Phase 2)	Additional turning lanes and protected phases	2028	$288,000	$0	$288,000	0%	$0	$288,000	$288,000	$0
78	Mountain Road and Tenth Line	Double lane roundabout	2023	$1,149,000	$0	$1,149,000	0%	$0	$1,149,000	$1,149,000	$0
79	High Street and Campbell Street	Double lane roundabout	2030	$1,149,000	$0	$1,149,000	0%	$0	$1,149,000	$344,700	$804,300
TOTAL				**$5,072,000**	**$521,100**	**$4,550,900**		**$0**	**$4,550,900**	**$3,510,000**	**$1,040,900**

(1) - Other contributions includes: grants, subsidies and other contributions attributable to new development

TOWN OF COLLINGWOOD
2019 DEVELOPMENT CHARGES BACKGROUND STUDY

SIDEWALK IMPROVEMENTS - PROJECT LIST
MAY 2019
FILE NO. 119015

PROJECT NO.	LOCATION	PROJECT LENGTH (m)	INCREASED SERVICE NEEDS ATTRIBUTABLE TO ANTICIPATED DEVELOPMENT	TIMING	GROSS CAPITAL COST ESTIMATE	(1) LESS: OTHER CONTRIBUTIONS	NET MUNICIPAL COST	LESS: BENEFIT TO EXISTING DEVELOPMENT		TOTAL DC ELIGIBLE COSTS	DC IN-PERIOD ELIGIBLE COSTS	POST PERIOD BENEFIT
								%	AMOUNT			
80	Mountain Road: Tenth Line to Osler Bluff Road	2,200	3 m wide trail on one side	2030	$550,600	$0	$550,600	0%	$0	$550,600	$550,600	$0
81	Collins Street: Ste. Marie Street to Katherine Street	360	1.5 m wide sidewalk on both sides	2028	$240,500	$0	$240,500	25%	$60,100	$180,400	$180,400	$0
82	High Street: Third Street to Fifth Street	435	West: 3 m wide sidewalk; East: 1.5 m wide sidewalk	2023	$393,300	$0	$393,300	25%	$98,300	$295,000	$295,000	$0
83	Tenth Line: Sixth Street to Mountain Road	1,065	3 m wide trail on one side	2022	$266,400	$0	$266,400	0%	$0	$266,400	$266,400	$0
84	High Street: Poplar Sideroad to Tenth Street	1,390	West: 3 m wide sidewalk; East: 1.5 m wide sidewalk	2024	$1,214,100	$0	$1,214,100	0%	$0	$1,214,100	$1,214,100	$0
85	Third Street: Spruce Street to Cedar Street	360	1.5 m wide sidewalk on both sides	2028	$240,500	$0	$240,500	25%	$60,100	$180,400	$180,400	$0
86	Cameron Street: Walnut Street to Hurontario Street	840	1.5 m wide sidewalk on both sides	2025	$573,700	$0	$573,700	25%	$143,400	$430,300	$430,300	$0
87	Mountain Road: Cambridge Street to Tenth Line	1,050	North: 1.5 m wide sidewalk; South: 3 m wide sidewalk	2022	$911,300	$0	$911,300	0%	$0	$911,300	$911,300	$0
88	Peel Street: Ontario Street to Bush Street	900	1.5 m wide sidewalk on both sides	2026	$612,000	$0	$612,000	25%	$153,000	$459,000	$459,000	$0
89	Sixth Street: Tenth Line to High Street	1,295	1.5 m wide sidewalk on both sides	2025	$818,000	$0	$818,000	25%	$204,500	$613,500	$613,500	$0
90	Poplar Sideroad: Hurontario Street to High Street	870	North: 3 m wide trail	2025	$217,700	$0	$217,700	0%	$0	$217,700	$217,700	$0
91	Highway 26: Marine View Drive to Sixth Line	340	North: 1.5 m wide sidewalk; South: 3 m wide sidewalk	2019	$295,100	$0	$295,100	25%	$73,800	$221,300	$221,300	$0
92	Tenth Line: Poplar Sideroad to Sixth Street	1,850	3 m wide trail on one side	2030	$463,000	$0	$463,000	0%	$0	$463,000	$463,000	$0
93	Highway 26: Osler Bluff Road to Silver Glen Boulevard	1,700	3 m wide trail on one side	2030	$425,500	$0	$425,500	0%	$0	$425,500	$425,500	$0
94	Second Street: High Street to Spruce Street	250	1.5 m wide sidewalk on one side	2019	$78,900	$0	$78,900	25%	$19,700	$59,200	$59,200	$0
TOTAL					**$7,300,600**	**$0**	**$7,300,600**		**$812,900**	**$6,487,700**	**$6,487,700**	**$0**

(1) - Other contributions includes: grants, subsidies and other contributions attributable to new development