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CITY OF BRANTFORD

Water and Wastewater Master Servicing Plan – Development Charges Update
2025 Amendment

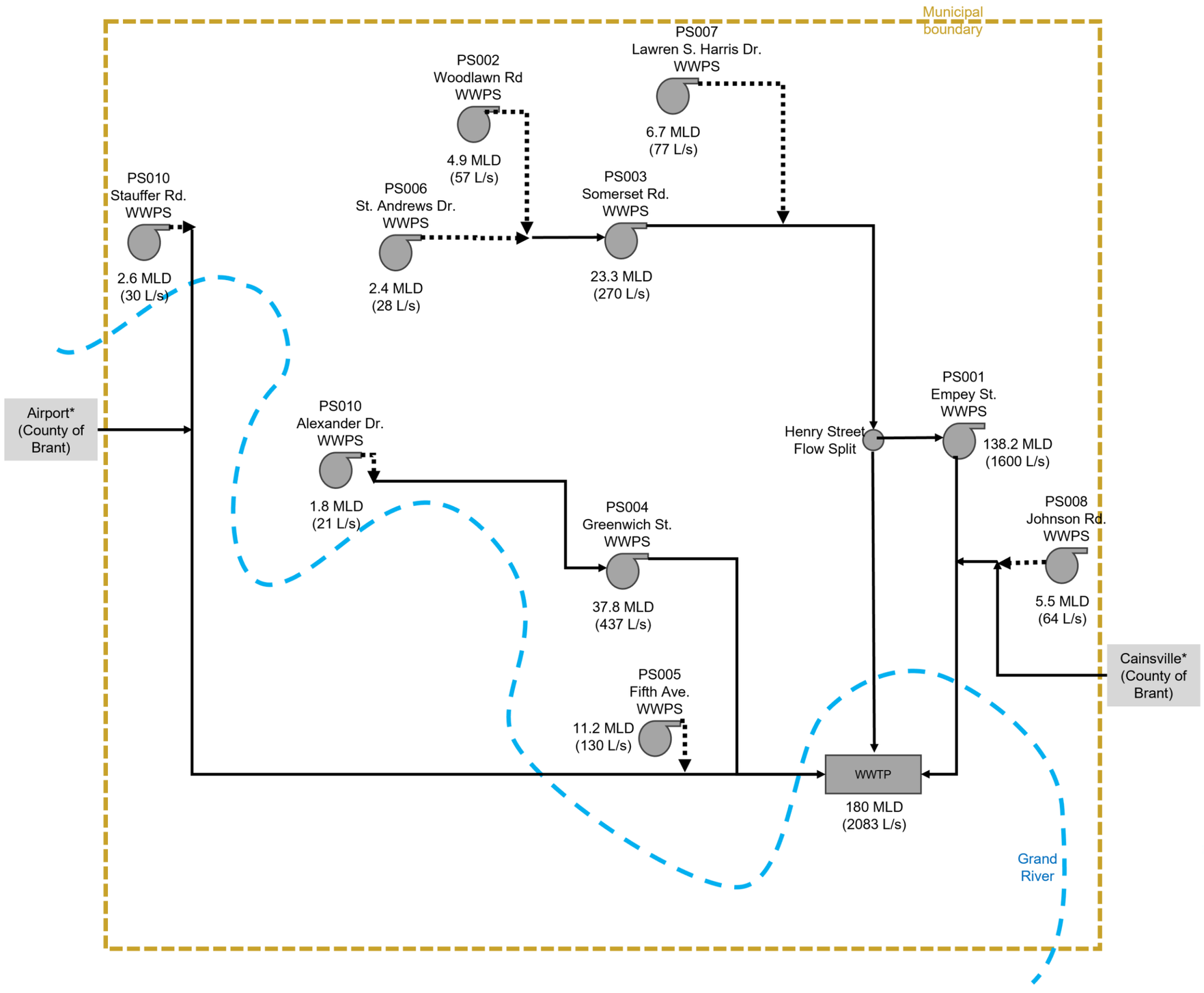
Volume IV – Wastewater Master Plan Appendices

June 2026
Project No. 2404322

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APPENDIX A:
Wastewater System Schematic



Legend

- Wastewater Pumping Station (WWPS)
- WWTP — Wastewater Treatment Plant (WWTP)
- Trunk Gravity Sewer
- Forcemain

Wastewater System Schematic

Project Name:
Water and Wastewater Master Servicing Plan – Development Charges Update 2025 Amendment

Client Name:
City of Brantford
(Ontario, Canada)

Not to Scale

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APPENDIX B:
Existing and Future Planning Details

Existing and Future Planning Details - Wastewater Flows

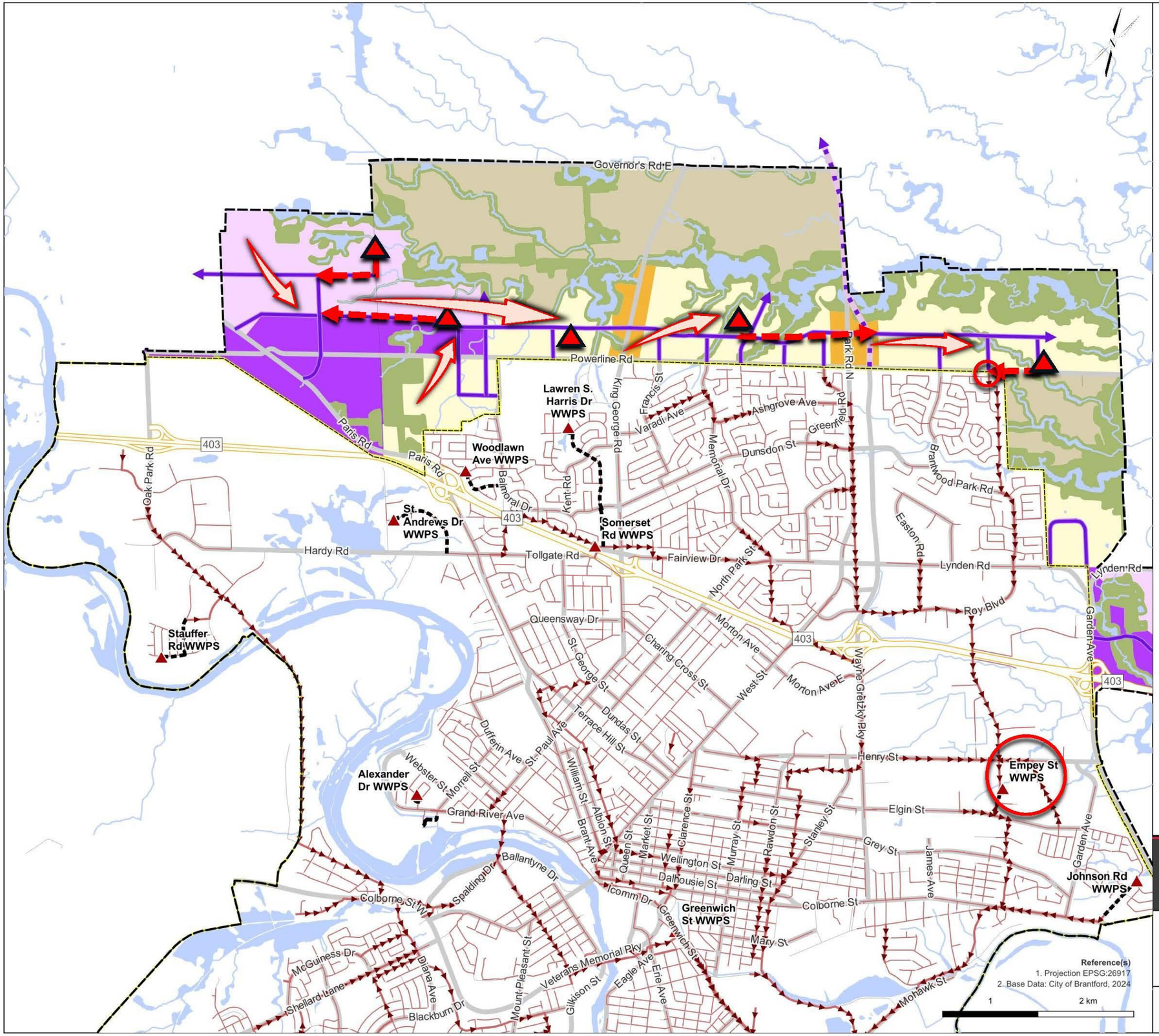
Wastewater Catchment**	2021 RES	2021 EMP	2021 Total	2051* RES	2051* EMP	2051* Total	2051 ADWF-RES (MLD)	2051 ADWF-EMP (MLD)	2051 ADWF-TOTAL (MLD)
Brantford WWTP	48,785	11,195	59,980	74,835	35,426	110,261	18.3	9.6	27.9
Johnson Rd. WWPS	1,762	0	1,762	1,858	76	1,934	0.5	0.0	0.5
Empey St. WWPS	29,827	19,830	49,658	47,926	33,787	81,713	11.7	9.1	20.9
Somerset Rd. WWPS	5,245	931	6,176	6,019	1,946	7,965	1.5	0.5	2.0
Woodlawn Rd. WWPS	1,940	0	1,940	1,838	168	2,006	0.5	0.0	0.5
St.Andrew's WWPS	149	19	169	1,101	190	1,291	0.3	0.1	0.3
Lawren S. Harris Dr. WWPS	1,041	4	1,045	911	287	1,198	0.2	0.1	0.3
Greenwich St. WWPS	9,665	4,280	13,945	17,775	7,413	25,188	4.4	2.0	6.4
Alexander Dr. WWPS	519	298	817	598	577	1,175	0.1	0.2	0.3
Fifth Ave. WWPS	3,788	340	4,129	6,455	814	7,270	1.6	0.2	1.8
Stauffer Rd. WWPS	4	27	31	2	294	296	0.0	0.1	0.1
New WWPSs***	870	68	938	36,726	15,814	52,539	9.0	4.3	13.3
Total	**103,596**	**36,993**	**140,589**	**196,044**	**96,792**	**292,836**	**48**	**26**	**74**

* Not including growth in LOSB

** Wastewater catchment only, not including any upstream catchments established from the City's Wastewater model

*** Multiple New Wastewater Pumping Stations to be constructed, these catchment areas are not serviced currently, but will be serviced in 2051.

APPENDIX C:
Expansion Lands Concepts



Wastewater Network

- Wastewater Treatment Plant (WWTP)
- Wastewater Pumping Station (WWPS)
- Forcemains
- Trunk Mains (>300 mm)
- Gravity Mains (≤300 mm)

Proposed Preferred Road Options

- Collector Road
- Major Arterial Roads
- Controlled Access Major Arterial
- Potential Future Road Closure

Proposed Preferred Land Use Options

- Agricultural Designation
- Core Natural Areas Designation
- Downtown Urban Growth Centre Designation
- General Employment Designation
- Intensification Corridor Designation
- Major Commercial Centre Designation
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- Prestige Employment Designation
- Residential Designation

General Features

- Expressway / Highway
- Arterial and Collector
- Local Roads
- Railway
- Six Nations of the Grand River Territory
- Current City Municipal Boundary
- 2016 Municipal Boundary
- Outside Municipalities
- Parks
- Waterbody and Watercourses

Wastewater Servicing Concepts
North Expansion Lands Concept 1: All Flows to Coulbeck Road

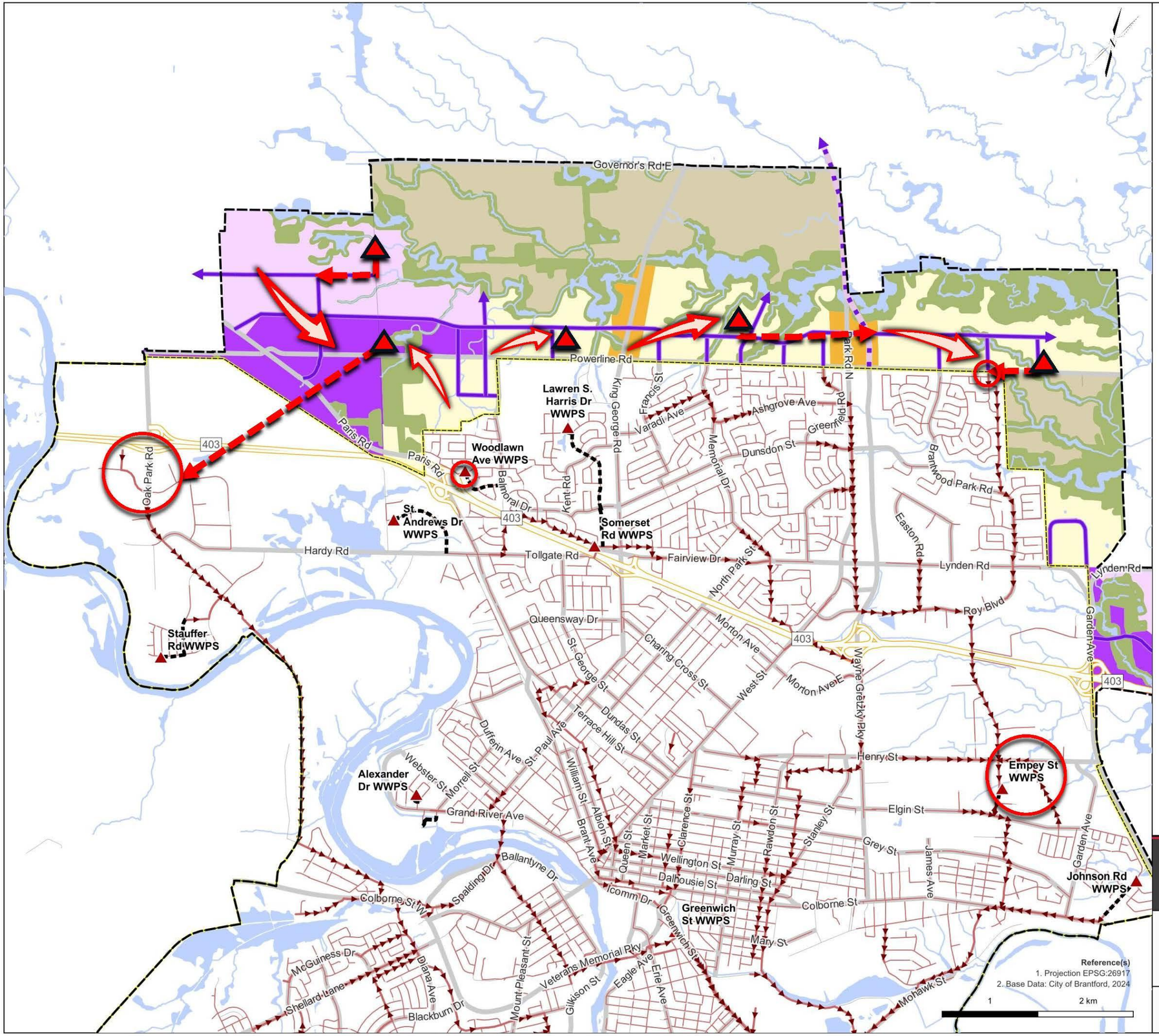
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Wastewater Servicing Concepts
North Expansion Lands Concept 2: Flow Split with all Residential Lands to Coulbeck Road

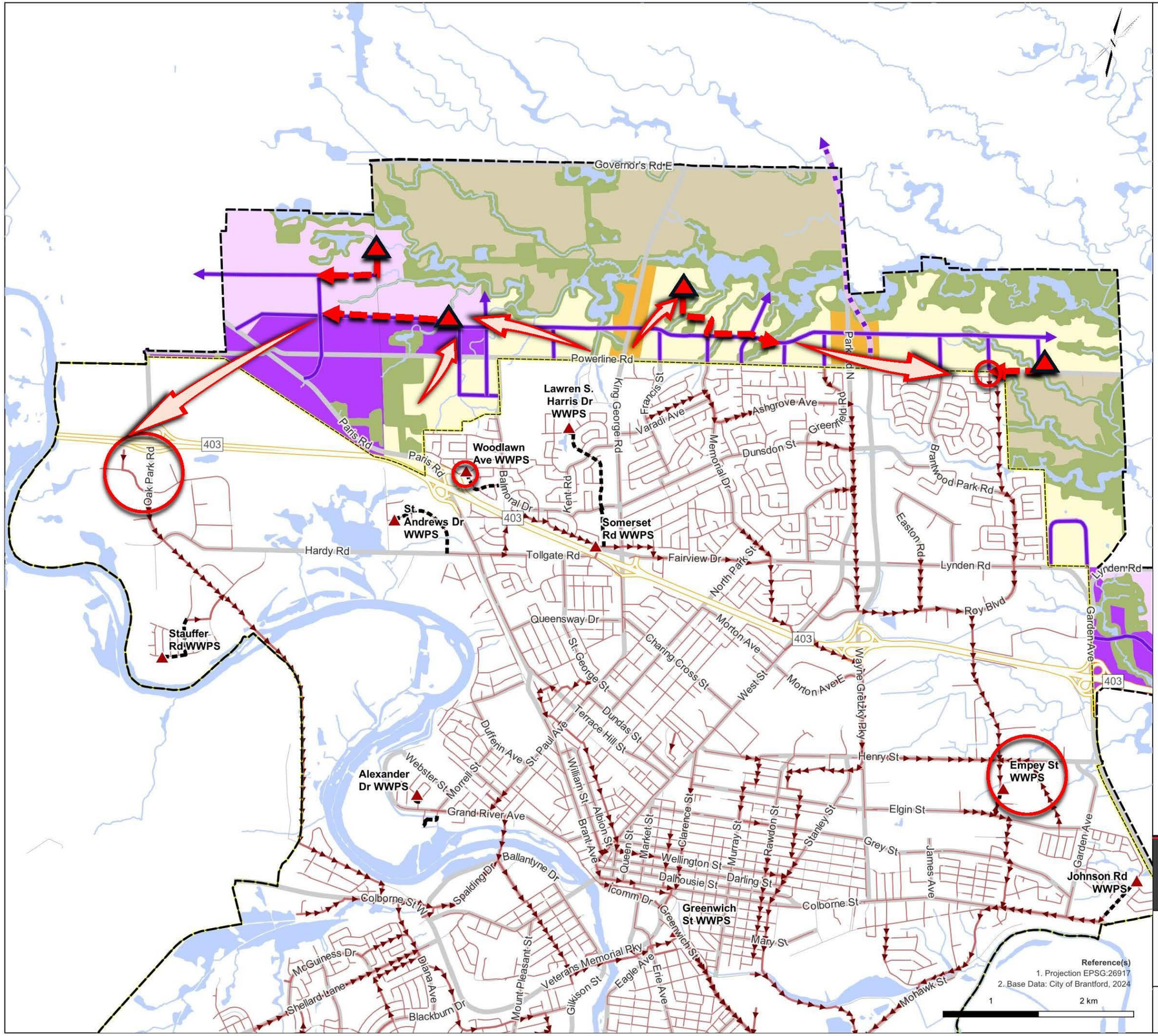
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Wastewater Servicing Concepts
North Expansion Lands Concept 3: Flow Split at King George

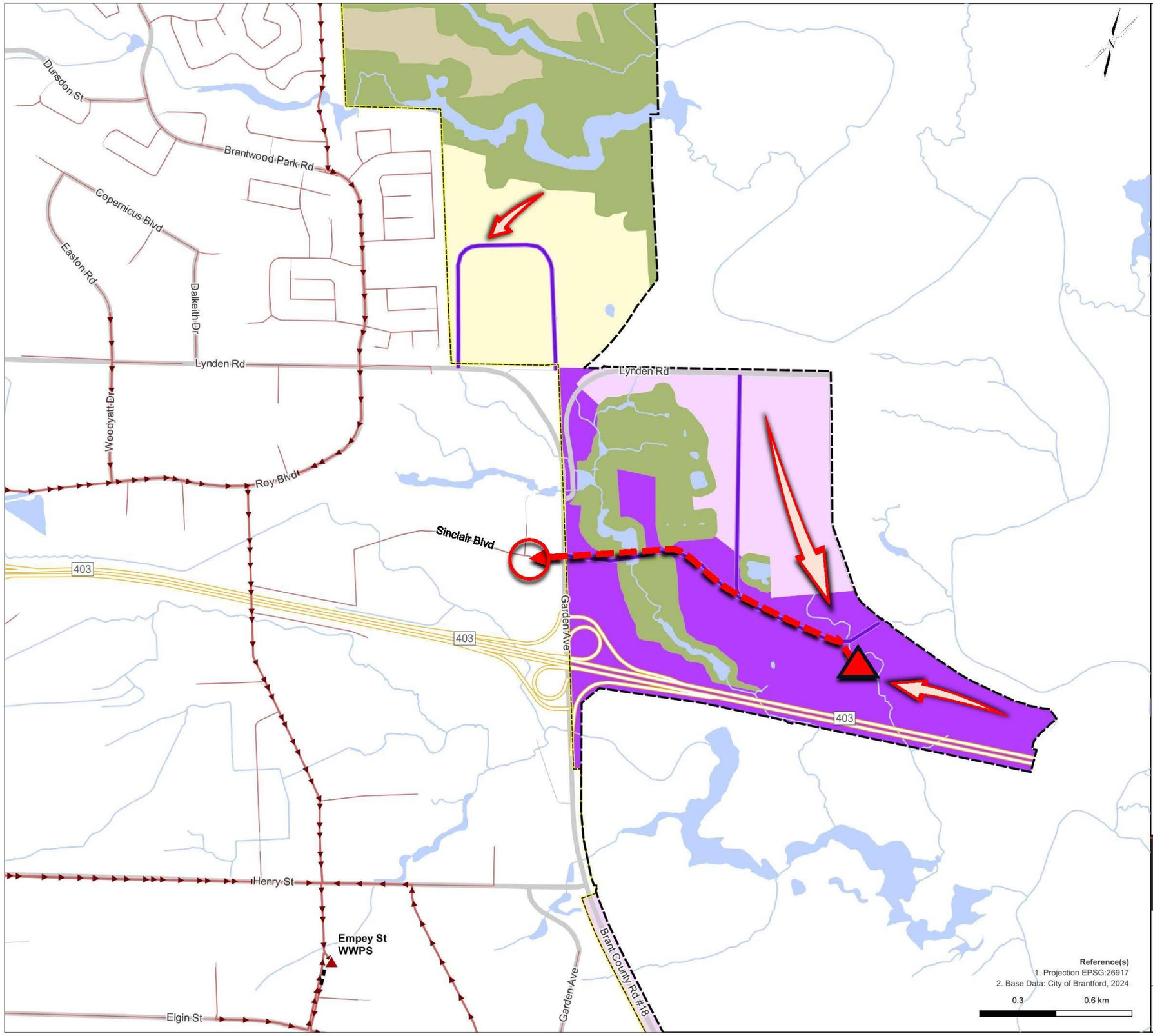
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Reference(s)
1. Projection EPSG:26917
2. Base Data: City of Brantford, 2024

0.3 0.6 km

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Wastewater Servicing Concepts
East Expansion Lands Concept 1: Sinclair Boulevard Tie In

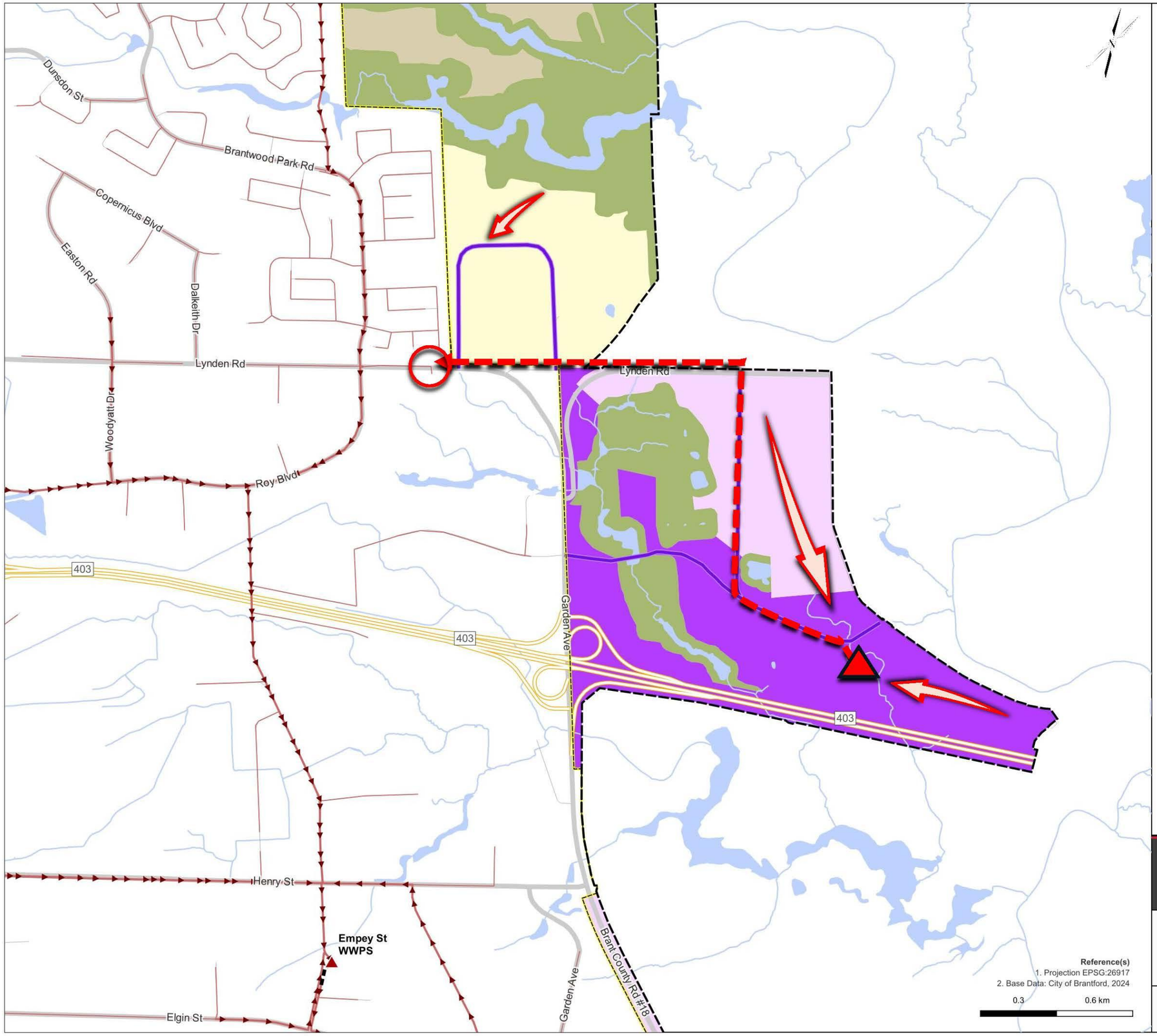
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Wastewater Servicing Concepts
East Expansion Lands Concept 2: Lynden Road Tie In

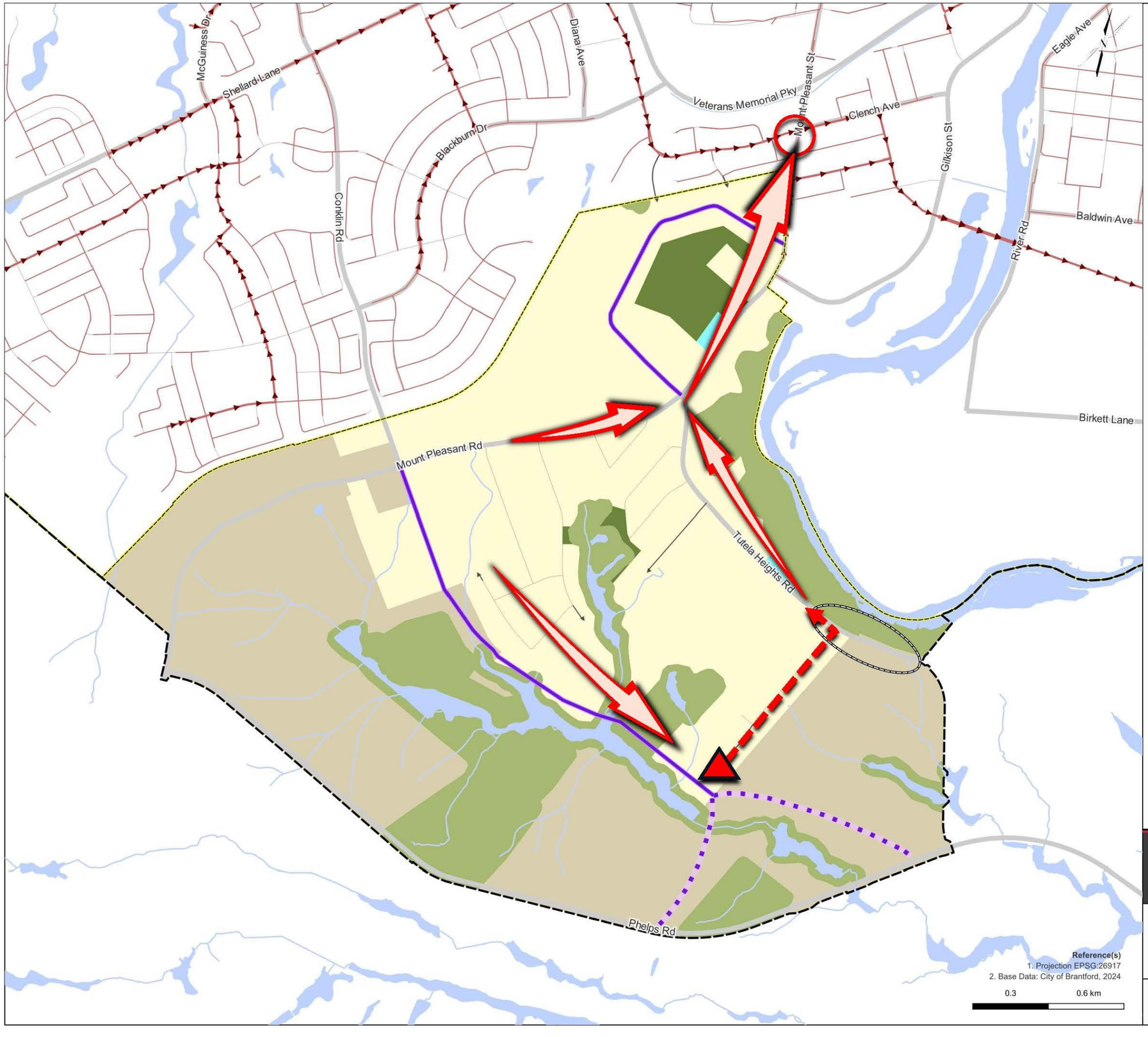
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Wastewater Servicing Concepts
Tutela Heights Concept 1: Tie into Mount Pleasant Road

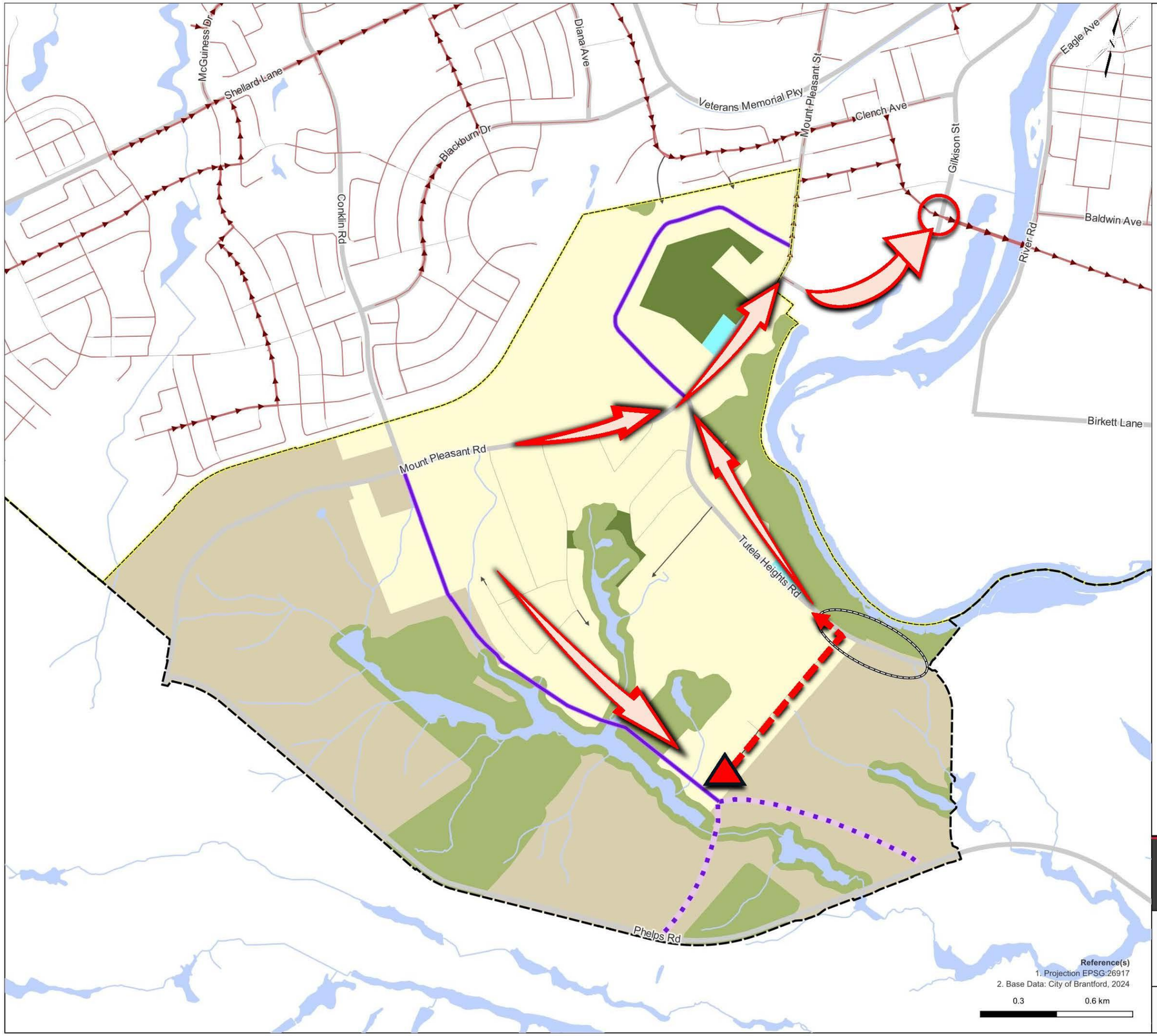
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Wastewater Servicing Concepts
Tutela Heights Concept 2: Tie into Gilkison Street

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APPENDIX D:
Wastewater Treatment Plant Concepts

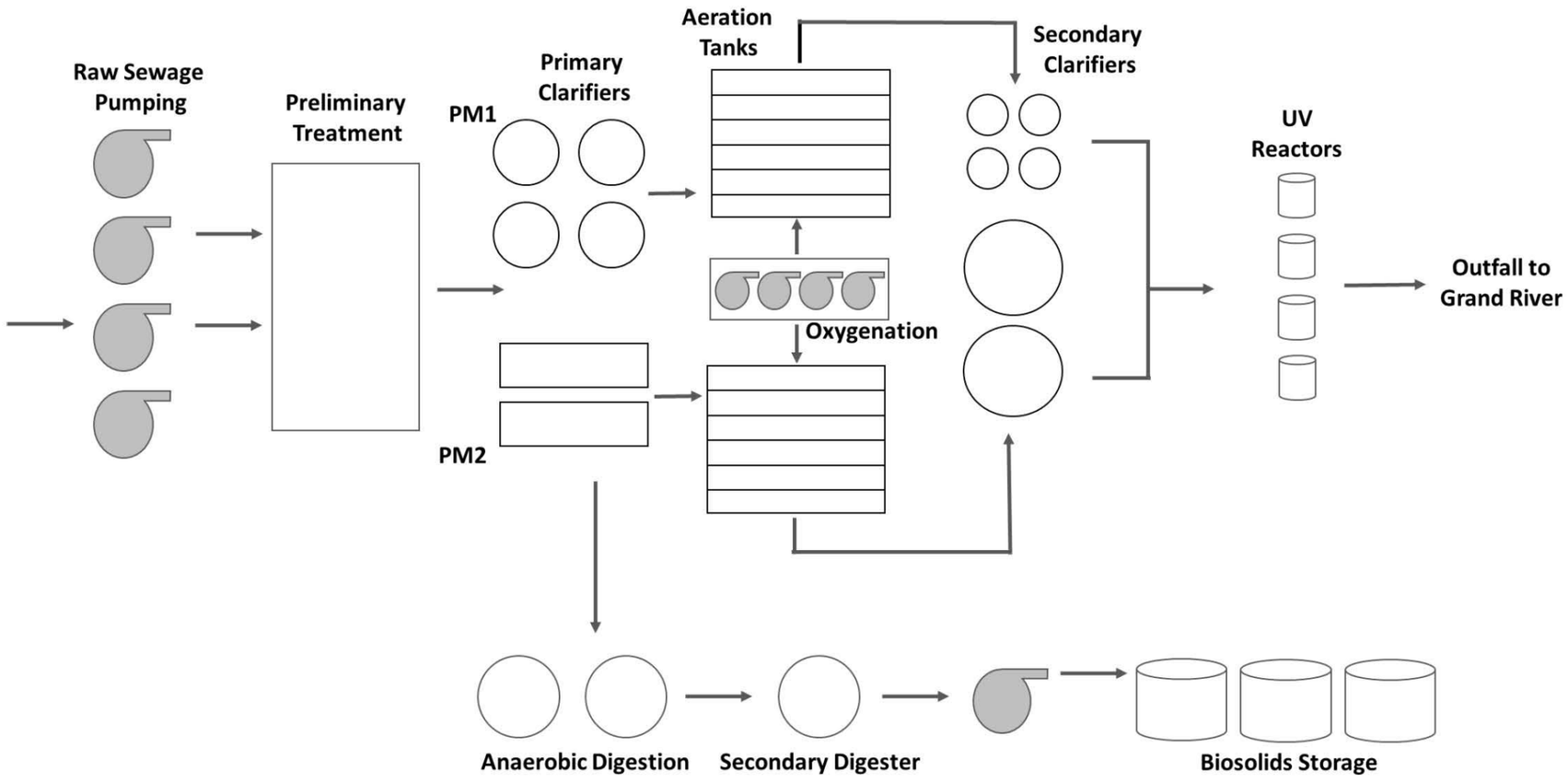


Figure 3
Wastewater Treatment Plant
Process Diagram

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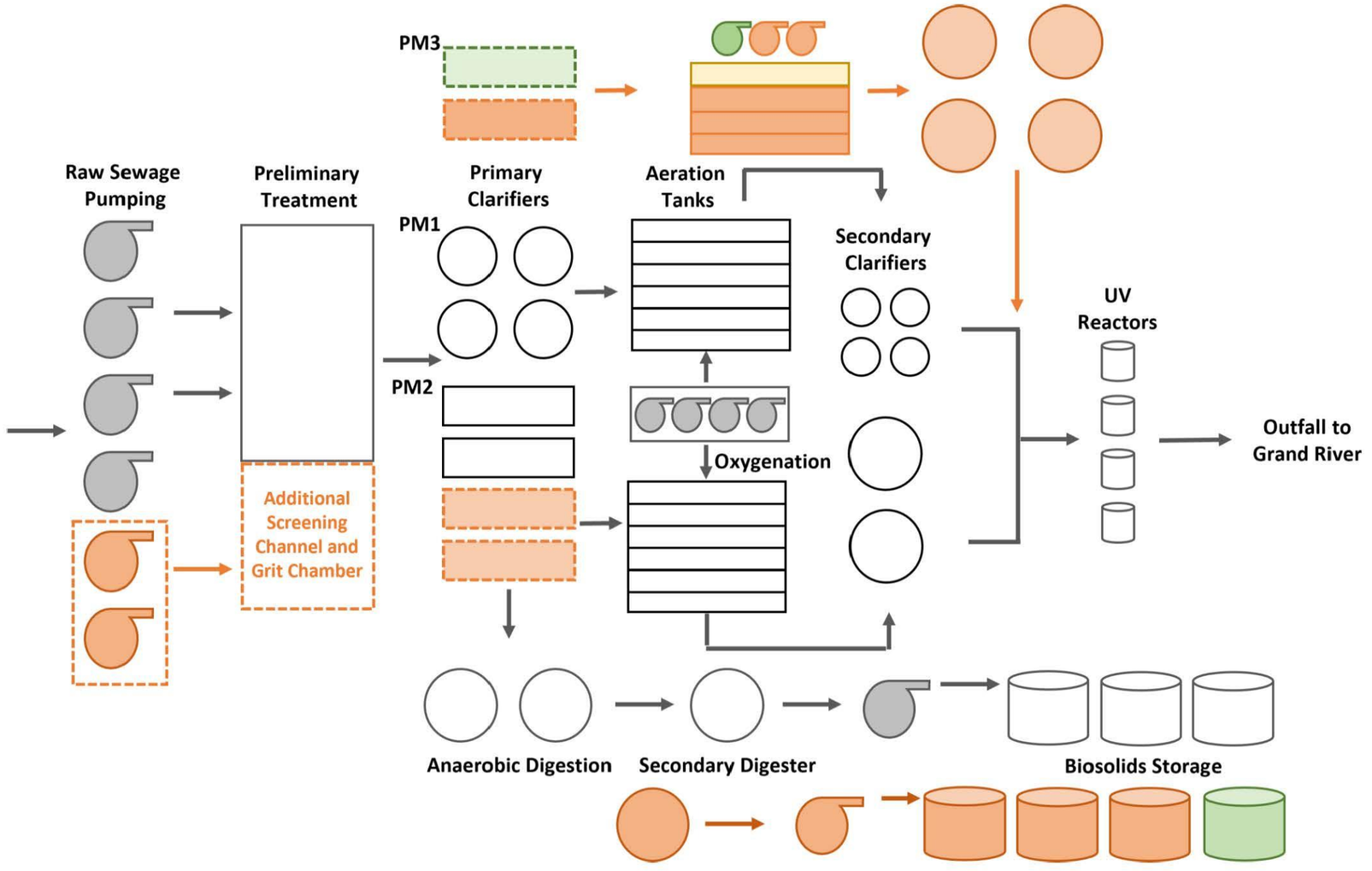
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Wastewater Treatment Plant Concepts
Alternative 1 – Utilize Existing Processes



2051 Low Growth Capacity

2051 Medium Growth Capacity

2051 High Growth Capacity

Wastewater Treatment Plant
Alternative 1: Utilize Existing Processes

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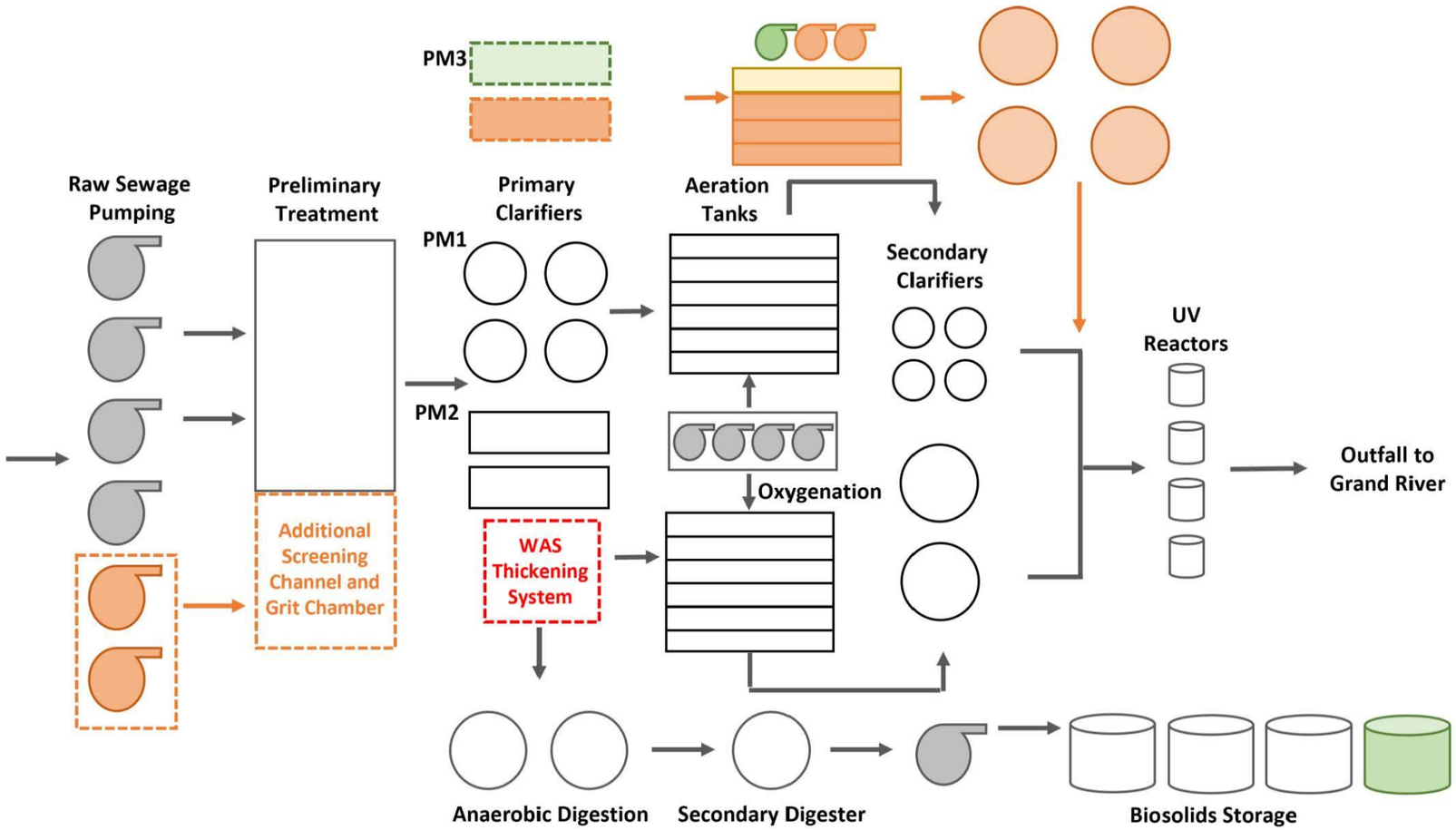
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Wastewater Treatment Plant Concepts
Alternative 2 – Sludge Thickening



2051 Low Growth Capacity

2051 Medium Growth Capacity

2051 High Growth Capacity

Wastewater Treatment Plant
Alternative 2: Sludge Thickening

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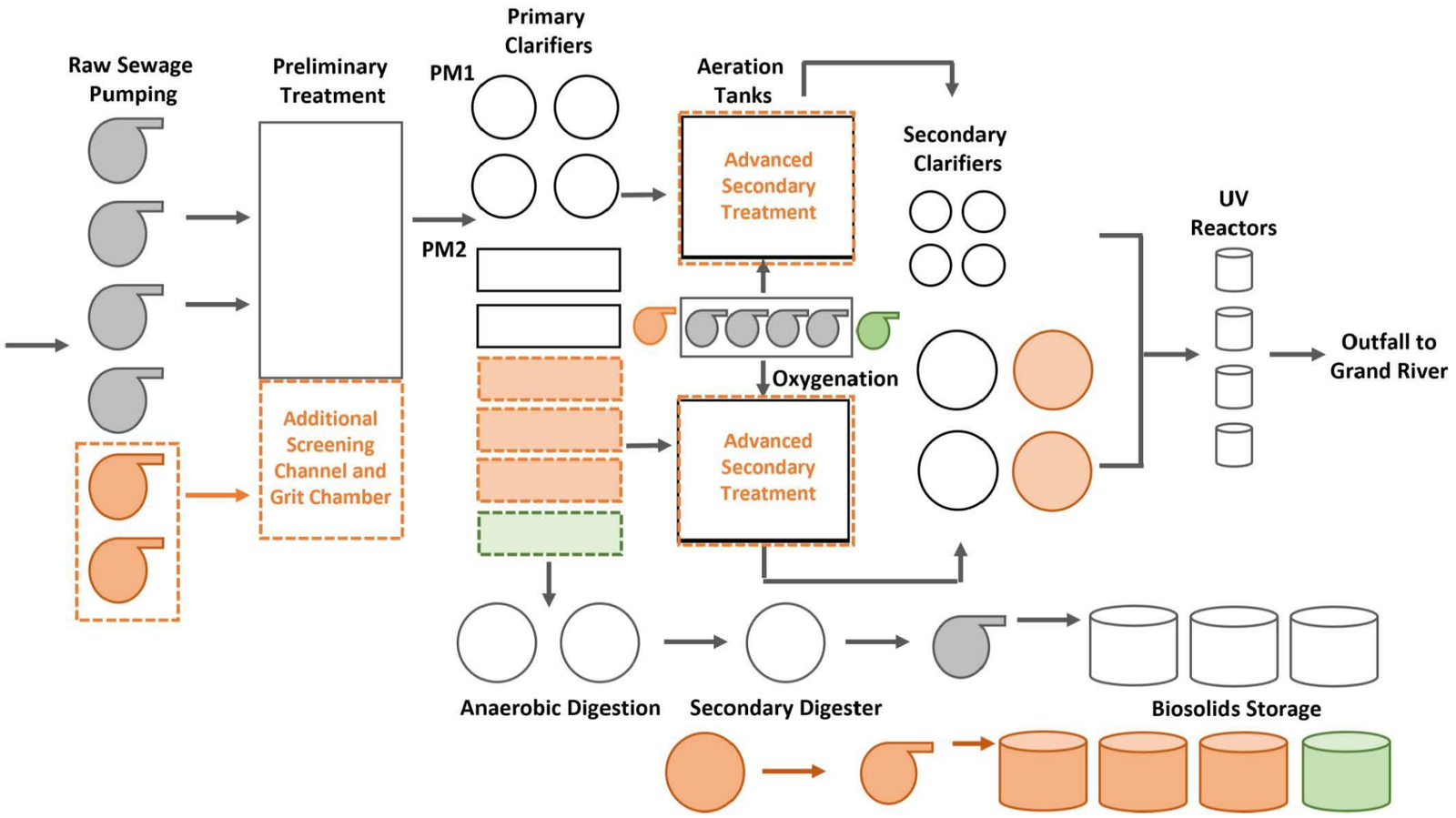
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Wastewater Treatment Plant Concepts
Alternative 3 – Advanced Secondary Treatment



2051 Low Growth Capacity

2051 Medium Growth Capacity

2051 High Growth Capacity

Wastewater Treatment Plant
Alternative 3: Advanced Secondary Treatment

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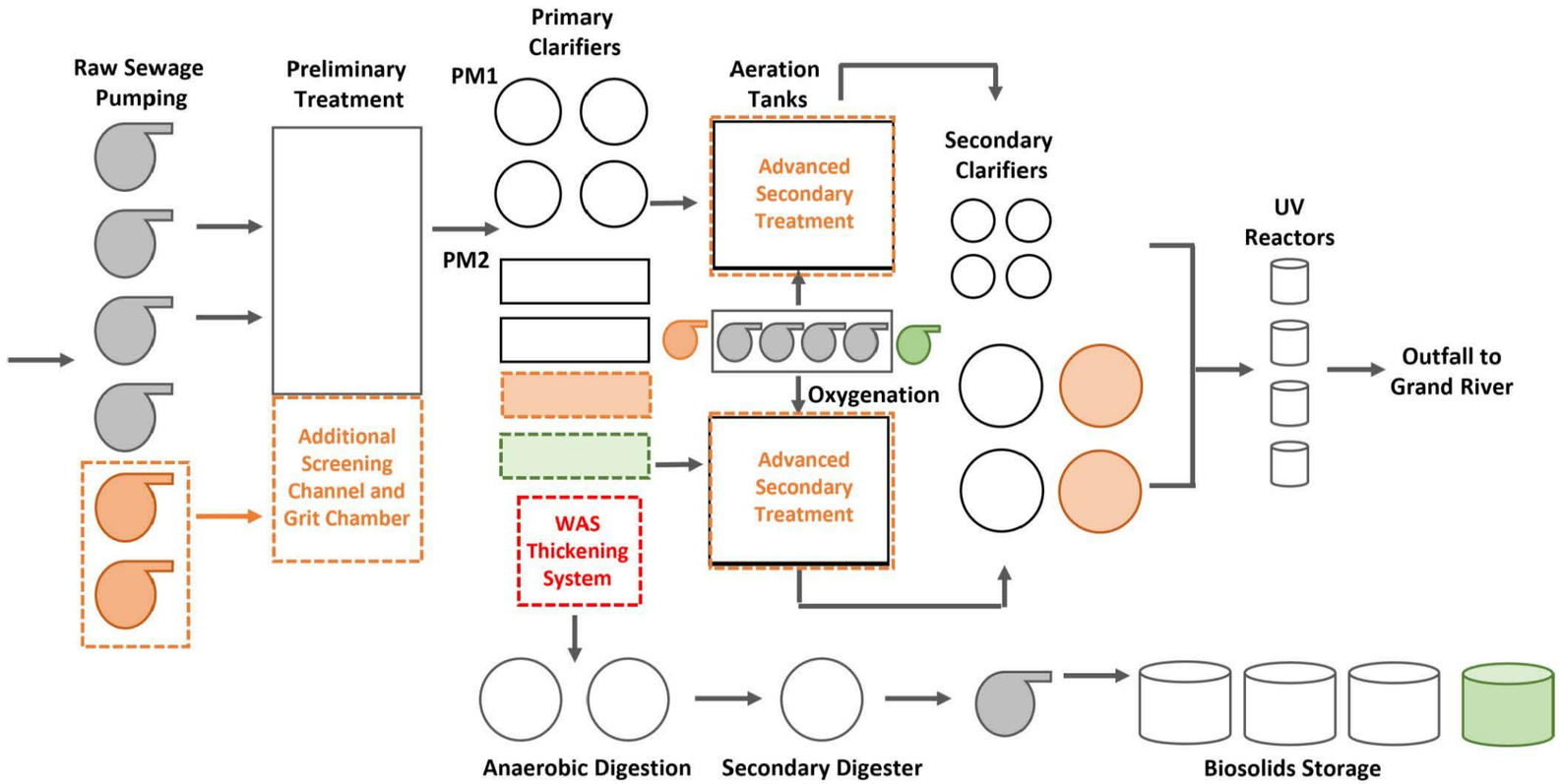
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Wastewater Treatment Plant Concepts
Alternative 4 – Sludge Thickening and Advanced Secondary Treatment



2051 Low Growth Capacity

2051 Medium Growth Capacity

2051 High Growth Capacity

Wastewater Treatment Plant
Alternative 4: Sludge Thickening and Advanced Secondary Treatment

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APPENDIX E:
Evaluation Tables

Appendix E Table 1: Brantford Wastewater Treatment Plant Evaluation

Category	Criteria	Alternative 1: Utilize Existing Processes	Alternative 2: Sludge Thickening	Alternative 3: Advanced Secondary Treatment	Alternative 4: Sludge Thickening and Advanced Secondary Treatment
Technical Impacts	Meets existing and future servicing needs	- Supports growth post 2051	- Supports growth post 2051	- Supports growth post 2051	- Supports growth post 2051
	Provides a reliable service	- Provides the same reliability of service as the existing plant	- Will reduce sludge volume and provide more flexibility	- New technology has less certain reliability	- Will reduce sludge volume and provide more flexibility
	Minimizes and manages construction risk	- Moderate impacts during construction	- Moderate impacts during construction	-more challenging constructability to retrofit existing secondary treatment system	- Moderate impacts during construction
	Supports phased expansion of the system	- New units can be added as population grows	- If implemented in an early phase can inform biosolids upgrades	- Can increase capacity in a later phase of tanks previously installed	- Has both benefits to a phased approach
	Operational Complexity	- Minimal changes to existing operations	- Reduces volume of sludge to manage	- Increases operational complexity of secondary treatment	- Reduced sludge but more complicated secondary treatment
	Resiliency to climate change	- No additional measures for system resiliency	- No additional measures for system resiliency	- No additional measures for system resiliency	- No additional measures for system resiliency
Environmental Impacts	Protects environment features	- No anticipated impacts	- No anticipated impacts	- No anticipated impacts	- No anticipated impacts
	Protects wildlife and species at risk	- No anticipated impacts	- No anticipated impacts	- No anticipated impacts	- No anticipated impacts
	Minimizes climate change impacts	- Minimal to no changes to existing GHG production	- Reduces sludge volume to be pumped, potential for higher biogas production	- Improved sludge digestion, potential for higher biogas production	- Reduced sludge but more energy for secondary treatment
Social and Cultural Impacts	Protects resident quality of life	- Minimal to no impacts to existing residents	- Minimal to no impacts to existing residents	- Minimal to no impacts to existing residents	- Minimal to no impacts to existing residents
	Manages and minimizes construction impacts	- Typical noise and dust anticipated	- Typical noise and dust anticipated	- Typical noise and dust anticipated	- Typical noise and dust anticipated
	Protects cultural heritage and archeological features	- Low potential for impacts to cultural heritage and archeological	- Low potential for impacts to cultural heritage and archeological	- Low potential for impacts to cultural heritage and archeological	- Low potential for impacts to cultural heritage and archeological
Financial Impacts	Capital and life-cycle costs	~ $98 - 116 M	~ $89 - 105 M	~ $96 - 113 M	~ $86 - 102 M
	Operation and maintenance costs	- Proportional increase of O&M costs	- Reduced biosolid management O&M costs	- Increased secondary treatment O&M costs	- Reduced biosolids management but increased secondary costs
	Aligns with approval and permitting process	- Aligns with process	- Aligns with process	- Aligns with process	- Aligns with process

Legend: High Medium Low

Appendix E Table 2: Greenwich WWPS Catchment Alternative Evaluation

Category	Criteria	Alternative 1 – Optimize Flow Split and Divert Flows	Alternative 2 – Maintain Flow Split
Technical Impacts	Meets existing and future servicing needs	- Yes	- Yes
	Provides a reliable service	- Services existing and growth - Less reliant on Grand River crossings	- Services existing and growth - Maintains reliance of Grand River crossings
	Minimizes and manages construction risk	- Construction along minor arterial	- Sewer upgrades upstream of Greenwich WWPS along minor arterial and in easement
	Supports phased expansion of the system	- Optimize new Icomm trunk sewer capacity	- Catharine Street sewers at capacity
	Operational Complexity	- No changes to existing complexity	- No changes to existing complexity
	Resiliency to climate change	- Reduces reliance on high flows through two river crossings	- Increases reliance on high flows through two river crossings
Environmental Impacts	Protects environment features	- Additional diverted flows do not cross Grand River	- Diverted flows cross Grand River through two siphons
	Protects wildlife and species at risk	- No impact	- No impact
	Minimizes climate change impacts	- No changes	- No changes
Social and Cultural Impacts	Protects resident quality of life	- Maintains/improves current LoS to customers - I/I reduction is still required	- Maintains/improves current LoS to customers - I/I reduction is still required
	Manages and minimizes construction impacts	- Moderate construction impact to residents and businesses	- Moderate construction impact to residents and businesses
	Protects cultural heritage and archeological features	- Unknown impacts to CH and Archeo	- Unknown impacts to CH and Archeo
Financial Impacts	Capital and life-cycle costs	- Sewers: $4 M - Greenwich WWPS: $3 M	- Sewers: $7M - Greenwich WWPS: $3 M
	Operation and maintenance costs	- Marginally Reduced O&M needs at siphons	- Maintained or increased O&M needs at siphons
	Aligns with approval and permitting process	- No land acquisition needed	- No land acquisition needed

Appendix E Table 3: North Brantford Alternative Evaluation

Category	Criteria	Alternative 1 – New Trunk Sewer to Baxter Road	Alternative 2 – Upgrade Existing Sewers to Park Road North
Technical Impacts	Meets existing and future servicing needs	- Yes	- Yes
	Provides a reliable service	- Services both existing and growth - Potential to service growth areas and existing septic areas	- Services existing lands only - Local upgrades sensitive to intensification distribution
	Minimizes and manages construction risk	- Construction along major arterial - Consolidated upgrades downstream are still needed	- Construction along minor collector - Consolidated upgrades downstream are still needed
	Supports phased expansion of the system	- Can supports north expansion lands - Aligns with strengthening KG corridor	- Does not support North Expansion Lands - Relieves existing deficiencies
	Operational Complexity	- Additional sewer under major arterial road; minor changes in complexity	- No changes to existing complexity
	Resiliency to climate change	- New sewers to accommodate future PWWF - Sewers to Park Road North trunk at capacity	- Upsize Park Road North trunk sewer provides additional capacity
Environmental Impacts	Protects environment features	- No impact, construction in right-of way	- No impact, construction in right-of way
	Protects wildlife and species at risk	- No impact, construction in right-of way	- No impact, construction in right-of way
	Minimizes climate change impacts	- No changes	- No changes
Social and Cultural Impacts	Protects resident quality of life	- Improved LOS to properties along King George with septic - Sewers at capacity need more I/I reduction	- Maintained LOS to properties with septic - Sewers at capacity are upsized
	Manages and minimizes construction impacts	- High impact to traffic and businesses	- Moderate impact to local roads
	Protects cultural heritage and archeological features	- Unknown impacts to Cultural Heritage and Archeological	- Unknown impacts to Cultural Heritage and Archeological
Financial Impacts	Capital and life-cycle costs	- $$$$ - $28M	- $$ - $5M
	Operation and maintenance costs	- I/I needed upstream of Park Road North sewer	- Reduced I/I needs due to upsized sewer
	Aligns with approval and permitting process	- No land acquisition needed	- No land acquisition needed

Appendix E Table 4: Empey Street WWPS Catchment Alternative Evaluation

Category	Criteria	Alternative 1A: Existing Flow Split with Downtown Sewer & Empey Upgrades	Alternative 1B: Existing Flow Split with new Downtown Trunk Sewer	Alternative 2A: Redirect Flows to Empey WWPS and Deep Tunnel	Alternative 2B: Redirect Flows to Empey WWPS and Upgrade Empey WWPS
Technical Impacts	Meets existing and future servicing needs	- Yes	- Yes	- Yes	- Yes
	Provides a reliable service	- Services existing and growth - Reduced reliance on pumping	- Services existing and growth - Reduced reliance on pumping	- Services existing and growth - No reliance on pumping	- Services existing and growth - More reliance on pumping
	Minimizes and manages construction risk	- Minimal WWPS upgrades - Construction on minor collector/ local	- Minimal WWPS upgrades - Construction on major arterial	- Complex implementation - Optimizes flow split	- No sewer upgrades - Optimizes flow split
	Supports phased expansion of the system	- Utilizes Empey capacity - Limits sewer upgrades	- Utilizes Empey capacity - Significant new sewers	- Does not utilize Empey capacity - Significant new sewers	- Maximizes Empey capacity
	Operational Complexity	- Similar operational complexity	- Similar operational complexity	- Reduced complexity due to WWPS elimination	- Similar operational complexity - Continued use of Empey
	Resiliency to climate change	- New sewer provides additional capacity	- New sewer provides additional capacity	- New sewer provides additional capacity	- Higher reliance on pumping
Environmental Impacts	Protects environment features	- No impact, construction at existing facility	- Potential impacts dependent on alignment	- Potential impacts dependent on alignment	- No impact, construction at existing facility
	Protects wildlife and species at risk	- No impact, construction at existing facility	- Potential impacts dependent on alignment	- Potential impacts dependent on alignment	- No impact, construction at existing facility
	Minimizes climate change impacts	- GHG contribution from increased operation at WWPS	- GHG contribution from increased operation at WWPS	- Decommissioning Empey WWPS results in efficiency	- GHG contribution from increased operation at WWPS
Social and Cultural Impacts	Protects resident quality of life	- Maintains/improves current LOS to customers	- Maintains/improves current LOS to customers	- Maintains/improves current LOS to customers	- Maintains/improves current LOS to customers
	Manages and minimizes construction impacts	- High construction disruption	- High construction disruption	- High construction disruption	- Moderate construction disruption
	Protects cultural heritage and archeological features	- Unknown impacts to Cultural Heritage and Archeological	- Unknown impacts to Cultural Heritage and Archeological	- Unknown impacts to Cultural Heritage and Archeological	- Unknown impacts to Cultural Heritage and Archeological
Financial Impacts	Capital and life-cycle costs	- Sewers: $10 M - Empey WWPS: $3 - $9 M	- Sewers: $18 M - Empey WWPS: $3 - $9 M	- Sewers: $48 M - Flow Split Reconfiguration: $0.7 M - Empey WWPS: $1.5 M	- Flow Split Reconfiguration: $0.7 M - Empey WWPS: $14 M
	Operation and maintenance costs	- Long term maintenance needs at Empey	- Long term maintenance needs at Empey	- Reduction in O&M due to decommissioning of Empey	- Long term O&M needs at Empey with increased capacity
	Aligns with approval and permitting process	- No site acquisition	- No site acquisition	- Site acquisition may be needed	- No site acquisition

APPENDIX F:
Capital Program Project Sheets

Wastewater Capital Program

The following appendix provides detailed information on the Wastewater Capital Program. It includes a summary table providing an overview of the specific capital projects included as well as detailed costing sheets for each individual project. The summary table is provided first and includes a reference to the specific page number where you can find additional information about each project. Accessible formats and communication supports are available upon request. For more information, please contact the City of Brantford Accessibility Coordinator at accessibility@brantford.ca.

Wastewater Capital Program

Capital Program ID	Name	Overview	Sanitary Catchment	Project Description	Required Studies	Study Scope	Study Objectives	Class EA Schedule	Project Type	Size/Capacity	Length (m)	Class Estimate Type	Project Complexity	Accuracy Range	Area Condition	Funding Source/ Responsibility	Total Estimated Cost (2025$)	Timeline	DC Benefit to Existing Class	Page Reference for Detailed Costing Project Sheet
WW-SS-001	Oak Park Road Trunk Sewer	New trunk sewer extending from North-South Collector's Road to Oak Park Road along Powerline Road	WWTP	New trunk sewer extending from North-South Collector's Road to Oak Park Road to service North Expansion lands west of King George Road. Sewer sized to accommodate full buildout.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Oak Park watermain alignment (Capital Program project W-M-001 and W-M-002) with costs shared between water and wastewater.	Determine the best alignment and construction type (ie. Open cut or tunnel) for the trunk sewer crossing Highway 403 including a railway crossing and overhead powerlines along Powerline Road. Determine if alignment can be coordinated with local development.	Schedule B	Sewer 5m	825 mm	3,120	Class 4	High	50%	Suburban	DC Eligible	$ 32,885,000	0-5 Years	A	Page 4 of 90
WW-SS-002	North-South Collector's Road Trunk Sewer	New trunk sewer extending along North-South Collector's Road from East-West Collector's Road to Powerline Road	WWTP	New trunk sewer extending along North-South Collector's Road from East-West Collector's Road to Powerline Road to service North Expansion lands west of King George Road. Sewer sized to accommodate full buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	825 mm	402	Class 4	Low	30%	Rural	DC Eligible	$ 1,532,000	0-5 Years	A	Page 5 of 90
WW-SS-003	North-South Collector's Road Trunk Sewer	New trunk sewer from northern East-West Collector's Road to North-South Collector's Road	WWTP	New trunk sewer extending along north-south collector's road from northern east-west collector's road to north-south collector's road to service lands north of east-west collector's road. Sewer sized to accommodate full buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	525 mm	427	Class 4	Low	30%	Rural	DC Eligible	$ 869,000	10-20 Years	A	Page 6 of 90
WW-SS-004	East-West Collector's Road Trunk Sewer (West of King George Road)	New trunk sewer along East-West Collector's Road from King George Road to Balmoral Drive road extension	Northwest-2 WWPS	New trunk sewer extending along east-west collector's road east of Northwest-2 WWPS and west of King George Road. Sewer sized to accommodatefull buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	525 mm	1,010	Class 4	Low	30%	Rural	DC Eligible	$ 2,054,000	10-20 Years	A	Page 7 of 90
WW-SS-005	East-West Collector's Road Trunk Sewer (West of King George Road)	New trunk sewer along East-West Collector's Road from Balmoral Drive road extension to Northwest-2 WWPS	Northwest-2 WWPS	New trunk sewer extending along east-west collector's road east of Northwest-2 WWPS and west of King George Road. Sewer sized to accommodate full buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	600 mm	402	Class 4	Low	30%	Rural	DC Eligible	$ 1,041,000	5-10 Years	A	Page 8 of 90
WW-SS-006	East-West Collector's Road Trunk Sewer (East of King George Road)	New trunk sewer along East-West Collector's Road east of King George Road.	North WWPS	New trunk sewer extending along east-west collector's road east of King George Road. Sewer sized to accommodate full buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	300 mm	135	Class 4	Low	30%	Rural	DC Eligible	$ 219,000	10-20 Years	A	Page 9 of 90
WW-SS-007	East-West Collector's Road Trunk Sewer (East of King George Road)	New trunk sewer along East-West Collector's Road east of King George Road and west of North WWPS.	North WWPS	New trunk sewer extending along east-west collector's road east of King George Road and west of North WWPS. Sewer sized to accommodate full buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	300 mm	444	Class 4	Low	30%	Rural	DC Eligible	$ 720,000	10-20 Years	A	Page 10 of 90
WW-SS-008	East-West Collector's Road Trunk Sewer (East of King George Road)	New trunk sewer along East-West Collector's Road east of King George Road extending to North SPS.	North WWPS	New trunk sewer extending along east-west collector's road east of King George Road extending to North SPS. Sewer sized to accommodate full buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	525 mm	761	Class 4	Low	30%	Rural	DC Eligible	$ 1,547,000	10-20 Years	A	Page 11 of 90
WW-SS-009	East-West Collector's Road Trunk Sewer (East of North WWPS)	New trunk sewer extending from North WWPS forcemain to Park Road North.	Empey Street WWPS	New trunk sewer extending from North WWPS forcemain to Park Road North. Sewer sized to accommodate full buildout.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	525 mm	620	Class 4	Low	30%	Rural	DC Eligible	$ 1,739,000	5-10 Years	A	Page 12 of 90
WW-SS-010	Powerline Road Trunk Sewer (East of North WWPS)	New trunk sewer on Park Road and Powerline Road east of North WWPS	Empey Street WWPS	New trunk sewer extending from Park Road North to east of Wayne Gretzky Parkway along Powerline Road. Sewer needs to be sized as 825mm to accommodate full buildout (including LOSB).	-	EA exempt because the sewer will be on exisitng road ROW and future road ROW.	-	Exempt	Sewer 5m	825 mm	820	Class 4	Low	30%	Rural	DC Eligible	$ 3,122,000	5-10 Years	A	Page 13 of 90
WW-SS-011	Powerline Road Trunk Sewer (East of North WWPS)	New trunk sewer extending from east of Wayne Gretzky Parkway to Coulbeck Road trunk sewer.	Empey Street WWPS	New trunk sewer extending from east of Wayne Gretzky Parkway to Coulbeck Road trunk sewer. Sewer needs to be sized as 825mm to accommodate full buildout (including LOSB). EA exempt because the sewer will be on existing road ROW.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	825 mm	1,002	Class 4	Low	30%	Rural	DC Eligible	$ 5,511,000	0-5 Years	A	Page 14 of 90
WW-SS-012	East Expansion Lands Trunk Sewer	New trunk sewer from Lynden Road to East WWPS along the East collector road	East WWPS	New trunk sewer from Lynden Road to East WWPS along East collector's road.	-	EA exempt because the sewer will be on future road ROW.	-	Exempt	Sewer 5m	525 mm	1,724	Class 4	Low	30%	Rural	DC Eligible	$ 5,145,000	5-10 Years	A	Page 15 of 90
WW-SS-013	Lynden Road Trunk Sewer Upgrades	Upgrades along Lynden Road to Brantwood Park Road trunk sewer	Empey Street WWPS	Upsize existing 250 mm sewer to 525mm sewer along Lynden Road from East SPS forcemain to Brantwood Park Road.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	525 mm	279	Class 4	Med	40%	Suburban	DC Eligible	$ 657,000	0-5 Years	A	Page 16 of 90
WW-SS-014	Gilkinson Street Trunk Sewer	Upgrades to trunk sewer along Gilkison Street	WWTP	Upgrade existing sewer to 825mm along Gilkison Street from Mount Pleasant Road to the trunk sewer connection at Delamere Street.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	825 mm	835	Class 4	Med	40%	Suburban	DC Eligible	$ 3,686,000	0-5 Years	B	Page 17 of 90
WW-SS-015	Mount Pleasant Road Trunk Sewer	New trunk sewer along Mount Pleasant Road from Tutela Heights Road to existing trunk sewer on Mount Pleasant Road.	WWTP	New trunk sewers along Mount Pleasant Road from Tutela Heights Road to existing trunk sewer on Mount Pleasant Road.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	600 mm	610	Class 4	Med	40%	Suburban	DC Eligible	$ 1,833,000	0-5 Years	A	Page 18 of 90
WW-SS-016	Tutela Heights Road Trunk Sewer	New trunk sewers along Tutela Heights Road from Tutela Heights WWPS forcemain to Mount Pleasant Road.	WWTP	New trunk sewers along Tutela Heights Road from Tutela Heights WWPS forcemain to Mount Pleasant Road.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	600 mm	1,535	Class 4	Med	40%	Rural	DC Eligible	$ 4,192,000	5-10 Years	A	Page 19 of 90
WW-SS-017	Bodine Road Easement Sewer Upgrades	Upsize existing sewer from Roy Boulevard to Henry Street crossing under Highway 403	Empey Street WWPS	Upsize existing 975 mm sewer to 1350mm sewer 270 m east of Bodine Road from Roy Boulevard to Henry Street crossing under Highway 403 to address future capacity issues. Sewer sized to accommodate full buildout. Project cost includes ongoing flow monitoring in existing trunk sewer to ensure I&I doesn't trigger project earlier than anticipated.	Municipal Class EA	Schedule B EA because some sections (Hwy403 crossing) will not be on existing road ROW.	-	Schedule B	Sewer 5m	1350 mm	1,622	Class 4	High	50%	Suburban	DC Eligible	$ 30,832,000	20+ Years	B	Page 20 of 90
WW-SS-018	North Ashgrove Avenue Sewer Upgrades	Upgrade existing sewers on Ashgrove Avenue	Empey Street WWPS	Upgrade existing 375-500 mm sewers to 600mm sewers on Memorial Drive from Kensington Drive to Ashgrove Avenue and on Ashgrove Avenue from Memorial Drive to the Homestead Place to address capacity issues in North Brantford.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	600 mm	1,563	Class 4	Low	30%	Suburban	City	$ 4,455,000	0-5 Years	B	Page 21 of 90
WW-SS-019	Summerhayes Crescent Servicing Study	Study to determine feasibility of connecting Summerhayes Crescent to existing or proposed sewer system in North Brantford.	Empey Street WWPS	Feasibility study to assess the connection of the exising septic service lands to the existing King George sewer or pumping the services to WW-SS-006 and North WWPS. Feasibility study to determine sewer upsizing needs.	Feasibility Study	The study will be a feasibility study to determine if the existing Summerhayes subdivision can be connected to the City's wastewater system.	Determine the best servicing strategy for the Summerhayes subdivision including maintaining existing septic systems, connecting to existing King George Road sewer including any potential sewer upsizing or pumping flows to proposed North WWPS in North Expansion Lands.	Exempt	Sewer 5m	0 mm	-	Class 4	Low	30%	Rural	City	$ 200,000	0-5 Years	B	Page 22 of 90
WW-SS-020	Henry Street Flow Split Reconfiguration	Reconfigure flow split at Henry Street and Wayne Gretzky Streeet	Empey Street WWPS	Reconfigure sewer flow split to redirect flows to Empey WWPS to relieve downstream sewer capacity constraints.	-	EA exempt because of reconfiguration at existing facility without any construction.	-	Exempt	Sewer 10m	825 mm	50	Class 4	High	50%	Urban	DC Eligible	$ 670,000	0-5 Years	D	Page 23 of 90
WW-SS-021	Grand River Avenue Sewer Upgrades	Upsize existing sewers along Grand River Ave from Jubilee Avenue to Icomm Drive	Greenwich Street WWPS	Optimize Grand River Avenue and Jubilee Avenue flow split by diverting more flows to Grand River Avenue. Upsize existing 300 mm sanitary sewers along Grand River Avenue to accommodate increased flows.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	525 mm	1,291	Class 4	High	50%	Suburban	City	$ 4,752,000	5-10 Years	E	Page 24 of 90
WW-SS-022	Oakhill Sewer Upgrades	Upsize existing sewers from Jennings Road to Colborne Street West along Oakhill Drive	WWTP	Existing sewer upsizes from 675/750 mm to 1050 mm. along Oakhill Drive Upsize sewer to accommodate growth flows from the North Expansion Lands as well as address any potential operational issues due to the smaller sewer diameter.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	1050 mm	1,116	Class 4	Med	40%	Suburban	DC Eligible	$ 6,893,000	10-20 Years	B	Page 25 of 90
WW-SS-023	Downtown Sewers - Chatham St	Sewer upsize along Chatham Street from Charlotte Street to Clarence Street.	WWTP	Sewer upsize along Chatham Street from Charlotte Street to Clarence Street.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	450 mm	142	Class 4	Med	40%	Suburban	Developer/City	$ 322,000	0-20 Years	C	Page 26 of 90
WW-SS-024	Mohawk Street Sewer Upgrades	Upsize existing sewer on Mohawk Street from Mohawk Street siphon (south of Forest Road) to WWTP entrance	Empey Street WWPS	Upsize existing 1200 mm sewer on Mohawk Street from Mohawk Street siphon (south of Forest Road) to WWTP entrance to address future capacity issues. Sewer sized to accommodate full buildout. Project cost includes ongoing flow monitoring in existing trunk sewer to ensure I&I doesn't trigger project earlier than anticipated.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	1350 mm	915	Class 4	High	50%	Suburban	DC Eligible	$ 7,951,000	20+ Years	B	Page 27 of 90
WW-SS-026	Division St Sewer Upgrades	Upsize existing sewer on Division St between Dorothy St and Tenth Ave. Existing pipe acting as a bottleneck with a small diameter.	WWTP	Upsize existing sewer on Division St between Dorothy St and Tenth Ave from 300mm to 450mm. Existing pipe acting as a bottleneck with a small diameter.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	450 mm	80	Class 3	Med	25%	Urban	City	$ 190,000	0-5 Years	B	Page 28 of 90
WW-SS-027	Fifth Ave Sewer Upgrades	Upsize existing sewer size along Fifth Ave from Fifth Ave SPS till Whitehead St.	WWTP	Upsize existing sewer size along Fifth Ave from Fifth Ave SPS till Whitehead St from 300mm to 450mm.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	450 mm	477	Class 3	Low	20%	Suburban	DC Eligible	$ 990,000	0-5 Years	E	Page 29 of 90
WW-SS-028	Brantwood Park Rd Sewer Upgrades	Upsize existing sewer size along Brantwood Park Rd.	WWTP	Upsize existing sewer size along Brantwood Park Rd from 250mm to 300mm to prevent bottleneck, just north of Banbury Rd.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	300 mm	76	Class 4	High	50%	Urban	DC Eligible	$ 1,123,000	10-20 Years	E	Page 30 of 90
WW-SS-029	Memorial Dr Sewer Upgrades	Upsize existing sewer size along Memorial Drive	WWTP	Upsize existing sewer size along Memorial Drive, just south of Buckingham St from 300mm to 375mm to prevent bottleneck.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	375 mm	80	Class 3	High	30%	Urban	DC Eligible	$ 1,521,000	10-20 Years	E	Page 31 of 90
WW-SS-030	Clarence St Sewer Upgrades	Upsize existing sewer size along Clarence St	WWTP	Upsize existing sewer size along Clarence Street from Marlborough St to Alice St.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	450 mm	606	Class 4	High	50%	Suburban	DC Eligible	$ 11,162,000	10-20 Years	D	Page 32 of 90
WW-SS-031	Grand River Ave Sewer Upgrades (West Section)	Upsize existing sewer size along Grand River Avenue from Morrell Street till St Paul Avenue	WWTP	Upsize existing sewer size along Grand River Avenue from Morrell Street till St Paul Avenue from 400mm to 525mm. New pipe with interpolated consistent slope at 0.165%.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	525 mm	497	Class 4	High	50%	Urban	DC Eligible	$ 9,066,000	5-10 Years	E	Page 33 of 90
WW-SS-032	Morrell St Sewer Upgrades	Upsize existing sewer size along Morrell St from Webster St till Grand River Ave	WWTP	Upsize existing sewer size along Morrell St from Webster St till Grand River Ave from 300mm to 375mm.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	375 mm	216	Class 4	High	50%	Urban	DC Eligible	$ 3,305,000	5-10 Years	E	Page 34 of 90
WW-SS-033	Fen Ridge Court Sewer to Resolve Oak Park Road Bottleneck	Upsizing from 600mm to 825mm sewer on Fen Ridge Court	WWTP	Upsizing from 600mm to 825mm sewer on Fen Ridge Court, just west of Oak Park Rd.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	825 mm	50	Class 4	Low	30%	Suburban	DC Eligible	$ 209,000	5-10 Years	A	Page 35 of 90
WW-SS-034	Greenwich St Sewer Upgrades (US of WWPS)	Upsize existing sewer size along Greenwich St	WWTP	Upsize existing sewer size along Greenwich St from 750mm to 900mm.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	900 mm	77	Class 4	High	50%	Urban	DC Eligible	$ 578,000	0-5 Years	B	Page 36 of 90
WW-SS-035	Greenwich St Sewer Upgrades (DS of WWPS)	Upsize existing sewer size along Greenwich St	WWTP	Upsize existing sewer size along Greenwich St from 750mm to 900mm.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	900 mm	99	Class 4	High	50%	Urban	DC Eligible	$ 715,000	0-5 Years	B	Page 37 of 90
WW-SS-036	Hardy Road Sewer Upgrades	Upsizing from 250mm to 300mm sewer on Hardy Road.	Somerset Road WWPS	Upsizing from 250mm to 300mm sewer on Hardy Road, west of Paris Rd.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	300 mm	198	Class 4	Med	40%	Suburban	DC Eligible	$ 1,077,000	10-20 Years	B	Page 38 of 90
WW-SS-037	Mount Pleasant Street Sewer Upgrades	Upsizing from 250mm to 300mm sewer on Mount Pleasant Road.	Greenwich Street WWPS	Upsizing from 250mm to 300mm sewer on Mount Pleasant Road, north of Bell Lane.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	300 mm	171	Class 4	Med	40%	Suburban	DC Eligible	$ 673,000	10-20 Years	E	Page 39 of 90
WW-SS-038	Tutela Heights Sewer Upstream of Tutela Heights WWPS	Tutela Heights Sewer Upgrades	Tutela Heights WWPS	Tutela Heights Sewer Upgrades, west of Davern Rd.	Municipal Class EA	Schedule B EA because sewer will not be on existing road ROW.	-	Schedule B	Sewer 5m	300 mm	1,374	Class 4	Med	40%	Rural	DC Eligible	$ 4,613,000	0-5 Years	A	Page 40 of 90

Wastewater Capital Program

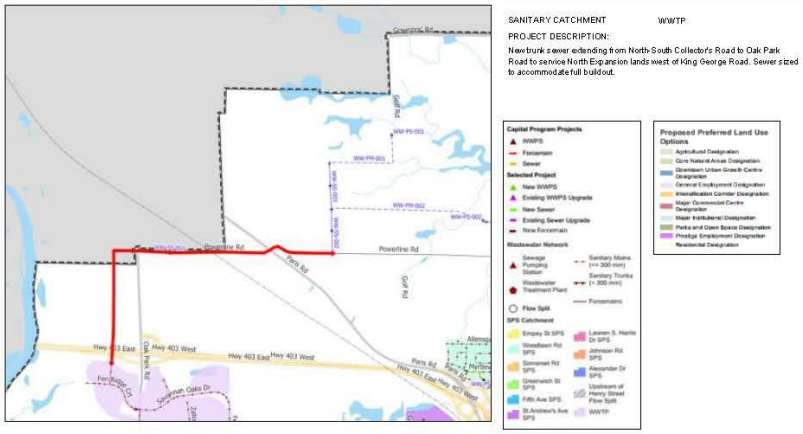
Capital Program ID	Name	Overview	Sanitary Catchment	Project Description	Required Studies	Study Scope	Study Objectives	Class EA Schedule	Project Type	Size/Capacity	Length (m)	Class Estimate Type	Project Complexity	Accuracy Range	Area Condition	Funding Source/ Responsibility	Total Estimated Cost (2025$)	Timeline	DC Benefit to Existing Class	Page Reference for Detailed Costing Project Sheet
WW-SS-039	Johnson WWPS Inlet Sewer Upgrades	Johnson WWPS Inlet Sewer Upgrades	WWTP	Johnson WWPS Inlet Sewer Upgrades from 250mm to 375mm. Existing slope, or keep monitoring and I&I reduction program, or keep monitoring and I&I reduction program.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	375 mm	24	Class 4	Med	40%	Suburban	DC Eligible	$ 832,000	5-10 Years	E	Page 41 of 90
WW-SS-040	Downtown Sewers - Darling St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Darling St from 225mm to 250mm, from King St to Market St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	250 mm	287	Class 4	Med	40%	Suburban	DC Eligible	$ 453,000	0-20 Years	A	Page 42 of 90
WW-SS-041	Downtown Sewers - Icomm Dr	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	Greenwich Street WWPS	Sewer upgrades on Icomm Dr from 350mm to 750mm, East of Brant Ave.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	750 mm	655	Class 4	Med	40%	Suburban	DC Eligible	$ 2,698,000	0-20 Years	A	Page 43 of 90
WW-SS-042	Downtown Sewers - West St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on West St from 300mm to 375mm, from Pearl St to Marlborough St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	375 mm	345	Class 4	Med	40%	Suburban	DC Eligible	$ 704,000	0-20 Years	A	Page 44 of 90
WW-SS-043	Downtown Sewers - Marlborough St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Marlborough St from 225mm to 300mm, from Charlotte St to Clarence St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	300 mm	139	Class 4	Med	40%	Suburban	DC Eligible	$ 273,000	0-20 Years	A	Page 45 of 90
WW-SS-044	Downtown Sewers - Sheridan St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Sheridan St from 225/250mm to 375mm, from Market St to Clarence St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	450 mm	380	Class 4	Med	40%	Suburban	DC Eligible	$ 842,000	0-20 Years	A	Page 46 of 90
WW-SS-045	Downtown Sewers - Nelson St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Nelson St from 250mm to 375mm, from Market St to Charlotte St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	375 mm	240	Class 4	Med	40%	Suburban	DC Eligible	$ 494,000	0-20 Years	A	Page 47 of 90
WW-SS-046	Downtown Sewers - Colborne St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Colborne St from 250-525mm to 250mm, with flow diversion, from Brant Ave to Charlotte St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	250 mm	630	Class 4	Med	40%	Suburban	DC Eligible	$ 981,000	0-20 Years	A	Page 48 of 90
WW-SS-047	Downtown Sewers - Brant Ave	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Brant Ave from 375/450mm to 525mm, from William St to Wharfe St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	525 mm	338	Class 4	Med	40%	Suburban	DC Eligible	$ 807,000	0-20 Years	B	Page 49 of 90
WW-SS-048	Downtown Sewers - Colborne St E	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Colborne St E from 250mm to 525mm, from just south of Dalbousie St to Echo St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	525 mm	162	Class 4	Med	40%	Suburban	DC Eligible	$ 393,000	0-20 Years	B	Page 50 of 90
WW-SS-049	Downtown Sewers - Clarence St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Clarence St from 450/500mm to 525/675mm, from Colbourne St to Marlborough St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	675 mm	737	Class 4	Med	40%	Suburban	DC Eligible	$ 2,733,000	0-20 Years	B	Page 51 of 90
WW-SS-050	Downtown Sewers - Clarence St S	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	WWTP	Sewer upgrades on Clarence St S from 675/750mm to 750/900mm, just south of Colbourne St.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	900 mm	172	Class 4	Med	40%	Suburban	DC Eligible	$ 900,000	0-20 Years	A	Page 52 of 90
WW-SS-051	Downtown Sewers - Water St	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	Greenwich Street WWPS	Sewer upgrades on Water St from 300mm to 250mm to opposite direction.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	250 mm	315	Class 4	Med	40%	Suburban	DC Eligible	$ 496,000	0-20 Years	B	Page 53 of 90
WW-SS-052	Downtown Sewers - Easement	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	Greenwich Street WWPS	New sewer on easement at 375mm, between Water St and Icomm Dr.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	375 mm	74	Class 4	Med	40%	Suburban	DC Eligible	$ 159,000	0-20 Years	B	Page 54 of 90
WW-SS-053	Downtown Sewers - Market St Erie Ave	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	Greenwich Street WWPS	Sewer upgrades on Market St and Erie Ave from 250mm to 375mm, north of Eagle Ave.	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	375 mm	462	Class 4	Med	40%	Suburban	DC Eligible	$ 938,000	0-20 Years	A	Page 55 of 90
WW-SS-054	Downtown Sewers - Eagle Ave	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	Greenwich Street WWPS	Sewer upgrades on Eagle Ave from 300/375mm to 525mm, east of Erie Ave	Feasibility Study	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	525 mm	363	Class 4	Med	40%	Suburban	DC Eligible	$ 867,000	0-20 Years	A	Page 56 of 90
WW-SS-055	Downtown Sewers - Veterans Memorial Pkwy	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	Greenwich Street WWPS	Sewer upgrades near Veterans Memorial Pkwy from 600mm to 675mm, east of Erie Ave.	Municipal Class EA	Schedule B EA because it will not be on existing road ROW.	-	Schedule B	Sewer 5m	675 mm	221	Class 4	Med	40%	Suburban	DC Eligible	$ 977,000	0-20 Years	B	Page 57 of 90
WW-SS-056	Downtown Sewers - Greenwich WWPS Inlet	Sewer upgrades or various diameters to service Downtown Brantford intensification core.	Greenwich Street WWPS	Sewer upgrades at inlet of Greenwich WWPS from 600/750mm to 900mm.	Municipal Class EA	Schedule B EA because some sections (Hwy403 crossing) will not be on existing road ROW.	-	Schedule B	Sewer 5m	900 mm	107	Class 4	Med	40%	Suburban	DC Eligible	$ 714,000	0-20 Years	B	Page 58 of 90
WW-SS-057	Myrtleville Sewer	Sewer upgrades on Myrtleville Dr and Sandlewood Ave	Woodlawn Road WWPS	Sewer diversion on Myrtleville Dr and Sandlewood Ave to avoid easement.	-	EA exempt because the sewer will be on existing road ROW.	-	Exempt	Sewer 5m	300 mm	441	Class 4	Med	40%	Suburban	DC Eligible	$ 829,000	5-10 Years	C	Page 59 of 90
WW-FM-001	Northwest-1 WWPS Forcemain	New forcemain for Northwest-1 WWPS	WWTP	New forcemain extending from Northwest-1 WWPS to north-south collector road trunk sewer. Forcemain sized to accommodate North Expansion Lands flows with space to allow for potential twinning for full buildout flows.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-1 WWPS (Costs included in Capital Program project WW-PS-001).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Forcemain	250 mm	859	Class 4	Low	30%	Rural	DC Eligible	$ 1,534,000	10-20 Years	A	Page 60 of 90
WW-FM-002	Northwest-2 WWPS Forcemain	New Northwest-2 WWPS forcemain	WWTP	New forcemain extending from Northwest-2 WWPS to north-south collector road trunk sewer. Forcemain sized to accommodate existing flows and full buildout flows.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-2 WWPS (Costs included in Capital Program project WW-PS-002).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Forcemain	500 mm	1,432	Class 4	Med	40%	Suburban	DC Eligible	$ 5,393,000	5-10 Years	A	Page 61 of 90
WW-FM-003	North WWPS Forcemain	New North WWPS forcemain	Empey Street WWPS	New forcemain from North WWPS to east-west collector road trunk sewer. Forcemain sized to accommodate existing flows and trigger land flows.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the North WWPS (Costs included in Capital Program project WW-PS-003).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Forcemain	350 mm	1,508	Class 4	Low	30%	Rural	DC Eligible	$ 3,279,000	10-20 Years	A	Page 62 of 90
WW-FM-004	Northeast WWPS Forcemain	New Northeast WWPS forcemain.	Empey Street WWPS	New forcemain from Northeast WWPS to Coulbeck Road trunk sewer. Forcemain sized to accommodate existing flows and full buildout.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northeast WWPS (Costs included in Capital Program project WW-PS-004).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Forcemain	300 mm	525	Class 4	Low	30%	Rural	DC Eligible	$ 1,012,000	0-5 Years	A	Page 63 of 90
WW-FM-005	East WWPS Forcemain	New East WWPS forcemain	Empey Street WWPS	New forcemain extending from East WWPS to Lynden Road trunk sewer	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the East WWPS (Costs included in Capital Program project WW-PS-005).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Forcemain	350 mm	1,626	Class 4	Med	40%	Suburban	DC Eligible	$ 4,221,000	5-10 Years	A	Page 64 of 90
WW-FM-006	Tutela Heights WWPS Forcemain	New Tutela Heights WWPS forcemain.	WWTP	New forcemain extending from Tutela Heights WWPS to Tutela Heights Road trunk sewer	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Tutela Heights WWPS (Costs included in Capital Program project WW-PS-006).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Forcemain	350 mm	467	Class 4	Low	30%	Suburban	DC Eligible	$ 1,175,000	10-20 Years	A	Page 65 of 90
WW-FM-007	Empey WWPS Forcemain Extension	Increase length of forcemain for Empey WWPS to mitigate capacity and depth of cover constraints.	WWTP	Increase length of forcemain for Empey WWPS to mitigate capacity and depth of cover constraints.	-	-	-	Eligible for Screening	Forcemain	900 mm	248	Class 4	High	50%	Urban	DC Eligible	$ 6,897,000	10-20 Years	C	Page 66 of 90
WW-FM-008	Johnson WWPS Forcemain Upgrades	Upsize forcemain for Johnson WWPS	WWTP	Upsize forcemain for Johnson WWPS from 200mm to 300mm	-	-	-	Exempt	Forcemain	300 mm	489	Class 4	Med	40%	Suburban	DC Eligible	$ 1,372,000	5-10 Years	E	Page 67 of 90
WW-FM-009	Empey WWPS Forcemain Replacement	Increase length of forcemain for Empey WWPS to mitigate capacity and depth of cover constraints.	WWTP	Increase length of forcemain for Empey WWPS to mitigate capacity and depth of cover constraints.	-	-	-	Eligible for Screening	Forcemain	900 mm	285	Class 4	High	50%	Urban	DC Eligible	$ 6,979,000	5-10 Years	B	Page 68 of 90
WW-PS-001	Northwest-1 Wastewater Pumping Station	New WWPS located northeast of Golf Road.	Northwest-1 WWPS	New WWPS located northeast of Golf Road. Flows will be pumped to the trunk sewer along north-south collector road, draining to Oak Park Road. Pumping Station sized for North Expansion Lands while securing site capacity to allow for upgrades for full buildout flows post 2051.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-1 WWPS forcemain alignment (Capital Program project WW-FM-001) .	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Pumping	30 L/s	-	Class 4	Med	40%	Rural	DC Eligible	$ 12,298,000	10-20 Years	A	Page 69 of 90
WW-PS-002	Northwest-2 Wastewater Pumping Station	New WWPS located east of Golf Road.	Northwest-2 WWPS	New SPS located east of Golf Road on east-west collector's road. Flows will be pumped to the trunk sewer along the north-south collector road, draining to Oak Park Road. Pumping Station sized for North Expansion Lands while securing site capacity to allow for upgrades for full buildout flows post 2051.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-12WWPS forcemain alignment (Capital Program project WW-FM-002).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Pumping	190 L/s	-	Class 4	Med	40%	Rural	DC Eligible	$ 20,800,000	5-10 Years	A	Page 70 of 90
WW-PS-003	North Wastewater Pumping Station	New WWPS located along the East-West Collector's Road	North WWPS	New WWPS located along the east-west collector's road between King George Road and Park Road, south of Jones Creek. Pumping Station sized for North Expansion Lands while securing site capacity to allow for upgrades for full buildout flows post 2051.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the North WWPS forcemain alignment (Capital Program project WW-FM-003).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Pumping	97 L/s	-	Class 4	Med	40%	Rural	DC Eligible	$ 15,578,000	10-20 Years	A	Page 71 of 90
WW-PS-004	Northeast Wastewater Pumping Station	New WWPS located along Powerline Road, east of Coulbeck Road.	Northeast WWPS	New WWPS located along Powerline Road, east of Coulbeck Road. Flows will be pumped to Coulbeck Road trunk sewer.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the NortheastWWPS forcemain alignment (Capital Program project WW-FM-004).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Pumping	75 L/s	-	Class 4	Med	40%	Rural	DC Eligible	$ 14,344,000	0-5 Years	A	Page 72 of 90
WW-PS-005	East Wastewater Pumping Station	New WWPS located in southeast East Expansion Lands	East WWPS	New WWPS located along Lyndey Road, north of the East Expansion Lands. Flows will be pumped to trunk sewer on Lynden Road	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the East WWPS forcemain alignment (Capital Program project WW-FM-005).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Pumping	105 L/s	-	Class 4	Med	40%	Rural	DC Eligible	$ 16,028,000	5-10 Years	A	Page 73 of 90
WW-PS-006	Tutela Heights Wastewater Pumping Station	New WWPS located in Tutela Heights	Tutela Heights WWPS	New WWPS located in south Tutela Heights along collector road. Flows to be pumped to trunk sewer on Tutela Heights Road, extending to Mount Pleasant Road trunk sewer.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Tutela Heights WWPS forcemain alignment (Capital Program project WW-FM-006).	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.	Schedule B	Pumping	80 L/s	-	Class 4	High	50%	Rural	DC Eligible	$ 16,772,000	10-20 Years	A	Page 74 of 90
WW-PS-007	Empey Street WWPS Storage Upgrades	Increase existing Empey Street WWPS storage	Empey Street WWPS	2185 m3 in new emergency storage tank (EST) plus 1100 m3 in collection system and 500 m3 in wet well for a total of 3800 m3, includes 4 new pumps and a new control building.	Municipal Class EA	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment.	Determine the best construction methodology for the wastewater pumping station expansion and upgrades including wet well construction.	Schedule B	Pumping	1000 m³	-	Class 4	Med	40%	Rural	DC Eligible	$ 9,568,000	0-5 Years	D	Page 75 of 90
WW-PS-008	Empey Street WWPS Rehabilitation and Improvements	Address operational concerns related to station capacity to reachieve 1600 L/s.	Empey Street WWPS	Renewal to meet current flow needs including maintenance and repair, rehabilitation, renewal to meet current flow needs.	Feasibility Study	The study will be a feasibility study to determine the rehab required at Empey WWPS.	Determine the best rehabilitation strategy for the Empey WWPS to address known existing issues, facility age, condition and performance.	Exempt	Pumping	1600 L/s	-	Class 4	Med	40%	Rural	City	$ 7,800,000	0-5 Years	E	Page 76 of 90
WW-PS-009	Fifth Avenue Wastewater Pumping Station Upgrades	Upgrade capacity to accommodate existing and future flows.	Fifth Ave WWPS	Station upgrades at existing WWPS including upgrading capacity to 130 L/s, and a new forcemain (twinned). City to confirm that this project has been completed and not a part of the 2025 Capital Program.	-	-	-	Exempt	Pumping	72 L/s	-	Class 4	Med	40%	Suburban	City	$ 5,057,000	Completion 2021	D	Page 77 of 90
WW-PS-010	Fifth Avenue WWPS Storage Upgrades	Upgrade wet well capacity to accommodate existing and future flows.	Fifth Ave WWPS	Add 1 hour of storage to accommodate peak flows, 468 m3 of storage, to address existing and future peak weather flow storage deficit.	Feasibility Study	-	-	Exempt	Pumping	468 m³	-	Class 4	Med	40%	Suburban	City	$ 3,327,000	0-5 Years	E	Page 78 of 90

Wastewater Capital Program

Capital Program ID	Name	Overview	Sanitary Catchment	Project Description	Required Studies	Study Scope	Study Objectives	Class EA Schedule	Project Type	Size/Capacity	Length (m)	Class Estimate Type	Project Complexity	Accuracy Range	Area Condition	Funding Source/ Responsibility	Total Estimated Cost (2025$)	Timeline	DC Benefit to Existing Class	Page Reference for Detailed Costing Project Sheet
WW-PS-011	Greenwich Wastewater Pumping Station Rehabilitation and Improvements	Address operational concerns related to station capacity to 578 L/s.	Greenwich Street WWPS	Renewal to meet current flow needs including maintenance and repair, rehabilitation and replacing existing pumps with new pumps and non-clog impellers to reduce plugging. Pumps to be selected to match current firm capacity to preservice the existing station capacity.	Feasibility Study	-	-	Eligible for Screening	Pumping	141 L/s	-	Class 4	Med	40%	Suburban	City	$ 1,296,000	10-20 Years	E	Page 79 of 90
WW-PS-012	St. Andrews WWPS Storage Upgrades	Upgrade wet well capacity to accommodate existing and future flows.	St. Andrews WWPS	Add an additional 25 m3 of storage plus collection system 7 m3 and wet well 20 m3 for a total of 52 m3 to address existing and future peak weather flow storage deficit.	Feasibility Study	0	Determine the best construction methodology for the wastewater pumping station expansion and upgrades including wet well construction.	Exempt	Pumping	25 m³	-	Class 4	Low	30%	Suburban	City	$ 503,000	0-5 Years	D	Page 80 of 90
WW-PS-013	Johnson WWPS Storage Upgrades	Upgrade wet well capacity to accommodate existing and future flows.	Johnson Road WWPS	Add an additional 115 m3 of storage to address existing and future peak weather flow storage deficit.	Feasibility Study	0	Determine the best construction methodology for the wastewater pumping station expansion and upgrades including wet well construction.	Eligible for Screening	Pumping	115 m³	-	Class 4	Low	30%	Suburban	City	$ 897,000	0-5 Years	E	Page 81 of 90
WW-PS-014	Johnson WWPS Rehabilitation	Upgrade capacity to accommodate existing and future flows.	Johnson Road WWPS	Rehabilitation, maintenance and repair to address operational concerns related to WWPS.	Feasibility Study	The study will be a feasibility study to determine the rehab required at the Johnson WWPS	Determine the best rehabilitation strategy for the Johnson WWPS to address known existing issues, facility age, condition and performance.	Exempt	Pumping	70 m³	-	Class 4	Low	30%	Suburban	City	$ 576,000	0-5 Years	E	Page 82 of 90
WW-PS-015	Woodlawn WWPS Rehabilitation	Upgrade capacity to accommodate existing and future flows.	Woodlawn Road WWPS	Rehabilitation, maintenance and repair to address operational concerns related to WWPS.	Feasibility Study	The study will be a feasibility study to determine the rehab required at the Woodlawn WWPS	Determine the best rehabilitation strategy for the Woodlawn WWPS to address known existing issues, facility age, condition and performance.	Exempt	Pumping	-	-	Class 4	Low	30%	Suburban	City	$ 576,000	0-5 Years	E	Page 83 of 90
WW-II-001	Flow Monitoring	City wide flow monitoring program.	WWTP	City wide flow monitoring program to address existing issues and provide guidance for wet weather flow management practices.	-	-	-	Exempt	Wet Weather Reduction	-	-	Class 4	Low	30%	Suburban	City	$ 12,129,000	0-5 Years	D	Page 84 of 90
WW-II-002	City Wide I&I Program	Wet weather management program to address growth and existing issues.	WWTP	City wide I&I reduction program based on flow monitoring results to address existing issues.	-	-	-	Exempt	Wet Weather Reduction	-	-	Class 4	Med	40%	Rural	City	$ 38,502,000	0-5 Years	D	Page 85 of 90
WW-II-003	Greenwich WWPS I&I Reduction	I&I program to manage peak flows in Greenwich WWPS catchment	Greenwich Street WWPS	Greenwich WWPS catchment subject to high I&I in catchment. Initiate I&I program to manage peak flows to free up capacity at existing WWPS.	-	-	-	Exempt	Wet Weather Reduction	-	-	Class 4	Med	40%	Rural	City	$ 8,019,000	0-5 Years	D	Page 86 of 90
WW-II-004	Johnson WWPS I&I Reduction	I&I program to manage peak flows in John WWPS catchment	Johnson Road WWPS	Johnson WWPS catchment subject to very high I&I in catchment. Initiate I&I program to manage peak flows to free up capacity at existing WWPS.	-	-	-	Exempt	Wet Weather Reduction	-	-	Class 4	Med	40%	Rural	City	$ 8,019,000	0-5 Years	D	Page 87 of 90
WW-TP-001	Wastewater Treatment Plant Upgrades - 0 - 5 Years	Increase plant capacity with a new raw sewage pumping station and forcemain	WWTP	Construct a new raw sewage pumping station with new forcemain to bring the pumping capacity to 230 MLD to match the current preliminary treatment capacity. Forcemain and wet well to be sized to the full build out capacity with provisions for future pumping and electrical capacity upgrades.	Municipal Class EA	-	-	Schedule C	Treatment	-	-	Class 4	Med	40%	Rural	City	$ 19,500,000	0-5 Years	D	Page 88 of 90
WW-TP-002	Wastewater Treatment Plant Upgrades - 5-10 Years	Increase plant capacity with restoration of secondary clarifiers and sludge thickening	WWTP	Bring all existing secondary clarifiers back into service. Implement sludge thickening in the biosolids management infrastructure. Monitor the impact to the primary treatment, digesters and biosolids storage to determine the need for future upgrades to support full buildout capacity.	Municipal Class EA	-	-	Schedule C	Treatment	-	-	Class 4	Med	40%	Rural	City	$ 9,750,000	5-10 Years	D	Page 89 of 90
WW-TP-003	Wastewater Treatment Plant Upgrades - 10-20 Years	Increase plant capacity for both primary and secondary treatment capacity	WWTP	4.Increase preliminary treatment capacity (Raw sewage pumping, Screening, Grit Removal, Primary clarifier) 5.Increase secondary treatment capacity (aeration tank and blower)	Municipal Class EA	-	-	Schedule C	Treatment	-	-	Class 4	Med	40%	Rural	City	$ 75,400,000	10-20 Years	D	Page 90 of 90
TOTAL																	**$ 503,740,000**			

PROJECT NO.:	WW-SS-001	TIMELINE:	0-5 Years
PROJECT NAME:	Oak Park Road Trunk Sewer		
PROJECT OVERVIEW:	New trunk sewer extending from North-South Collector's Road to Oak Park Road along Powerline Road		

MAP



REQUIRED STUDIES:	Municipal Class EA
STUDY SCOPE:	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Oak Park watermain alignment (Capital Program project W-M-001 and W-M-002) with costs shared between water and wastewater.
OBJECTIVES:	Determine the best alignment and construction type (ie. Open cut or tunnel) for the trunk sewer crossing Highway 403 including a railway crossing and overhead powerlines along Powerline Road. Determine if alignment can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	825 mm
TOTAL LENGTH:	3120 m

Tunnelled	0 m	0%
Open Cut - 5m	2120 m	100%
Open Cut - 10m	1000 m	

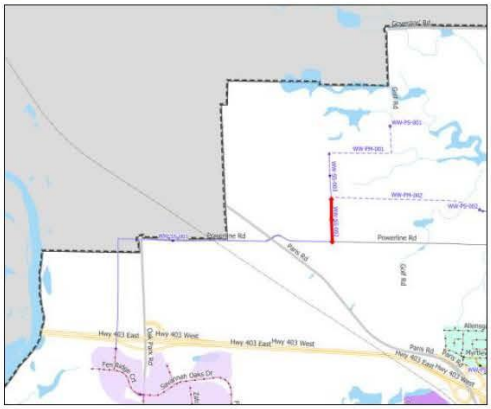
CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study				$0	
Study	EA		1	$300,000	$300,000	
Sub-Total Study Costs					**$300,000**	
Construction Cost						
Pipe Construction - Open Cut (5m)		m	2120 m	$2,279	$4,832,007	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)		m	1000 m	$5,764	$5,764,380	Existing road ROW & expansion lands
Pipe Construction - Tunneling		m	0 m	$14,112	$0	
Minor Creek Crossings		ea.	0	$452,828	$0	
Major Creek Crossings		ea.	0	$2,278,470	$0	
Road Crossings		ea.	1	$1,014,564	$1,014,564	Paris Road
Major Road Crossings (Highway)		ea.	1	$2,278,470	$2,278,470	Highway 403
Utility Crossings		ea.	2	$1,014,564	$2,029,128	Railway Crossing (two tracks)
Pipe Construction Uplift (Based on Area Conditions)	10%				$1,591,953	
	20%					
Additional Construction Costs	10%	ea.			$1,751,038	Includes: Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%	ea.			$1,751,038	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					**$21,012,000**	
Geotechnical / Hydrogeological / Materials	2.0%				$420,200	
Geotechnical Sub-Total Cost					$420,200	
Property Requirements	2.0%				$ 420,200	
Property Requirements Sub-Total					$420,200	
Consultant Engineering/Design	12%				$ 2,521,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$2,521,400	
In House Labour/Engineering/Wages/CA	6%				$ 1,260,700	
In-house Labour/Wages Sub-Total					$1,260,700	
Project Contingency	25%				$6,409,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$6,409,000	
Non-Refundable HST	1.76%				$541,900	
Non-Refundable HST Sub-Total					$541,900	
Total (2024 Dollars)					**$32,885,000**	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					**$32,885,000**	2024 Estimate

PROJECT NO.:	WW-SS-002	TIMELINE:	0-5 Years
PROJECT NAME:	North-South Collector's Road Trunk Sewer		
PROJECT OVERVIEW:	New trunk sewer extending along North-South Collector's Road from East-West Collector's Road to Powerline Road		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
New trunk sewer extending along North-South Collector's Road from East-West Collector's Road to Powerline Road to service North Expansion lands west of King George Road. Sewer sized to accommodate full buildout.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contract restoration

PROPOSED DIAMETER:	825 mm
TOTAL LENGTH:	402 m

Tunnelled	0 m	0%
Open Cut	402 m	100%

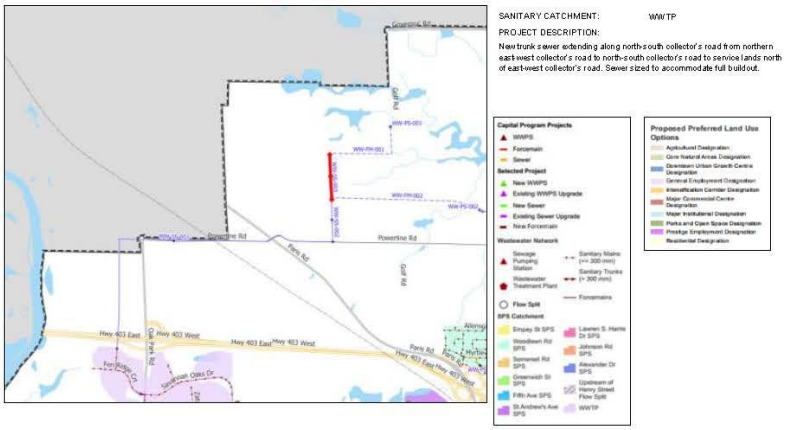
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			0		$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	402 m	$2,279	$916,258	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$14,112	$0	
Minor Creek Crossings			ea.	0	$452,828	$0	
Major Creek Crossings			ea.	0	$2,278,470	$0	
Road Crossings			ea.	0	$1,014,564	$0	
Major Road Crossings (Highway)			ea.	0	$2,278,470	$0	
Utility Crossings			ea.	0	$1,014,564	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$91,626	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$91,626	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$1,100,000	
Geotechnical / Hydrogeological / Materials	0.5%					$5,500	
Geotechnical Sub-Total Cost						$5,500	
Property Requirements	1.0%					$ 11,000	
Property Requirements Sub-Total						$11,000	
Consultant Engineering/Design	15%					$ 165,000	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$165,000	
In House Labour/Engineering/Wages/CA	8%					$ 88,000	
In-house Labour/Wages Sub-Total						$88,000	
Project Contingency	10%					$137,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$137,000	
Non-Refundable HST	1.76%					$25,000	
Non-Refundable HST Sub-Total						$25,000	
Total (2024 Dollars)						$1,532,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,532,000	2024 Estimate

PROJECT NO.:	WW-SS-003	TIMELINE:	10-20 Years
PROJECT NAME:	North-South Collector's Road Trunk Sewer		
PROJECT OVERVIEW:	New trunk sewer from northern East-West Collector's Road to North-South Collector's Road		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
New trunk sewer extending along north-south collector's road from northern east-west collector's road to north-south collector's road to service lands north of east-west collector's road. Sewer sized to accommodate full buildout.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	525 mm	
TOTAL LENGTH:	427 m	
Tunnelled	0 m	0%
Open Cut	427 m	100%

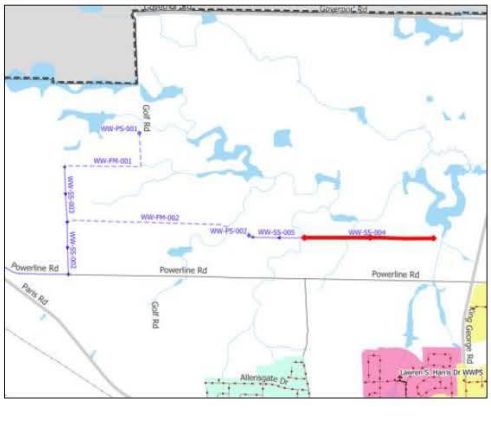
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			0		$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	427 m	$1,217	$519,642	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$51,964	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$51,964	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$624,000	
Geotechnical / Hydrogeological / Materials	0.5%					$3,100	
Geotechnical Sub-Total Cost						$3,100	
Property Requirements	1.0%					$ 6,200	
Property Requirements Sub-Total						$6,200	
Consultant Engineering/Design	15%					$ 93,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$93,600	
In House Labour/Engineering/Wages/CA	8%					$ 49,900	
In-house Labour/Wages Sub-Total						$49,900	
Project Contingency	10%					$78,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$78,000	
Non-Refundable HST	1.76%					$14,200	
Non-Refundable HST Sub-Total						$14,200	
Total (2024 Dollars)						$869,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$869,000	2024 Estimate

PROJECT NO.:	WW-SS-004	TIMELINE:	10-20 Years
PROJECT NAME:	East-West Collector's Road Trunk Sewer (West of King George Road)		
PROJECT OVERVIEW:	New trunk sewer along East-West Collector's Road from King George Road to Balmoral Drive road extension		

MAP



SANITARY CATCHMENT: Northwest-2 WWPS

PROJECT DESCRIPTION:
New trunk sewer extending along east-west collector's road east of Northwest-2 WWPS and west of King George Road. Sewer sized to accommodate full buildout.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	525 mm
TOTAL LENGTH:	1010 m

Tunnelled	0 m	0%
Open Cut	1010 m	100%

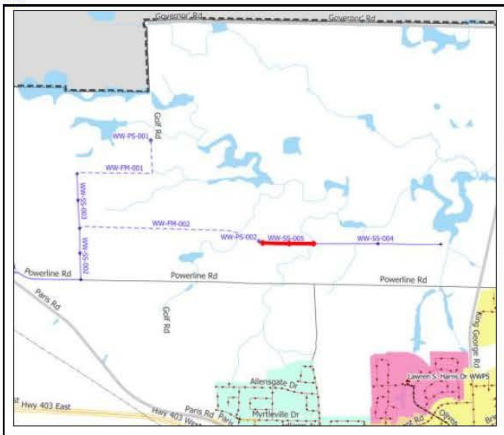
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			0		$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	1010 m	$1217	$1,229,131	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$122,913	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$122,913	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$1,475,000	
Geotechnical / Hydrogeological / Materials	0.5%					$7,400	
Geotechnical Sub-Total Cost						$7,400	
Property Requirements	1.0%					$ 14800	
Property Requirements Sub-Total						$14,800	
Consultant Engineering/Design	15%					$ 221,300	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$221,300	
In House Labour/Engineering/Wages/CA	8%					$ 118,000	
In-house Labour/Wages Sub-Total						$118,000	
Project Contingency	10%					$184,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$184,000	
Non-Refundable HST	1.76%					$33,500	
Non-Refundable HST Sub-Total						$33,500	
Total (2024 Dollars)						$2,054,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$2,054,000	2024 Estimate

PROJECT NO.:	WW-SS-005	TIMELINE:	5-10 Years
PROJECT NAME:	East-West Collector's Road Trunk Sewer (West of King George Road)		
PROJECT OVERVIEW:	New trunk sewer along East-West Collector's Road from Balmoral Drive road extension to Northwest-2 WWPS		

MAP







SANITARY CATCHMENT: Northwest-2 WWPS

PROJECT DESCRIPTION:
New trunk sewer extending along east-west collector's road east of Northwest-2 WWPS and west of King George Road. Sewer sized to accommodate full buildout.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	600 mm	
TOTAL LENGTH:	402 m	
Tunnelled	0 m	0%
Open Cut	402 m	100%

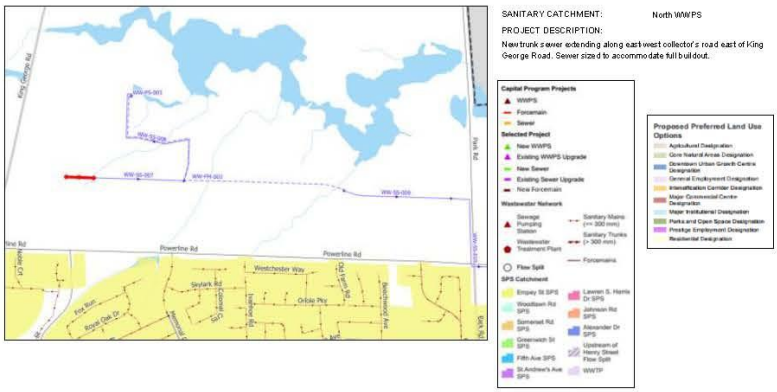
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			0		$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	402 m	$1,551	$623,469	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$11,520	$0	
Minor Creek Crossings			ea.	0	$329,590	$0	
Major Creek Crossings			ea.	0	$1,819,910	$0	
Road Crossings			ea.	0	$788,150	$0	
Major Road Crossings (Highway)			ea.	0	$1,819,910	$0	
Utility Crossings			ea.	0	$788,150	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$62,340	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$62,340	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$748,000	
Geotechnical / Hydrogeological / Materials	0.5%					$3,700	
Geotechnical Sub-Total Cost						$3,700	
Property Requirements	1.0%					$ 7,500	
Property Requirements Sub-Total						$7,500	
Consultant Engineering/Design	15%					$ 112,200	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$112,200	
In House Labour/Engineering/Wages/CA	8%					$ 59,800	
In-house Labour/Wages Sub-Total						$59,800	
Project Contingency	10%					$93,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$93,000	
Non-Refundable HST	1.76%					$17,000	
Non-Refundable HST Sub-Total						$17,000	
Total (2024 Dollars)						$1,041,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,041,000	2024 Estimate

PROJECT NO.:	WW-SS-006	TIMELINE:	10-20 Years
PROJECT NAME:	East-West Collector's Road Trunk Sewer (East of King George Road)		
PROJECT OVERVIEW:	New trunk sewer along East-West Collector's Road east of King George Road.		

MAP



SANITARY CATCHMENT: North WWPS

PROJECT DESCRIPTION:
New trunk sewer extending along east-west collector's road east of King George Road. Sewer sized to accommodate full buildout.

REQUIRED STUDIES: -

STUDY SCOPE:
EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	300 mm	
TOTAL LENGTH:	135 m	
Tunnelled	0 m	0%
Open Cut	135 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	135 m	$971	$131,085	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$2,089	$0	
Minor Creek Crossings			ea.	0	$98,877	$0	
Major Creek Crossings			ea.	0	$359,714	$0	
Road Crossings			ea.	0	$181,991	$0	
Major Road Crossings (Highway)			ea.	0	$359,714	$0	
Utility Crossings			ea.	0	$181,991	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$13,107	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$13,107	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$157,000	
Geotechnical / Hydrogeological / Materials	0.5%					$800	
Geotechnical Sub-Total Cost						$800	
Property Requirements	1.0%					$ 1,600	
Property Requirements Sub-Total						$1,600	
Consultant Engineering/Design	15%					$ 23,600	Includes: planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$23,600	
In House Labour/Engineering/Wages/CA	8%					$ 12,600	
In-house Labour/Wages Sub-Total						$12,600	
Project Contingency	10%					$20,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$20,000	
Non-Refundable HST	1.76%					$3,600	
Non-Refundable HST Sub-Total						$3,600	
Total (2024 Dollars)						$219,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$219,000	2024 Estimate

PROJECT NO.:	WW-SS-007	TIMELINE:	10-20 Years
PROJECT NAME:	East-West Collector's Road Trunk Sewer (East of King George Road)		
PROJECT OVERVIEW:	New trunk sewer along East-West Collector's Road east of King George Road and west of North WWPS.		

MAP



SANITARY CATCHMENT: North WWPS

PROJECT DESCRIPTION:
New trunk sewer extending along east/west collector's road east of King George Road and west of North WWPS. Sewer sized to accommodate full buildout.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contract restoration

PROPOSED DIAMETER:	300 mm	
TOTAL LENGTH:	444 m	
Tunnelled	0 m	0%
Open Cut	444 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	444 m	$971	$431,059	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$2,089	$0	
Minor Creek Crossings			ea.	0	$98,877	$0	
Major Creek Crossings			ea.	0	$369,714	$0	
Road Crossings			ea.	0	$181,991	$0	
Major Road Crossings (Highway)			ea.	0	$369,714	$0	
Utility Crossings			ea.	0	$181,991	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$43,100	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$43,100	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$517,000	
Geotechnical / Hydrogeological / Materials	0.5%					$2,600	
Geotechnical Sub-Total Cost						$2,600	
Property Requirements	1.0%					$ 5,200	
Property Requirements Sub-Total						$5,200	
Consultant Engineering/Design	15%					$ 77,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$77,600	
In House Labour/Engineering/Wages/CA	8%					$ 41,400	
In-house Labour/Wages Sub-Total						$41,400	
Project Contingency	10%					$64,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$64,000	
Non-Refundable HST	1.76%					$11,700	
Non-Refundable HST Sub-Total						$11,700	
Total (2024 Dollars)						$720,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$720,000	2024 Estimate

PROJECT NO.:	WW-SS-008	TIMELINE:	10-20 Years
PROJECT NAME:	East-West Collector's Road Trunk Sewer (East of King George Road)		
PROJECT OVERVIEW:	New trunk sewer along East-West Collector's Road east of King George Road extending to North SPS.		

MAP



SANITARY CATCHMENT: North WWPS

PROJECT DESCRIPTION:

New trunk sewer extending along east west collector's road east of King George Road extending to North SPS. Sewer sized to accommodate full buildout.



REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition uplifts unit cost and restoration

PROPOSED DIAMETER:	525 mm	
TOTAL LENGTH:	761 m	
Tunnelled	0 m	0%
Open Cut	761 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	761 m	$1,217	$926,107	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$92,611	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$92,611	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$1,111,000	

SANITARY CATCHMENT:	SANITARY CATCHMENT:	SANITARY CATCHMENT:	SANITARY CATCHMENT:			SANITARY CATCHMENT:	SANITARY CATCHMENT:
Geotechnical / Hydrogeological / Materials	0.5%					$5,600	
Geotechnical Sub-Total Cost						$5,600	
Property Requirements	1.0%					$ 11,100	
Property Requirements Sub-Total						$11,100	
Consultant Engineering/Design	15%					$ 166,700	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$166,700	
In House Labour/Engineering/Wages/CA	8%					$ 88,900	
In-house Labour/Wages Sub-Total						$88,900	
Project Contingency	10%					$138,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$138,000	
Non-Refundable HST	1.76%					$25,200	
Non-Refundable HST Sub-Total						$25,200	
Total (2024 Dollars)						$1,547,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,547,000	2024 Estimate

PROJECT NO.:	WW-SS-009	TIMELINE:	5-10 Years
PROJECT NAME:	East-West Collector's Road Trunk Sewer (East of North WWPS)		
PROJECT OVERVIEW:	New trunk sewer extending from North WWPS forcemain to Park Road North.		

MAP



SANITARY CATCHMENT: Emjey Street WWPS

PROJECT DESCRIPTION:
New trunk sewer extending from North WWPS forcemain to Park Road North. Sewer sized to accommodate full buildout.

EA exempt because the sewer will be on future road ROW.

OBJECTIVES:

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	525 mm
TOTAL LENGTH:	620 m

Tunnelled	0 m	0%
Open Cut	620 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	620 m	$1,217	$754,540	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	1	$296,600	$296,600	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$104,112	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$104,112	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$1,249,000	
Geotechnical / Hydrogeological / Materials	0.5%					$6,200	
Geotechnical Sub-Total Cost						$6,200	
Property Requirements	1.0%					$ 12,500	
Property Requirements Sub-Total						$12,500	
Consultant Engineering/Design	15%					$ 187,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$187,400	
In House Labour/Engineering/Wages/CA	8%					$ 99,900	
In-house Labour/Wages Sub-Total						$99,900	
Project Contingency	10%					$156,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$156,000	
Non-Refundable HST	1.76%					$28,400	
Non-Refundable HST Sub-Total						$28,400	
Total (2024 Dollars)						$1,739,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,739,000	2024 Estimate

PROJECT NO.:	WW-SS-010	TIMELINE:	5-10 Years
PROJECT NAME:	Powerline Road Trunk Sewer (East of North WWPS)		
PROJECT OVERVIEW:	New trunk sewer on Park Road and Powerline Road east of North WWPS		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
New trunk sewer extending from Park Road North to east of Wayne Gretzky Parkway along Powerline Road. Sewer needs to be sized as 825mm to accommodate full buildout (including LDSB).

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW and future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	825 mm	
TOTAL LENGTH:	820 m	
Tunnelled	0 m	0%
Open Cut	820 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	820 m	$2,279	$1,868,984	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$14,112	$0	
Minor Creek Crossings			ea.	0	$452,828	$0	
Major Creek Crossings			ea.	0	$2,278,470	$0	
Road Crossings			ea.	0	$1,014,564	$0	
Major Road Crossings (Highway)			ea.	0	$2,278,470	$0	
Utility Crossings			ea.	0	$1,014,564	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$186,898	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$186,898	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,243,000	
Geotechnical / Hydrogeological / Materials	0.5%					$11,200	
Geotechnical Sub-Total Cost						$11,200	
Property Requirements	1.0%					$ 22,400	
Property Requirements Sub-Total						$22,400	
Consultant Engineering/Design	15%					$ 336,500	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$336,500	
In House Labour/Engineering/Wages/CA	8%					$ 179,400	
In-house Labour/Wages Sub-Total						$179,400	
Project Contingency	10%					$279,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$279,000	
Non-Refundable HST	1.76%					$50,900	
Non-Refundable HST Sub-Total						$50,900	
Total (2024 Dollars)						$3,122,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$3,122,000	2024 Estimate

PROJECT NO.:	WW-SS-011	TIMELINE:	0-5 Years
PROJECT NAME:	Powerline Road Trunk Sewer (East of North WWPS)		
PROJECT OVERVIEW:	New trunk sewer extending from east of Wayne Gretzky Parkway to Coulbeck Road trunk sewer.		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
New trunk sewer extending from east of Wayne Gretzky Parkway to Coulbeck Road trunk sewer. Sewer needs to be sized as 825mm to accommodate full buildout (including LOSB).
EA exempt because the sewer will be on existing road ROW.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contract restoration

PROPOSED DIAMETER:	825 mm	
TOTAL LENGTH:	1002 m	
Tunnelled	0 m	0%
Open Cut	1002 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	1002 m	$2,279	$2,283,807	Proposed Collector Road ROW
Pipe Construction - Tunneling			m	0 m	$14,112	$0	
Minor Creek Crossings			ea.	0	$452,828	$0	
Major Creek Crossings			ea.	0	$2,278,470	$0	
Road Crossings			ea.	1	$1,014,564	$1,014,564	Powerline Road
Major Road Crossings (Highway)			ea.	0	$2,278,470	$0	
Utility Crossings			ea.	0	$1,014,564	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$329,837	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$329,837	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$3,958,000	
Geotechnical / Hydrogeological / Materials	0.5%					$19,800	
Geotechnical Sub-Total Cost						$19,800	
Property Requirements	1.0%					$ 39,600	
Property Requirements Sub-Total						$39,600	
Consultant Engineering/Design	15%					$ 593,700	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$593,700	
In House Labour/Engineering/Wages/CA	8%					$ 316,800	
In-house Labour/Wages Sub-Total						$316,800	
Project Contingency	10%					$493,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$493,000	
Non-Refundable HST	1.76%					$69,800	
Non-Refundable HST Sub-Total						$69,800	
Total (2024 Dollars)						$5,511,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$5,511,000	2024 Estimate

PROJECT NO.:	WW-SS-012	TIMELINE:	5-10 Years
PROJECT NAME:	East Expansion Lands Trunk Sewer		
PROJECT OVERVIEW:	New trunk sewer from Lynden Road to East WWPS along the East collector road		

MAP



SANITARY CATCHMENT: East WWPS

PROJECT DESCRIPTION:
New trunk sewer from Lynden Road to East WWPS along East collector's road.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on future road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	525 mm	
TOTAL LENGTH:	1724 m	
Tunnelled	0 m	0%
Open Cut	1724 m	100%

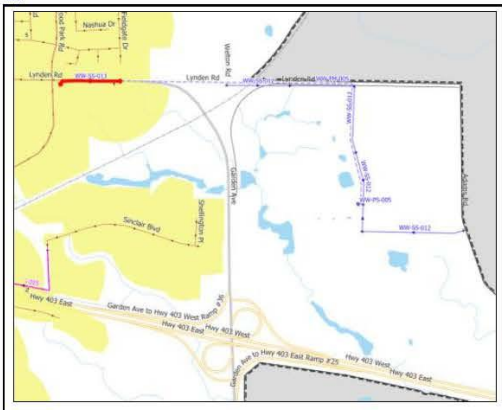
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5 m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	1724 m	$1,217	$2,098,041	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	2	$659,180	$1,318,360	Rail Crossing (two tracks)
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$341,640	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$341,640	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$4,100,000	
Geotechnical / Hydrogeological / Materials	0.5%					$20,500	
Geotechnical Sub-Total Cost						$20,500	
Property Requirements	1.0%					$ 41,000	
Property Requirements Sub-Total						$41,000	
Consultant Engineering/Design	15%					$ 615,000	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$615,000	
In House Labour/Engineering/Wages/CA	8%					$ 328,000	
In-house Labour/Wages Sub-Total						$328,000	
Project Contingency	10%					$510,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$510,000	
Non-Refundable HST	1.76%					$93,000	
Non-Refundable HST Sub-Total						$93,000	
Total (2024 Dollars)						$5,708,000	Rounded to nearest $1,000
Other Estimate						$5,145,000	
Chosen Estimate						$5,145,000	2024 Estimate

PROJECT NO.:	WW-SS-013	TIMELINE:	0-5 Years
PROJECT NAME:	Lynden Road Trunk Sewer Upgrades		
PROJECT OVERVIEW:	Upgrades along Lynden Road to Brantwood Park Road trunk sewer		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
Upsize existing 250 mm sewer to 525mm sewer along Lynden Road from East SPS forcemain to Brantwood Park Road.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	525 mm	
TOTAL LENGTH:	279 m	
Tunnelled	0 m	0%
Open Cut	279 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	279 m	$1,217	$339,522	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$33,953	
	15%						
Additional Construction Costs	10%		ea.			$37,346	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$37,346	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$448,000	
Geotechnical / Hydrogeological / Materials	1.0%					$4,500	
Geotechnical Sub-Total Cost						$4,500	
Property Requirements	1.5%					$ 6,700	
Property Requirements Sub-Total						$6,700	
Consultant Engineering/Design	15%					$ 67,200	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$67,200	
In House Labour/Engineering/Wages/CA	8%					$ 35,800	
In-house Labour/Wages Sub-Total						$35,800	
Project Contingency	15%					$94,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$94,000	
Non-Refundable HST	1.76%					$10,700	
Non-Refundable HST Sub-Total						$10,700	
Total (2024 Dollars)						$657,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$657,000	2024 Estimate

PROJECT NO.:	WW-SS-014	TIMELINE:	0-5 Years
PROJECT NAME:	Gilkinson Street Trunk Sewer		
PROJECT OVERVIEW:	Upgrades to trunk sewer along Gilkison Street		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Upgrade existing sewer to 825mm along Gilkison Street from Mount Pleasant Road to the trunk sewer connection at Delamere Street.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	825 mm	
TOTAL LENGTH:	835 m	
Tunnelled	0 m	0%
Open Cut	835 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	835 m	$2,279	$1,903,172	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$14,112	$0	
Minor Creek Crossings			ea.	0	$452,828	$0	
Major Creek Crossings			ea.	0	$2,278,470	$0	
Road Crossings			ea.	0	$1,014,564	$0	
Major Road Crossings (Highway)			ea.	0	$2,278,470	$0	
Utility Crossings			ea.	0	$1,014,564	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$190,317	
	15%						
Additional Construction Costs	10%		ea.			$209,349	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$209,349	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,512,000	
Geotechnical / Hydrogeological / Materials	1.0%					$25,100	
Geotechnical Sub-Total Cost						$25,100	
Property Requirements	1.5%					$ 37,700	
Property Requirements Sub-Total						$37,700	
Consultant Engineering/Design	15%					$ 376,800	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$376,800	
In House Labour/Engineering/Wages/CA	8%					$ 201,000	
In-house Labour/Wages Sub-Total						$201,000	
Project Contingency	15%					$473,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$473,000	
Non-Refundable HST	1.76%					$60,300	
Non-Refundable HST Sub-Total						$60,300	
Total (2024 Dollars)						$3,686,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$3,686,000	2024 Estimate

PROJECT NO.:	WW-SS-015	TIMELINE:	0-5 Years
PROJECT NAME:	Mount Pleasant Road Trunk Sewer		
PROJECT OVERVIEW:	New trunk sewer along Mount Pleasant Road from Tutela Heights Road to existing trunk sewer on Mount Pleasant Road.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
New trunk sewers along Mount Pleasant Road from Tutela Heights Road to existing trunk sewer on Mount Pleasant Road.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class accounts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	600 mm	
TOTAL LENGTH:	610 m	
Tunnelled	0 m	0%
Open Cut	610 m	100%

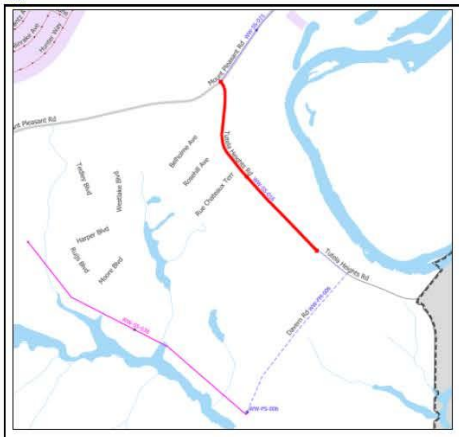
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5 m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	610 m	$1,551	$946,045	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$11,520	$0	
Minor Creek Crossings			ea.	0	$329,590	$0	
Major Creek Crossings			ea.	0	$1,819,910	$0	
Road Crossings			ea.	0	$788,150	$0	
Major Road Crossings (Highway)			ea.	0	$1,819,910	$0	
Utility Crossings			ea.	0	$788,150	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$94,604	
	15%						
Additional Construction Costs	10%		ea.			$104,055	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$104,055	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$1,249,000	
Geotechnical / Hydrogeological / Materials	1.0%					$12,500	
Geotechnical Sub-Total Cost						$12,500	
Property Requirements	1.5%					$ 18,700	
Property Requirements Sub-Total						$18,700	
Consultant Engineering/Design	15%					$ 187,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$187,400	
In House Labour/Engineering/Wages/CA	8%					$ 99,900	
In-house Labour/Wages Sub-Total						$99,900	
Project Contingency	15%					$235,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$235,000	
Non-Refundable HST	1.76%					$30,000	
Non-Refundable HST Sub-Total						$30,000	
Total (2024 Dollars)						$1,833,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,833,000	2024 Estimate

PROJECT NO.:	WW-SS-016	TIMELINE:	5-10 Years
PROJECT NAME:	Tutela Heights Road Trunk Sewer		
PROJECT OVERVIEW:	New trunk sewers along Tutela Heights Road from Tutela Heights WWPS forcemain to Mount Pleasant Road.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
New trunk sewers along Tutela Heights Road from Tutela Heights WWPS forcemain to Mount Pleasant Road.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED DIAMETER:	600 mm	
TOTAL LENGTH:	1535 m	
Tunnelled	0 m	0%
Open Cut	1535 m	100%

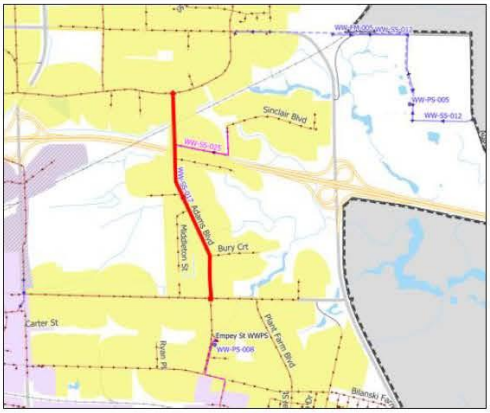
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	1535 m	$1,551	$2,380,620	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$11,520	$0	
Minor Creek Crossings			ea.	0	$329,590	$0	
Major Creek Crossings			ea.	0	$1,819,910	$0	
Road Crossings			ea.	0	$788,150	$0	
Major Road Crossings (Highway)			ea.	0	$1,819,910	$0	
Utility Crossings			ea.	0	$788,150	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	15%						
Additional Construction Costs	10%		ea.			$238,062	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$238,062	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,857,000	
Geotechnical / Hydrogeological / Materials	1.0%					$28,600	
Geotechnical Sub-Total Cost						$28,600	
Property Requirements	1.5%					$ 42,900	
Property Requirements Sub-Total						$42,900	
Consultant Engineering/Design	15%					$ 428,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$428,600	
In House Labour/Engineering/Wages/CA	8%					$ 228,600	
In-house Labour/Wages Sub-Total						$228,600	
Project Contingency	15%					$538,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$538,000	
Non-Refundable HST	1.76%					$68,600	
Non-Refundable HST Sub-Total						$68,600	
Total (2024 Dollars)						$4,192,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$4,192,000	2024 Estimate

PROJECT NO.:	WW-SS-017	TIMELINE:	20+ Years
PROJECT NAME:	Bodine Road Easement Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer from Roy Boulevard to Henry Street crossing under Highway 403		

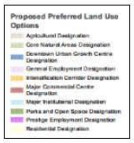
MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
Upsize existing 975 mm sewer to 1350mm sewer 270 m east of Bodine Road from Roy Boulevard to Henry Street crossing under Highway 403 to address future capacity issues. Sewer sized to accommodate full buildout. Project cost includes ongoing flow monitoring in existing trunk sewer to ensure I&I doesn't trigger project earlier than anticipated.





REQUIRED STUDIES:	Municipal Class EA
STUDY SCOPE:	Schedule B EA because some sections (Hwy403 crossing) will not be on existing road ROW.
OBJECTIVES:	.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	1350 mm
TOTAL LENGTH:	1622 m

Tunnelled	665 m	41%
Open Cut	957 m	59%

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Sewer 5 m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA			1	$300,000	$300,000	
Sub-Total Study Costs						$300,000	
Construction Cost							
Pipe Construction - Open Cut			m	957 m	$4078	$3,903,046	
Pipe Construction - Tunneling			m	665 m	$16,560	$11,012,400	
Minor Creek Crossings			ea.	0	$644850	$0	
Major Creek Crossings			ea.	0	$2,787,195	$0	
Road Crossings			ea.	0	$1,304,030	$0	
Major Road Crossings (Highway)			ea.	0	$2,787,195	$0	
Utility Crossings			ea.	0	$1,304,030	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$1,491,545	
	20%						
Additional Construction Costs	10%		ea.			$1,640,695	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$1,640,695	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$19,688,000	
Geotechnical / Hydrogeological / Materials	2.0%					$393,800	
Geotechnical Sub-Total Cost						$393,800	
Property Requirements	2.0%					$ 393,800	
Property Requirements Sub-Total						$393,800	
Consultant Engineering/Design	12%					$ 2,362,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$2,362,600	
In House Labour/Engineering/Wages/CA	6%					$ 1,181,200	
In-house Labour/Wages Sub-Total						$1,181,200	
Project Contingency	25%					$5,005,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$5,005,000	
Non-Refundable HST	1.76%					$507,600	
Non-Refundable HST Sub-Total						$507,600	
Total (2024 Dollars)						$30,832,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$30,832,000	2024 Estimate

PROJECT NO.:	WW-SS-018	TIMELINE:	0-5 Years
PROJECT NAME:	North Ashgrove Avenue Sewer Upgrades		
PROJECT OVERVIEW:	Upgrade existing sewers on Ashgrove Avenue		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:

Upgrade existing 375-500 mm sewers to 600mm sewers on Memorial Drive from Kensington Drive to Ashgrove Avenue and on Ashgrove Avenue from Memorial Drive to the Homestead Place to address capacity issues in North Brantford.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	600 mm	
TOTAL LENGTH:	1563 m	
Tunnelled	0 m	0%
Open Cut	1563 m	100%

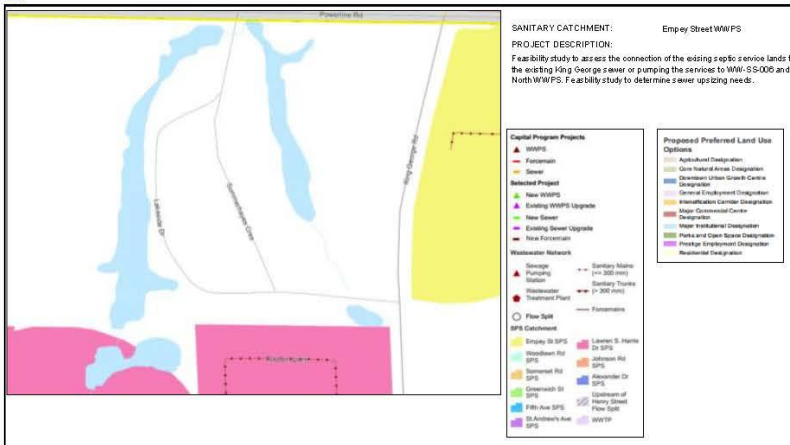
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	1563 m	$1,551	$2,424,045	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$11,520	$0	
Minor Creek Crossings			ea.	0	$329,590	$0	
Major Creek Crossings			ea.	0	$1,819,910	$0	
Road Crossings			ea.	0	$788,150	$0	
Major Road Crossings (Highway)			ea.	0	$1,819,910	$0	
Utility Crossings			ea.	0	$788,150	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$242,405	
	10%						
Additional Construction Costs	10%		ea.			$266,640	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$266,640	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$3,200,000	
Geotechnical / Hydrogeological / Materials	0.5%					$16,000	
Geotechnical Sub-Total Cost						$16,000	
Property Requirements	1.0%					$ 32,000	
Property Requirements Sub-Total						$32,000	
Consultant Engineering/Design	15%					$ 480,000	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$480,000	
In House Labour/Engineering/Wages/CA	8%					$ 256,000	
In-house Labour/Wages Sub-Total						$256,000	
Project Contingency	10%					$398,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$398,000	
Non-Refundable HST	1.76%					$72,600	
Non-Refundable HST Sub-Total						$72,600	
Total (2024 Dollars)						$4,455,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$4,455,000	2024 Estimate

PROJECT NO.:	WW-SS-019	TIMELINE:	0-5 Years
PROJECT NAME:	Summerhayes Crescent Servicing Study		
PROJECT OVERVIEW:	Study to determine feasibility of connecting Summerhayes Crescent to existing or proposed sewer system in North Brantford.		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
Feasibility study to assess the connection of the existing septic service lands to the existing King George sewer or pumping the services to WW-SS-006 and North WWPS. Feasibility study to determine sewer upsizing needs.

REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	The study will be a feasibility study to determine if the existing Summerhayes subdivision can be connected to the City's wastewater system.
OBJECTIVES:	Determine the best servicing strategy for the Summerhayes subdivision including maintaining existing septic systems, connecting to existing King George Road sewer including any potential sewer upsizing or pumping flows to proposed North WWPS in North Expansion Lands.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contract restoration

PROPOSED DIAMETER:		
TOTAL LENGTH:	0 m	
Tunnelled	0 m	#DIV/0!
Open Cut	0 m	#DIV/0!

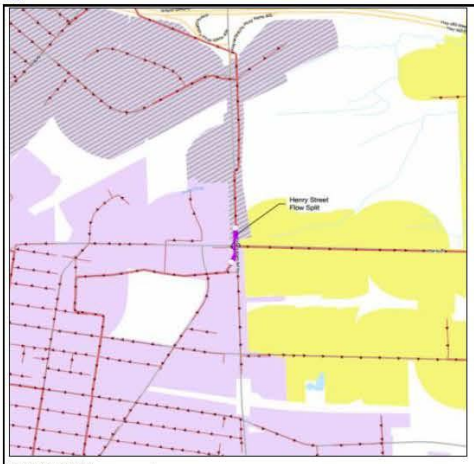
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			1	$200,000	$200,000	
Study	EA					$0	
Sub-Total Study Costs						$200,000	
	10%						
	10%						
Sub-Total Construction Base Costs						$0	
Geotechnical / Hydrogeological / Materials	0.5%					$0	
Geotechnical Sub-Total Cost						$0	
Property Requirements	1.0%					$ -	
Property Requirements Sub-Total						$0	
Consultant Engineering/Design	15%					$	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$0	
In House Labour/Engineering/Wages/CA	8%					$ -	
In-house Labour/Wages Sub-Total						$0	
Project Contingency	10%					$0	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$0	
Non-Refundable HST	1.76%					$0	
Non-Refundable HST Sub-Total						$0	
Total (2024 Dollars)						$200,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$200,000	2024 Estimate

PROJECT NO.:	WW-SS-020	TIMELINE:	0-5 Years
PROJECT NAME:	Henry Street Flow Split Reconfiguration		
PROJECT OVERVIEW:	Reconfigure flow split at Henry Street and Wayne Gretzky Streeet		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
Reconfigure sewer flow split to redirect flows to Empey WWPS to relieve downstream sewer capacity constraints.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because of reconfiguration at existing facility without any construction.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	825 mm	
TOTAL LENGTH:	50 m	
Tunnelled	0 m	0%
Open Cut	50 m	100%

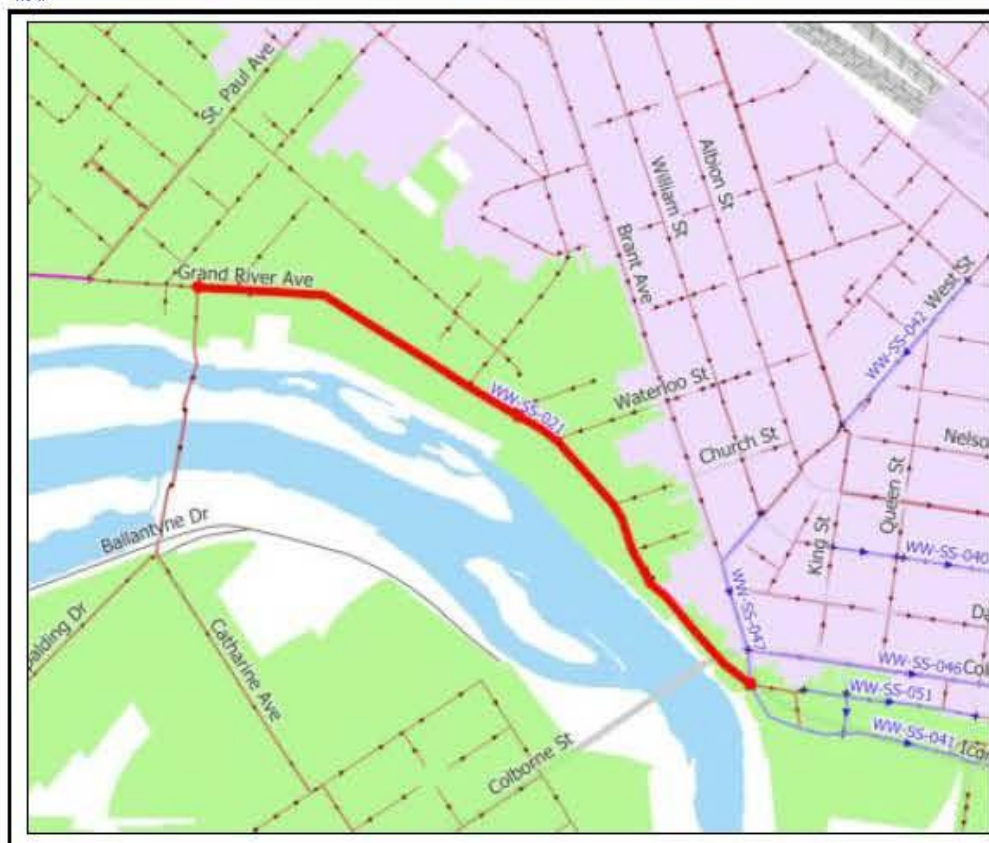
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	50 m	$5,764	$288,219	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$14,112	$0	
Minor Creek Crossings			ea.	0	$452,828	$0	
Major Creek Crossings			ea.	0	$2,278,470	$0	
Road Crossings			ea.	0	$1,014,564	$0	
Major Road Crossings (Highway)			ea.	0	$2,278,470	$0	
Utility Crossings			ea.	0	$1,014,564	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$57,644	
	20%						
Additional Construction Costs	10%		ea.			$34,588	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$34,588	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$415,000	
Geotechnical / Hydrogeological / Materials	2.0%					$8,300	
Geotechnical Sub-Total Cost						$8,300	
Property Requirements	2.0%					$ 8,300	
Property Requirements Sub-Total						$8,300	
Consultant Engineering/Design	15%					$ 62,300	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$62,300	
In House Labour/Engineering/Wages/CA	8%					$ 33,200	
In-house Labour/Wages Sub-Total						$33,200	
Project Contingency	25%					$132,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$132,000	
Non-Refundable HST	1.76%					$11,000	
Non-Refundable HST Sub-Total						$11,000	
Total (2024 Dollars)						$670,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$670,000	2024 Estimate

PROJECT NO.:	WW-SS-021	TIMELINE:	5-10 Years
PROJECT NAME:	Grand River Avenue Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewers along Grand River Ave from Jubilee Avenue to Icomm Drive		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:

Optimize Grand River Avenue and Jubilee Avenue flowsplit by diverting more flows to Grand River Avenue. Upsize existing 300 mm sanitary sewers along Grand River Avenue to accommodate increased flows.



REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Suburban	Area Condition uplifts unit cost and restoration

PROPOSED DIAMETER:		525 mm	
TOTAL LENGTH:		1291 m	
	Tunnelled	0 m	0%
	Open Cut	1291 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	1291 m	$1,217	$1,571,097	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	1	$659,180	$659,180	Coulborne
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$223,028	
	20%						
Additional Construction Costs	10%		ea.			$245,330	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$245,330	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,944,000	
Geotechnical / Hydrogeological / Materials	2.0%					$58,900	
Geotechnical Sub-Total Cost						$58,900	
Property Requirements	2.0%					$ 58,900	
Property Requirements Sub-Total						$58,900	
Consultant Engineering/Design	15%					$ 441,600	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$441,600	
In House Labour/Engineering/Wages/CA	8%					$ 235,500	
In-house Labour/Wages Sub-Total						$235,500	
Project Contingency	25%					$935,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$935,000	
Non-Refundable HST	1.76%					$78,100	
Non-Refundable HST Sub-Total						$78,100	
Total (2024 Dollars)						$4,752,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$4,752,000	2024 Estimate

PROJECT NO.:	WW-SS-022	TIMELINE:	10-20 Years
PROJECT NAME:	Oakhill Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewers from Jennings Road to Colborne Street West along Oakhill Drive		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Existing sewer upsizes from 675/750 mm to 1050 mm along Oakhill Drive. Upsize sewer to accommodate growth flows from the North Expansion Lands as well as address any potential operational issues due to the smaller sewer diameter.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	1050 mm	
TOTAL LENGTH:	1116 m	
Tunnelled	0 m	0%
Open Cut	1116 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	1116 m	$3,189	$3,559,915	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$14,976	$0	
Minor Creek Crossings			ea.	0	$613,324	$0	
Major Creek Crossings			ea.	0	$2,550,740	$0	
Road Crossings			ea.	0	$1,209,452	$0	
Major Road Crossings (Highway)			ea.	0	$2,550,740	$0	
Utility Crossings			ea.	0	$1,209,452	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$355,891	
	15%						
Additional Construction Costs	10%		ea.			$391,481	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$391,481	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$4,698,000	
Geotechnical / Hydrogeological / Materials	1.0%					$47,000	
Geotechnical Sub-Total Cost						$47,000	
Property Requirements	1.5%					$ 70,500	
Property Requirements Sub-Total						$70,500	
Consultant Engineering/Design	15%					$ 704,700	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$704,700	
In House Labour/Engineering/Wages/CA	8%					$ 375,800	
In-house Labour/Wages Sub-Total						$375,800	
Project Contingency	15%					$884,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$884,000	
Non-Refundable HST	1.76%					$112,700	
Non-Refundable HST Sub-Total						$112,700	
Total (2024 Dollars)						$6,893,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$6,893,000	2024 Estimate

PROJECT NO.: WW-SS-023 TIMELINE: 0-20 Years

PROJECT NAME: Downtown Sewers - Chatham St

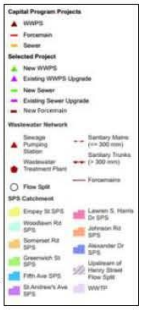
PROJECT OVERVIEW: Sewer upsize along Chatham Street from Charlotte Street to Clarence Street.

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upsize along Chatham Street from Charlotte Street to Clarence Street.





REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	450 mm	
TOTAL LENGTH:	142 m	
Tunnelled	0 m	0%
Open Cut	142 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study		6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA				$0	
Sub-Total Study Costs					$11,000	
Construction Cost						
Pipe Construction - Open Cut		m	142 m	$1,129	$160,351	
Pipe Construction - Tunneling		m	0 m	$9,216	$0	
Minor Creek Crossings		ea.	0	$283,734	$0	
Major Creek Crossings		ea.	0	$1,475,990	$0	
Road Crossings		ea.	0	$650,582	$0	
Major Road Crossings (Highway)		ea.	0	$1,475,990	$0	
Utility Crossings		ea.	0	$650,582	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$16,035	
	15%					
Additional Construction Costs	10%	ea.			$17,639	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%	ea.			$17,639	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$212,000	
Geotechnical / Hydrogeological / Materials	1.0%				$2,100	
Geotechnical Sub-Total Cost					$2,100	
Property Requirements	1.5%				$ 3,200	
Property Requirements Sub-Total					$3,200	
Consultant Engineering/Design	15%				$ 31,800	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$31,800	
In House Labour/Engineering/Wages/CA	8%				$ 17,000	
In-house Labour/Wages Sub-Total					$17,000	
Project Contingency	15%				$40,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$40,000	
Non-Refundable HST	1.76%				$5,100	
Non-Refundable HST Sub-Total					$5,100	
Total (2024 Dollars)					$322,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$322,000	2024 Estimate

PROJECT NO.:	WW-SS-024	TIMELINE:	20+ Years
PROJECT NAME:	Mohawk Street Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer on Mohawk Street from Mohawk Street siphon (south of Forest Road) to WWTP entrance		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
Upsize existing 1200 mm sewer on Mohawk Street from Mohawk Street siphon (south of Forest Road) to WWTP entrance to address future capacity issues. Sewer sized to accommodate full buildout. Project cost includes ongoing flow monitoring in existing trunk sewer to ensure I&I doesn't trigger project earlier than anticipated.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Suburban	Area Condition splits out contrast restoration

PROPOSED DIAMETER:	1350 mm	
TOTAL LENGTH:	915 m	
Tunnelled	0 m	0%
Open Cut	915 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	915 m	$4078	$3,731,753	
Pipe Construction - Tunneling			m	0 m	$16,580	$0	
Minor Creek Crossings			ea.	0	$644850	$0	
Major Creek Crossings			ea.	0	$2,787,185	$0	
Road Crossings			ea.	0	$1,304,030	$0	
Major Road Crossings (Highway)			ea.	0	$2,787,185	$0	
Utility Crossings			ea.	0	$1,304,030	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$373,175	
	20%						
Additional Construction Costs	10%		ea.			$410,493	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$410,493	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$4,926,000	
Geotechnical / Hydrogeological / Materials	2.0%					$98,500	
Geotechnical Sub-Total Cost						$98,500	
Property Requirements	2.0%					$ 98,500	
Property Requirements Sub-Total						$98,500	
Consultant Engineering/Design	15%					$ 738,900	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$738,900	
In House Labour/Engineering/Wages/CA	8%					$ 394,100	
In-house Labour/Wages Sub-Total						$394,100	
Project Contingency	25%					$1,564,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,564,000	
Non-Refundable HST	1.76%					$130,700	
Non-Refundable HST Sub-Total						$130,700	
Total (2024 Dollars)						$7,951,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$7,951,000	2024 Estimate

PROJECT NO.:	WW-SS-026	TIMELINE:	0-5 Years
PROJECT NAME:	Division St Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer on Division St between Dorothy St and Tenth Ave. Existing pipe acting as a bottleneck with a small diameter.		

MAP



SANITARY CATCHMENT WWTP

PROJECT DESCRIPTION:
Upsize existing sewer on Division St between Dorothy St and Tenth Ave from 300mm to 450mm. Existing pipe acting as a bottleneck with a small diameter.





REQUIRED STUDIES: -

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 3	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	25%	
Area Condition:	Urban	Area Condition splits into cost and inflation

PROPOSED DIAMETER:	450 mm	
TOTAL LENGTH:	80 m	
Tunnelled	0 m	0%
Open Cut - 5m	80 m	100%
Open Cut - 10m	0 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	80 m	$1,129	$90,339	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$4,233	$0	
Pipe Construction - Tunneling			m	0 m	$9,216	$0	
Minor Creek Crossings			ea.	0	$283,794	$0	
Major Creek Crossings			ea.	0	$1,475,990	$0	
Road Crossings			ea.	0	$650,582	$0	
Major Road Crossings (Highway)			ea.	0	$1,475,990	$0	
Utility Crossings			ea.	0	$650,582	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$18,068	
	15%						
Additional Construction Costs	10%		ea.			$10,941	Includes: Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$10,941	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$130,000	
Geotechnical / Hydrogeological / Materials	1.0%					$1,300	
Geotechnical Sub-Total Cost						$1,300	
Property Requirements	1.5%					$ 2,000	
Property Requirements Sub-Total						$2,000	
Consultant Engineering/Design	15%					$ 19,500	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$19,500	
In House Labour/Engineering/Wages/CA	8%					$ 10,400	
In-house Labour/Wages Sub-Total						$10,400	
Project Contingency	15%					$24,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$24,000	
Non-Refundable HST	1.76%					$3,100	
Non-Refundable HST Sub-Total						$3,100	
Total (2024 Dollars)						$190,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$190,000	2024 Estimate

PROJECT NO.:	WW-SS-027	TIMELINE:	0-5 Years
PROJECT NAME:	Fifth Ave Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer size along Fifth Ave from Fifth Ave SPS till Whitehead St.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Upsize existing sewer size along Fifth Ave from Fifth Ave SPS till Whitehead St from 300mm to 450mm.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 3	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	20%	
Area Condition:	Suburban	Area Condition splits out contract and inflation

PROPOSED DIAMETER:	450 mm	
TOTAL LENGTH:	477 m	
Tunnelled	0 m	0%
Open Cut - 5m	477 m	100%
Open Cut - 10m	0 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	477 m	$1,129	$538,644	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$4,233	$0	
Pipe Construction - Tunneling			m	0 m	$9,216	$0	
Minor Creek Crossings			ea.	0	$283,794	$0	
Major Creek Crossings			ea.	0	$1,475,990	$0	
Road Crossings			ea.	0	$650,582	$0	
Major Road Crossings (Highway)			ea.	0	$1,475,990	$0	
Utility Crossings			ea.	0	$650,582	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$53,864	
	10%						
Additional Construction Costs	10%		ea.			$59,251	Includes: Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$59,251	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$711,000	
Geotechnical / Hydrogeological / Materials	0.5%					$3,600	
Geotechnical Sub-Total Cost						$3,600	
Property Requirements	1.0%					$ 7,100	
Property Requirements Sub-Total						$7,100	
Consultant Engineering/Design	15%					$ 106,700	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$106,700	
In House Labour/Engineering/Wages/CA	8%					$ 56,900	
In-house Labour/Wages Sub-Total						$56,900	
Project Contingency	10%					$89,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$89,000	
Non-Refundable HST	1.76%					$ 16,100	
Non-Refundable HST Sub-Total						$ 16,100	
Total (2024 Dollars)						$990,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$990,000	2024 Estimate

PROJECT NO.:	WW-SS-028	TIMELINE:	10-20 Years
PROJECT NAME:	Brantwood Park Rd Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer size along Brantwood Park Rd.		

MAP



SANITARY CATCHMENT WWTP

PROJECT DESCRIPTION:

Upsize existing sewer size along Brantwood Park Rd from 250mm to 300mm to prevent bottleneck, just north of Banbury Rd.





REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition splits out cost and inflation

PROPOSED DIAMETER:	300 mm	
TOTAL LENGTH:	76 m	
Tunnelled	0 m	0%
Open Cut - 5m	0 m	100%
Open Cut - 10m	76 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	0 m	$971	$0	
Pipe Construction - Open Cut (10m)			m	76 m	$3,961	$301,067	Existing road ROW & expansion lands
Pipe Construction - Tunneling			m	0 m	$2,088	$0	
Minor Creek Crossings			ea.	0	$98,877	$0	
Major Creek Crossings			ea.	0	$369,714	$0	
Road Crossings			ea.	1	$181,991	$181,991	
Major Road Crossings (Highway)			ea.	0	$369,714	$0	
Utility Crossings			ea.	0	$181,991	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$96,612	
	20%						
Additional Construction Costs	10%		ea.			$57,967	Includes: Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$57,967	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$696,000	
Geotechnical / Hydrogeological / Materials	2.0%					$13,900	
Geotechnical Sub-Total Cost						$13,900	
Property Requirements	2.0%					$ 13,900	
Property Requirements Sub-Total						$13,900	
Consultant Engineering/Design	15%					$ 104,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$104,400	
In House Labour/Engineering/Wages/CA	8%					$ 55,700	
In-house Labour/Wages Sub-Total						$55,700	
Project Contingency	25%					$221,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$221,000	
Non-Refundable HST	1.76%					$ 18,500	
Non-Refundable HST Sub-Total						$ 18,500	
Total (2024 Dollars)						$1,123,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,123,000	2024 Estimate

PROJECT NO.:	WW-SS-029	TIMELINE:	10-20 Years
PROJECT NAME:	Memorial Dr Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer size along Memorial Drive		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Upsize existing sewer size along Memorial Drive, just south of Buckingham St from 300mm to 375mm to prevent bottleneck.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 3	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Urban	Area Condition splits out cost and inflation

PROPOSED DIAMETER:	375 mm	
TOTAL LENGTH:	80 m	
Tunnelled	0 m	0%
Open Cut - 5m	80 m	100%
Open Cut - 10m	0 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	80 m	$1,037	$82,963	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$4,081	$0	
Pipe Construction - Tunneling			m	0 m	$9,072	$0	
Minor Creek Crossings			ea.	0	$237,878	$0	
Major Creek Crossings			ea.	0	$1,411,505	$0	
Road Crossings			ea.	1	$598,994	$598,994	
Major Road Crossings (Highway)			ea.	0	$1,411,505	$0	
Utility Crossings			ea.	0	$598,994	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$136,391	
	20%						
Additional Construction Costs	10%		ea.			$81,835	Includes: Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$81,835	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$982,000	
Geotechnical / Hydrogeological / Materials	2.0%					$19,600	
Geotechnical Sub-Total Cost						$19,600	
Property Requirements	2.0%					$ 19,600	
Property Requirements Sub-Total						$19,600	
Consultant Engineering/Design	15%					$ 147,300	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$147,300	
In House Labour/Engineering/Wages/CA	8%					$ 78,600	
In-house Labour/Wages Sub-Total						$78,600	
Project Contingency	20%					$249,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$249,000	
Non-Refundable HST	1.76%					$24,900	
Non-Refundable HST Sub-Total						$24,900	
Total (2024 Dollars)						$1,521,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,521,000	2024 Estimate

PROJECT NO.:	WW-SS-030	TIMELINE:	10-20 Years
PROJECT NAME:	Clarence St Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer size along Clarence St		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Upsize existing sewer size along Clarence Street from Marlborough St to Alice St.





REQUIRED STUDIES: -

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Suburban	Area Condition splits out cost and inflation

PROPOSED DIAMETER:	450 mm	
TOTAL LENGTH:	606 m	
Tunnelled	0 m	0%
Open Cut - 5m	606 m	100%
Open Cut - 10m	0 m	

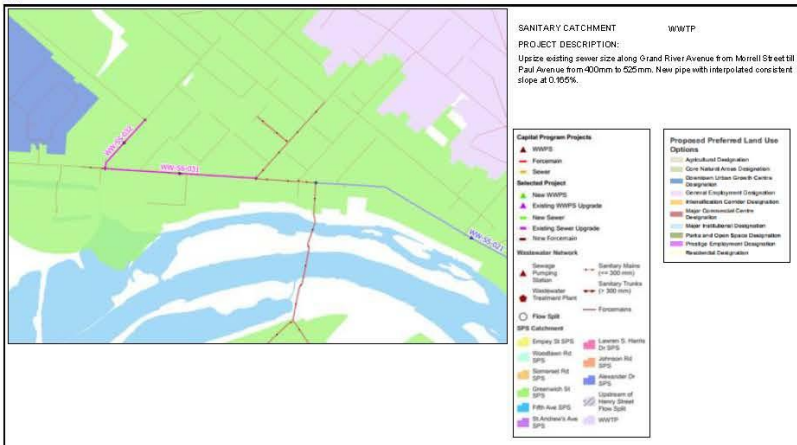
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	606 m	$1,129	$684,315	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$4,233	$0	
Pipe Construction - Tunneling			m	0 m	$9,216	$0	
Minor Creek Crossings			ea.	0	$283,794	$0	
Major Creek Crossings			ea.	0	$1,475,990	$0	
Road Crossings			ea.	6	$650,582	$3,903,492	
Major Road Crossings (Highway)			ea.	0	$1,475,990	$0	
Utility Crossings			ea.	1	$650,582	$650,582	railway crossing
Pipe Construction Uplift (Based on Area Conditions)	10%					$523,839	
	20%						
Additional Construction Costs	10%		ea.			$576,223	Includes: Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$576,223	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$6,915,000	
Geotechnical / Hydrogeological / Materials	2.0%					$138,300	
Geotechnical Sub-Total Cost						$138,300	
Property Requirements	2.0%					$ 138,300	
Property Requirements Sub-Total						$138,300	
Consultant Engineering/Design	15%					$ 1,037,300	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$1,037,300	
In House Labour/Engineering/Wages/CA	8%					$ 553,200	
In-house Labour/Wages Sub-Total						$553,200	
Project Contingency	25%					$2,196,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$2,196,000	
Non-Refundable HST	1.76%					$183,500	
Non-Refundable HST Sub-Total						$183,500	
Total (2024 Dollars)						$11,162,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$11,162,000	2024 Estimate

PROJECT NO.:	WW-SS-031	TIMELINE:	5-10 Years
PROJECT NAME:	Grand River Ave Sewer Upgrades (West Section)		
PROJECT OVERVIEW:	Upsize existing sewer size along Grand River Avenue from Morrell Street till St Paul Avenue		

MAP



REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition splits out cost and inflation

PROPOSED DIAMETER:	525 mm	
TOTAL LENGTH:	497 m	
Tunnelled	0 m	0%
Open Cut - 5m	497 m	100%
Open Cut - 10m	0 m	

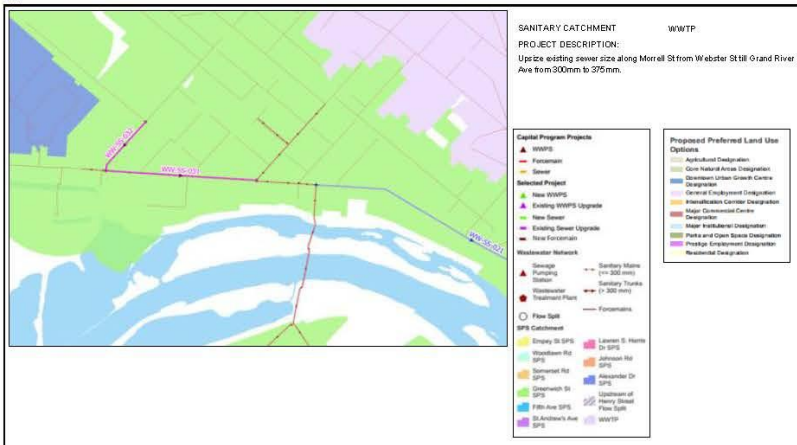
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	497 m	$1,217	$604,830	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$4,372	$0	
Pipe Construction - Tunneling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$295,600	$0	
Major Creek Crossings			ea.	0	$1,497,495	$0	
Road Crossings			ea.	5	$659,180	$3,295,900	
Major Road Crossings (Highway)			ea.	0	$1,497,495	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$780,146	
	20%						
Additional Construction Costs	10%		ea.			$468,088	Includes: Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$468,088	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$5,617,000	
Geotechnical / Hydrogeological / Materials	2.0%					$112,300	
Geotechnical Sub-Total Cost						$112,300	
Property Requirements	2.0%					$ 112,300	
Property Requirements Sub-Total						$112,300	
Consultant Engineering/Design	15%					$ 842,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$842,600	
In House Labour/Engineering/Wages/CA	8%					$ 449,400	
In-house Labour/Wages Sub-Total						$449,400	
Project Contingency	25%					$1,783,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,783,000	
Non-Refundable HST	1.76%					$149,000	
Non-Refundable HST Sub-Total						$149,000	
Total (2024 Dollars)						$9,066,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$9,066,000	2024 Estimate

PROJECT NO.:	WW-SS-032	TIMELINE:	5-10 Years
PROJECT NAME:	Morrell St Sewer Upgrades		
PROJECT OVERVIEW:	Upsize existing sewer size along Morrell St from Webster St till Grand River Ave		

MAP



REQUIRED STUDIES:	-
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition splits out cost and inflation

PROPOSED DIAMETER:	375 mm
TOTAL LENGTH:	216 m

Tunnelled	0 m	0%
Open Cut - 5m	216 m	100%
Open Cut - 10m	0 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	216 m	$1,037	$224,000	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$4,081	$0	
Pipe Construction - Tunneling			m	0 m	$9,072	$0	
Minor Creek Crossings			ea.	0	$237,878	$0	
Major Creek Crossings			ea.	0	$1,411,505	$0	
Road Crossings			ea.	2	$598,994	$1,197,988	
Major Road Crossings (Highway)			ea.	0	$1,411,505	$0	
Utility Crossings			ea.	0	$598,994	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$284,398	
	20%						
Additional Construction Costs	10%		ea.			$170,639	Includes: Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$170,639	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,048,000	
Geotechnical / Hydrogeological / Materials	2.0%					$41,000	
Geotechnical Sub-Total Cost						$41,000	
Property Requirements	2.0%					$ 41,000	
Property Requirements Sub-Total						$41,000	
Consultant Engineering/Design	15%					$ 307,200	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$307,200	
In House Labour/Engineering/Wages/CA	8%					$ 163,800	
In-house Labour/Wages Sub-Total						$163,800	
Project Contingency	25%					$650,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$650,000	
Non-Refundable HST	1.76%					$54,300	
Non-Refundable HST Sub-Total						$54,300	
Total (2024 Dollars)						$3,305,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$3,305,000	2024 Estimate

PROJECT NO.: WW-SS-033 TIMELINE: 5-10 Years

PROJECT NAME: Fen Ridge Court Sewer to Resolve Oak Park Road Bottleneck

PROJECT OVERVIEW: Upsizing from 600mm to 825mm sewer on Fen Ridge Court

MAP







SANITARY CATCHMENT WWTP

PROJECT DESCRIPTION:

Upsizing from 600mm to 825mm sewer on Fen Ridge Court, just west of Oak Park Rd.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition uplifts unit cost based on location

PROPOSED DIAMETER:	825 mm
TOTAL LENGTH:	50 m

Tunnelled	0 m	0%
Open Cut - 5m	50 m	100%
Open Cut - 10m	0 m	0%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study				$0	
Study	EA				$0	
Sub-Total Study Costs					$0	
Construction Cost						
Pipe Construction - Open Cut (5m)		m	50 m	$2,279	$113,982	
Pipe Construction - Open Cut (10m)		m	0 m	$5,764	$0	
Pipe Construction - Tunneling		m	0 m	$14,112	$0	
Minor Creek Crossings		ea.	0	$452,828	$0	
Major Creek Crossings		ea.	0	$2,278,470	$0	
Road Crossings		ea.	0	$1,014,564	$0	
Major Road Crossings (Highway)		ea.	0	$2,278,470	$0	
Utility Crossings		ea.	0	$1,014,564	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$11,396	
	10%					
Additional Construction Costs	10%	ea.			$12,536	Includes Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional $ Allowance	10%	ea.			$12,536	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$150,000	
Geotechnical / Hydrogeological / Materials	0.5%				$800	
Geotechnical Sub-Total Cost					$800	
Property Requirements	1.0%				$ 1,500	
Property Requirements Sub-Total					$1,500	
Consultant Engineering/Design	15%				$ 22,500	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$22,500	
In House Labour/Engineering/Wages/CA	8%				$ 12,000	
In-house Labour/Wages Sub-Total					$12,000	
Project Contingency	10%				$19,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$19,000	
Non-Refundable HST	1.76%				$3,400	
Non-Refundable HST Sub-Total					$3,400	
Total (2024 Dollars)					$209,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$209,000	2024 Estimate

PROJECT NO.:	WW-SS-034	TIMELINE:	0-5 Years
PROJECT NAME:	Greenwich St Sewer Upgrades (US of WWPS)		
PROJECT OVERVIEW:	Upsize existing sewer size along Greenwich St		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Upsize existing sewer size along Greenwich St from 750mm to 900mm.

REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition splits out cost and inflation

PROPOSED DIAMETER:	900 mm	
TOTAL LENGTH:	77 m	
Tunnelled	0 m	0%
Open Cut - 5m	77 m	100%
Open Cut - 10m	0 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0.5	$200,000	$100,000	one feasibility for the Greenwich Trunk Sewers
Study	EA					$0	
Sub-Total Study Costs						$100,000	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	77 m	$2,671	$205,676	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$6,302	$0	
Pipe Construction - Tunneling			m	0 m	$14,400	$0	
Minor Creek Crossings			ea.	0	$630,210	$0	
Major Creek Crossings			ea.	0	$2,393,110	$0	
Road Crossings			ea.	0	$1,103,410	$0	
Major Road Crossings (Highway)			ea.	0	$2,393,110	$0	
Utility Crossings			ea.	0	$1,103,410	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$41,135	
	20%						
Additional Construction Costs	10%		ea.			$24,681	Includes Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$24,681	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$296,000	
Geotechnical / Hydrogeological / Materials	2.0%					$5,900	
Geotechnical Sub-Total Cost						$5,900	
Property Requirements	2.0%					$ 5,900	
Property Requirements Sub-Total						$5,900	
Consultant Engineering/Design	15%					$ 44,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$44,400	
In House Labour/Engineering/Wages/CA	8%					$ 23,700	
In-house Labour/Wages Sub-Total						$23,700	
Project Contingency	25%					$94,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$94,000	
Non-Refundable HST	1.76%					$7,900	
Non-Refundable HST Sub-Total						$7,900	
Total (2024 Dollars)						$578,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$578,000	2024 Estimate

PROJECT NO.:	WW-SS-095	TIMELINE:	0-5 Years
PROJECT NAME:	Greenwich St Sewer Upgrades (DS of WWPS)		
PROJECT OVERVIEW:	Upsize existing sewer size along Greenwich St		

MAP

SANITARY CATCHMENT WWTP

PROJECT DESCRIPTION:
Upsize existing sewer size along Greenwich St from 750mm to 900mm.



REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition uplifts unit cost based on location

PROPOSED DIAMETER:	900 mm	
TOTAL LENGTH:	99 m	
Tunnelled	0 m	0%
Open Cut - 5m	99 m	100%
Open Cut - 10m	0 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

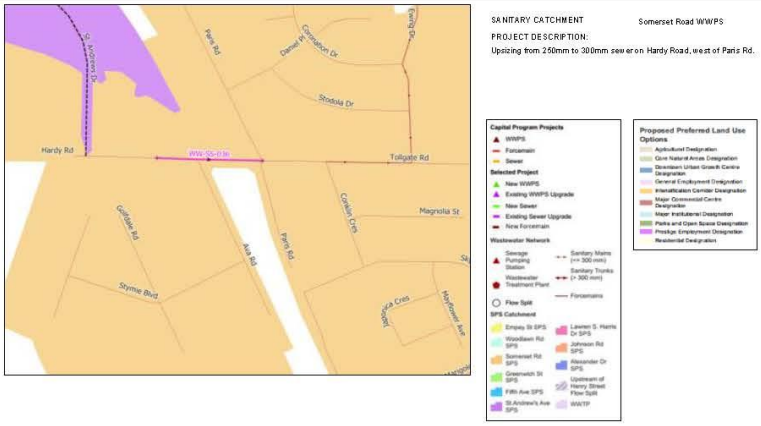
COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0.5	$200,000	$100,000	One Feasibility Study for the Greenwich Street Trunk Sewers
Study	EA					$0	
Sub-Total Study Costs						$100,000	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	99 m	$2,671	$264,440	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	0 m	$6,302	$0	
Pipe Construction - Tunneling			m	0 m	$14,400	$0	
Minor Creek Crossings			ea.	0	$530,210	$0	
Major Creek Crossings			ea.	0	$2,393,110	$0	
Road Crossings			ea.	0	$1,103,410	$0	
Major Road Crossings (Highway)			ea.	0	$2,393,110	$0	
Utility Crossings			ea.	0	$1,103,410	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$52,888	
	20%						
Additional Construction Costs	10%		ea.			$31,733	Includes Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$31,733	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$381,000	
Geotechnical / Hydrogeological / Materials	2.0%					$7,600	
Geotechnical Sub-Total Cost						$7,600	
Property Requirements	2.0%					$ 7,600	
Property Requirements Sub-Total						$7,600	
Consultant Engineering/Design	15%					$ 57,200	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$57,200	
In House Labour/Engineering/Wages/CA	8%					$ 30,500	
In-house Labour/Wages Sub-Total						$30,500	
Project Contingency	25%					$121,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$121,000	
Non-Refundable HST	1.76%					$10,100	
Non-Refundable HST Sub-Total						$10,100	
Total (2024 Dollars)						$715,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$715,000	2024 Estimate

PROJECT NO.: WW-SS-036 TIMELINE: 10-20 Years

PROJECT NAME: Hardy Road Sewer Upgrades

PROJECT OVERVIEW: Upsizing from 250mm to 300mm sewer on Hardy Road.

MAP



SANITARY CATCHMENT Somerset Road WWPS

PROJECT DESCRIPTION:
Upsizing from 250mm to 300mm sewer on Hardy Road, west of Paris Rd.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	300 mm
TOTAL LENGTH:	198 m

Tunnelled	0 m	0%
Open Cut - 5m	198 m	100%
Open Cut - 10m	0 m	0%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study				$0	
Study	EA				$0	
Sub-Total Study Costs					$0	
Construction Cost						
Pipe Construction - Open Cut (5m)		m	198 m	$971	$192,229	
Pipe Construction - Open Cut (10m)		m	0 m	$3,961	$0	
Pipe Construction - Tunneling		m	0 m	$2,088	$0	
Minor Creek Crossings		ea.	0	$98,877	$0	
Major Creek Crossings		ea.	0	$369,714	$0	
Road Crossings		ea.	1	$181,991	$181,991	
Major Road Crossings (Highway)		ea.	0	$369,714	$0	
Utility Crossings		ea.	1	$181,991	$181,991	Railroad crossing
Pipe Construction Uplift (Based on Area Conditions)	10%				$55,621	
	15%					
Additional Construction Costs	10%	ea.			$61,183	Includes Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional $ Allowance	10%	ea.			$61,183	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$734,000	
Geotechnical / Hydrogeological / Materials	1.0%				$7,300	
Geotechnical Sub-Total Cost					$7,300	
Property Requirements	1.5%				$ 11,000	
Property Requirements Sub-Total					$11,000	
Consultant Engineering/Design	15%				$ 110,100	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$110,100	
In House Labour/Engineering/Wages/CA	8%				$ 58,700	
In-house Labour/Wages Sub-Total					$58,700	
Project Contingency	15%				$138,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$138,000	
Non-Refundable HST	1.76%				$17,600	
Non-Refundable HST Sub-Total					$17,600	
Total (2024 Dollars)					$1,077,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$1,077,000	2024 Estimate

PROJECT NO.:	WW-SS-037	TIMELINE:	10-20 Years
PROJECT NAME:	Mount Pleasant Street Sewer Upgrades		
PROJECT OVERVIEW:	Upsizing from 250mm to 300mm sewer on Mount Pleasant Road.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
Upsizing from 250mm to 300mm sewer on Mount Pleasant Road, north of Bell Lane.

REQUIRED STUDIES:	-
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and inflation

PROPOSED DIAMETER:	300 mm
TOTAL LENGTH:	171 m

Tunnelled	0 m	0%
Open Cut - 5m	171 m	100%
Open Cut - 10m	0 m	0%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

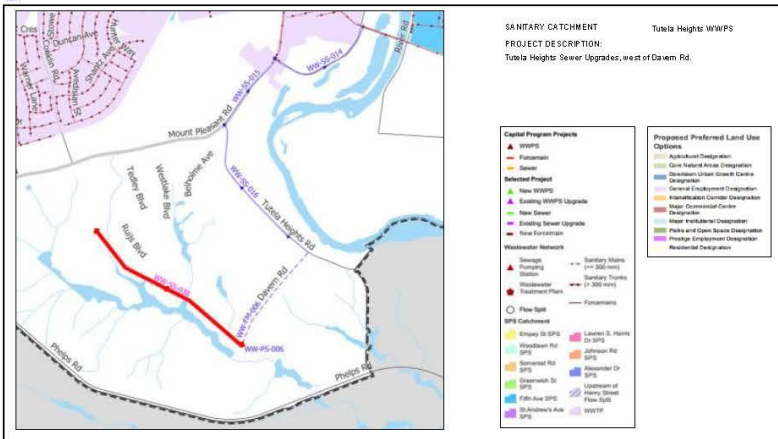
COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study				$0	
Study	EA				$0	
Sub-Total Study Costs					$0	
Construction Cost						
Pipe Construction - Open Cut (5m)		m	171 m	$971	$166,016	
Pipe Construction - Open Cut (10m)		m	0 m	$3,961	$0	
Pipe Construction - Tunneling		m	0 m	$2,088	$0	
Minor Creek Crossings		ea.	0	$98,877	$0	
Major Creek Crossings		ea.	0	$369,714	$0	
Road Crossings		ea.	1	$181,991	$181,991	
Major Road Crossings (Highway)		ea.	0	$369,714	$0	
Utility Crossings		ea.	0	$181,991	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$34,801	
	15%					
Additional Construction Costs	10%	ea.			$38,281	Includes Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%	ea.			$38,281	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$459,000	
Geotechnical / Hydrogeological / Materials	1.0%				$4,600	
Geotechnical Sub-Total Cost					$4,600	
Property Requirements	1.5%				$ 6,900	
Property Requirements Sub-Total					$6,900	
Consultant Engineering/Design	15%				$ 68,900	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$68,900	
In House Labour/Engineering/Wages/CA	8%				$ 36,700	
In-house Labour/Wages Sub-Total					$36,700	
Project Contingency	15%				$86,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$86,000	
Non-Refundable HST	1.76%				$11,000	
Non-Refundable HST Sub-Total					$11,000	
Total (2024 Dollars)					$673,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$673,000	2024 Estimate

PROJECT NO.: WW-SS-038 TIMELINE: 0-5 Years

PROJECT NAME: Tutela Heights Sewer Upstream of Tutela Heights WWPS

PROJECT OVERVIEW: Tutela Heights Sewer Upgrades

MAP



SANITARY CATCHMENT Tutela Heights WWPS

PROJECT DESCRIPTION:
Tutela Heights Sewer Upgrades, west of Davern Rd.

REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: Schedule B EA because sewer will not be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition uplifts both costs and contingency

PROPOSED DIAMETER:	300 mm
TOTAL LENGTH:	1374 m

Tunnelled	0 m	0%
Open Cut - 5m	1100 m	80%
Open Cut - 10m	274 m	20%

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study				$0	
Study	EA		1	$300,000	$300,000	
Sub-Total Study Costs					$300,000	
Construction Cost						
Pipe Construction - Open Cut (5m)		m	1100 m	$971	$1,067,940	Expansion lands
Pipe Construction - Open Cut (10m)		m	274 m	$3,961	$1,085,426	Expansion lands
Pipe Construction - Tunneling		m	0 m	$2,088	$0	
Minor Creek Crossings		ea.	3	$98,877	$296,631	
Major Creek Crossings		ea.	0	$369,714	$0	
Road Crossings		ea.	0	$181,991	$0	
Major Road Crossings (Highway)		ea.	0	$369,714	$0	
Utility Crossings		ea.	0	$181,991	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%				$0	
	15%					
Additional Construction Costs	10%	ea.			$245,000	Includes Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional $ Allowance	10%	ea.			$245,000	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$2,940,000	
Geotechnical / Hydrogeological / Materials	1.0%				$29,400	
Geotechnical Sub-Total Cost					$29,400	
Property Requirements	1.5%				$ 44,100	
Property Requirements Sub-Total					$44,100	
Consultant Engineering/Design	15%				$ 441,000	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$441,000	
In House Labour/Engineering/Wages/CA	8%				$ 235,200	
In-house Labour/Wages Sub-Total					$235,200	
Project Contingency	15%				$553,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$553,000	
Non-Refundable HST	1.76%				$70,500	
Non-Refundable HST Sub-Total					$70,500	
Total (2024 Dollars)					$4,613,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$4,613,000	2024 Estimate

PROJECT NO.:	WW-SS-039	TIMELINE:	5-10 Years
PROJECT NAME:	Johnson WWPS Inlet Sewer Upgrades		
PROJECT OVERVIEW:	Johnson WWPS Inlet Sewer Upgrades		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Johnson WWPS Inlet Sewer Upgrades from 250mm to 375mm. Existing slope, or keep monitoring and I&I reduction program, or keep monitoring and I&I reduction program.

REQUIRED STUDIES: -

STUDY SCOPE: EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition uplifts both contained and restoration

PROPOSED DIAMETER:	375 mm	
TOTAL LENGTH:	24 m	
Tunnelled	0 m	0%
Open Cut - 5m	20 m	100%
Open Cut - 10m	4 m	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m
CONSTRUCTION ASSUMPTION:	Sewer 10m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY		COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA			1	$300,000	$300,000	
Sub-Total Study Costs						$300,000	
Construction Cost							
Pipe Construction - Open Cut (5m)			m	20 m	$1,037	$20,741	Existing road ROW & expansion lands
Pipe Construction - Open Cut (10m)			m	4 m	$4,081	$16,322	Existing road ROW & expansion lands
Pipe Construction - Tunneling			m	0 m	$9,072	$0	
Minor Creek Crossings			ea.	1	$237,878	$237,878	
Major Creek Crossings			ea.	0	$1,411,505	$0	
Road Crossings			ea.	0	$698,994	$0	
Major Road Crossings (Highway)			ea.	0	$1,411,505	$0	
Utility Crossings			ea.	0	$698,994	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$27,494	
	15%						
Additional Construction Costs	10%		ea.			$30,243	Includes Mob/Demob, connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$30,243	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$363,000	
Geotechnical / Hydrogeological / Materials	1.0%					$3,600	
Geotechnical Sub-Total Cost						$3,600	
Property Requirements	1.5%					$ 5,400	
Property Requirements Sub-Total						$5,400	
Consultant Engineering/Design	15%					$ 54,500	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$54,500	
In House Labour/Engineering/Wages/CA	8%					$ 29,000	
In-house Labour/Wages Sub-Total						$29,000	
Project Contingency	15%					$68,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$68,000	
Non-Refundable HST	1.76%					$8,700	
Non-Refundable HST Sub-Total						$8,700	
Total (2024 Dollars)						$832,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$832,000	2024 Estimate

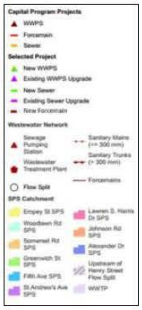
PROJECT NO.:	WW-SS-040	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Darling St		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Darling St from 225mm to 250mm, from King St to Market St.





REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	250 mm	
TOTAL LENGTH:	287 m	
Tunnelled	0 m	0%
Open Cut	287 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study		6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA				$0	
Sub-Total Study Costs					$11,000	
Construction Cost						
Pipe Construction - Open Cut		m	287 m	$795	$228,241	
Pipe Construction - Tunneling		m	0 m	$2,016	$0	
Minor Creek Crossings		ea.	0	$97,444	$0	
Major Creek Crossings		ea.	0	$358,250	$0	
Road Crossings		ea.	0	$177,692	$0	
Major Road Crossings (Highway)		ea.	0	$358,250	$0	
Utility Crossings		ea.	0	$177,692	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$22,824	
	15%					
Additional Construction Costs	10%	ea.			$25,107	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional $ Allowance	10%	ea.			$25,107	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$301,000	
Geotechnical / Hydrogeological / Materials	1.0%				$3,000	
Geotechnical Sub-Total Cost					$3,000	
Property Requirements	1.5%				$ 4,500	
Property Requirements Sub-Total					$4,500	
Consultant Engineering/Design	15%				$ 45,200	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$45,200	
In House Labour/Engineering/Wages/CA	8%				$ 24,100	
In-house Labour/Wages Sub-Total					$24,100	
Project Contingency	15%				$57,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$57,000	
Non-Refundable HST	1.76%				$7,200	
Non-Refundable HST Sub-Total					$7,200	
Total (2024 Dollars)					$453,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$453,000	2024 Estimate

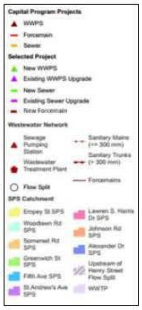
PROJECT NO.:	WW-SS-041	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Icomm Dr		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
Sewer upgrades on Icomm Dr from 350mm to 750mm, East of Brant Ave.





REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	750 mm	
TOTAL LENGTH:	665 m	
Tunnelled	0 m	0%
Open Cut	665 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study		6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA				$0	
Sub-Total Study Costs					$11,000	
Construction Cost						
Pipe Construction - Open Cut		m	665 m	$2,118	$1,387,090	
Pipe Construction - Tunneling		m	0 m	$11,808	$0	
Minor Creek Crossings		ea.	0	$406,972	$0	
Major Creek Crossings		ea.	0	$1,934,550	$0	
Road Crossings		ea.	0	$876,996	$0	
Major Road Crossings (Highway)		ea.	0	$1,934,550	$0	
Utility Crossings		ea.	0	$876,996	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$138,709	
	15%					
Additional Construction Costs	10%	ea.			$152,680	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%	ea.			$152,680	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$1,831,000	
Geotechnical / Hydrogeological / Materials	1.0%				$18,300	
Geotechnical Sub-Total Cost					$18,300	
Property Requirements	1.5%				$ 27,500	
Property Requirements Sub-Total					$27,500	
Consultant Engineering/Design	15%				$ 274,700	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$274,700	
In House Labour/Engineering/Wages/CA	8%				$ 146,500	
In-house Labour/Wages Sub-Total					$146,500	
Project Contingency	15%				$345,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$345,000	
Non-Refundable HST	1.76%				$43,900	
Non-Refundable HST Sub-Total					$43,900	
Total (2024 Dollars)					$2,698,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$2,698,000	2024 Estimate

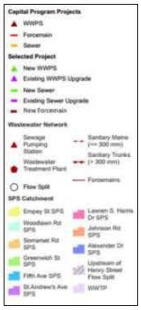
PROJECT NO.:	WW-SS-042	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - West St		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on West St from 300mm to 375mm, from Pearl St to Marlborough St.





REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contained restoration

PROPOSED DIAMETER:	375 mm	
TOTAL LENGTH:	345 m	
Tunnelled	0 m	0%
Open Cut	345 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

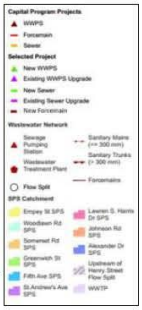
COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	345 m	$1,037	$357,779	
Pipe Construction - Tunneling			m	0 m	$9,072	$0	
Minor Creek Crossings			ea.	0	$237,878	$0	
Major Creek Crossings			ea.	0	$1,411,505	$0	
Road Crossings			ea.	0	$598,994	$0	
Major Road Crossings (Highway)			ea.	0	$1,411,505	$0	
Utility Crossings			ea.	0	$598,994	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$35,778	
	15%						
Additional Construction Costs	10%		ea.			$39,356	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$39,356	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$472,000	
Geotechnical / Hydrogeological / Materials	1.0%					$4,700	
Geotechnical Sub-Total Cost						$4,700	
Property Requirements	1.5%					$ 7,100	
Property Requirements Sub-Total						$7,100	
Consultant Engineering/Design	15%					$ 70,800	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$70,800	
In House Labour/Engineering/Wages/CA	8%					$ 37,800	
In-house Labour/Wages Sub-Total						$37,800	
Project Contingency	15%					$89,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$89,000	
Non-Refundable HST	1.76%					$11,300	
Non-Refundable HST Sub-Total						$11,300	
Total (2024 Dollars)						$704,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$704,000	2024 Estimate

PROJECT NO.:	WW-SS-043	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Marlborough St		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Marlborough St from 225mm to 300mm, from Charlotte St to Clarence St.

REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
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CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	300 mm
TOTAL LENGTH:	139 m

Tunnelled	0 m	0%
Open Cut	139 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

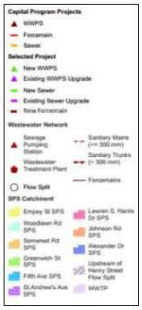
COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	139 m	$971	$134,949	
Pipe Construction - Tunneling			m	0 m	$2,088	$0	
Minor Creek Crossings			ea.	0	$98,877	$0	
Major Creek Crossings			ea.	0	$369,714	$0	
Road Crossings			ea.	0	$181,991	$0	
Major Road Crossings (Highway)			ea.	0	$369,714	$0	
Utility Crossings			ea.	0	$181,991	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$13,495	
	15%						
Additional Construction Costs	10%		ea.			$14,844	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$14,844	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$178,000	
Geotechnical / Hydrogeological / Materials	1.0%					$1,800	
Geotechnical Sub-Total Cost						$1,800	
Property Requirements	1.5%					$ 2,700	
Property Requirements Sub-Total						$2,700	
Consultant Engineering/Design	15%					$ 26,700	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$26,700	
In House Labour/Engineering/Wages/CA	8%					$ 14,200	
In-house Labour/Wages Sub-Total						$14,200	
Project Contingency	15%					$34,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$34,000	
Non-Refundable HST	1.76%					$4,300	
Non-Refundable HST Sub-Total						$4,300	
Total (2024 Dollars)						$273,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$273,000	2024 Estimate

PROJECT NO.:	WW-SS-044	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Sheridan St		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Sheridan St from 225/250mm to 375mm, from Market St to Clarence St.

REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	450 mm	
TOTAL LENGTH:	380 m	
Tunnelled	0 m	0%
Open Cut	380 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	380 m	$1,129	$429,108	
Pipe Construction - Tunnelling			m	0 m	$9,216	$0	
Minor Creek Crossings			ea.	0	$283,734	$0	
Major Creek Crossings			ea.	0	$1,475,990	$0	
Road Crossings			ea.	0	$650,582	$0	
Major Road Crossings (Highway)			ea.	0	$1,475,990	$0	
Utility Crossings			ea.	0	$650,582	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$42,911	
	15%						
Additional Construction Costs	10%		ea.			$47,202	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$47,202	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$566,000	
Geotechnical / Hydrogeological / Materials	1.0%					$5,700	
Geotechnical Sub-Total Cost						$5,700	
Property Requirements	1.5%					$ 8,500	
Property Requirements Sub-Total						$8,500	
Consultant Engineering/Design	15%					$ 84,900	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$84,900	
In House Labour/Engineering/Wages/CA	8%					$ 45,200	
In-house Labour/Wages Sub-Total						$45,300	
Project Contingency	15%					$107,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$107,000	
Non-Refundable HST	1.76%					$13,600	
Non-Refundable HST Sub-Total						$13,600	
Total (2024 Dollars)						$842,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$842,000	2024 Estimate

PROJECT NO.: WW-SS-045 TIMELINE: 0-20 Years

PROJECT NAME: Downtown Sewers - Nelson St

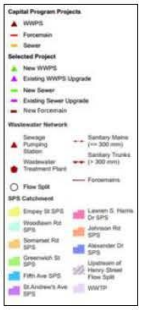
PROJECT OVERVIEW: Sewer upgrades on various diameters to service Downtown Brantford intensification core.

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Nelson St from 250mm to 375mm, from Market St to Charlotte St.





REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Cost based on and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Cost based on, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	375 mm	
TOTAL LENGTH:	240 m	
Tunnelled	0 m	0%
Open Cut	240 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

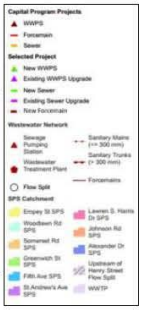
COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	240 m	$1,037	$248,889	
Pipe Construction - Tunneling			m	0 m	$9,072	$0	
Minor Creek Crossings			ea.	0	$237,878	$0	
Major Creek Crossings			ea.	0	$1,411,505	$0	
Road Crossings			ea.	0	$698,994	$0	
Major Road Crossings (Highway)			ea.	0	$1,411,505	$0	
Utility Crossings			ea.	0	$698,994	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$24,889	
	15%						
Additional Construction Costs	10%		ea.			$27,378	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$27,378	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$329,000	
Geotechnical / Hydrogeological / Materials	1.0%					$3,300	
Geotechnical Sub-Total Cost						$3,300	
Property Requirements	1.5%					$ 4,900	
Property Requirements Sub-Total						$4,900	
Consultant Engineering/Design	15%					$ 49,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$49,400	
In House Labour/Engineering/Wages/CA	8%					$ 26,300	
In-house Labour/Wages Sub-Total						$26,300	
Project Contingency	15%					$62,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$62,000	
Non-Refundable HST	1.76%					$7,900	
Non-Refundable HST Sub-Total						$7,900	
Total (2024 Dollars)						$494,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$494,000	2024 Estimate

PROJECT NO.:	WW-SS-046	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Colborne St		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Colborne St from 250-525mm to 250mm, with flow diversion, from Brant Ave to Charlotte St.

REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	250 mm	
TOTAL LENGTH:	630 m	
Tunnelled	0 m	0%
Open Cut	630 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	630 m	$795	$501,017	
Pipe Construction - Tunneling			m	0 m	$2,016	$0	
Minor Creek Crossings			ea.	0	$97,444	$0	
Major Creek Crossings			ea.	0	$358,250	$0	
Road Crossings			ea.	0	$177,692	$0	
Major Road Crossings (Highway)			ea.	0	$358,250	$0	
Utility Crossings			ea.	0	$177,692	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$50,102	
	15%						
Additional Construction Costs	10%		ea.			$55,112	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$55,112	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$661,000	
Geotechnical / Hydrogeological / Materials	1.0%					$6,600	
Geotechnical Sub-Total Cost						$6,600	
Property Requirements	1.5%					$ 9,900	
Property Requirements Sub-Total						$9,900	
Consultant Engineering/Design	15%					$ 99,200	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$99,200	
In House Labour/Engineering/Wages/CA	8%					$ 52,900	
In-house Labour/Wages Sub-Total						$52,900	
Project Contingency	15%					$124,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$124,000	
Non-Refundable HST	1.76%					$15,900	
Non-Refundable HST Sub-Total						$15,900	
Total (2024 Dollars)						$981,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$981,000	2024 Estimate

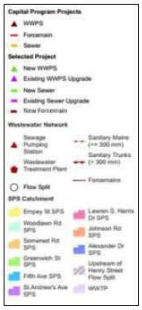
PROJECT NO.:	WW-SS-047	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Brant Ave		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Brant Ave from 375/450mm to 525mm, from William St to Wharfe St.





REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	525 mm
TOTAL LENGTH:	338 m

Tunnelled	0 m	0%
Open Cut	338 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	338 m	$1,217	$411,333	
Pipe Construction - Tunnelling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$41,133	
	15%						
Additional Construction Costs	10%		ea.			$46,247	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$46,247	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$543,000	
Geotechnical / Hydrogeological / Materials	1.0%					$5,400	
Geotechnical Sub-Total Cost						$5,400	
Property Requirements	1.5%					$ 8,100	
Property Requirements Sub-Total						$8,100	
Consultant Engineering/Design	15%					$ 81,500	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$81,500	
In House Labour/Engineering/Wages/CA	8%					$ 43,400	
In-house Labour/Wages Sub-Total						$43,400	
Project Contingency	15%					$102,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$102,000	
Non-Refundable HST	1.76%					$13,000	
Non-Refundable HST Sub-Total						$13,000	
Total (2024 Dollars)						$807,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$807,000	2024 Estimate

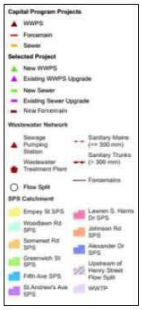
PROJECT NO.: WW-SS-048 TIMELINE: 0-20 Years

PROJECT NAME: Downtown Sewers - Colborne St E

PROJECT OVERVIEW: Sewer upgrades on various diameters to service Downtown Brantford intensification core.

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Colborne St E from 250mm to 525mm, from just south of Dalbousie St to Echo St.

REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	525 mm
TOTAL LENGTH:	162 m

Tunnelled	0 m	0%
Open Cut	162 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	162 m	$1,217	$197,148	
Pipe Construction - Tunnelling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,160	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,160	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$19,715	
	15%						
Additional Construction Costs	10%		ea.			$21,686	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$21,686	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$260,000	
Geotechnical / Hydrogeological / Materials	1.0%					$2,600	
Geotechnical Sub-Total Cost						$2,600	
Property Requirements	1.5%					$ 3,900	
Property Requirements Sub-Total						$3,900	
Consultant Engineering/Design	15%					$ 39,000	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$39,000	
In House Labour/Engineering/Wages/CA	8%					$ 20,800	
In-house Labour/Wages Sub-Total						$20,800	
Project Contingency	15%					$49,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$49,000	
Non-Refundable HST	1.76%					$6,200	
Non-Refundable HST Sub-Total						$6,200	
Total (2024 Dollars)						$393,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$393,000	2024 Estimate

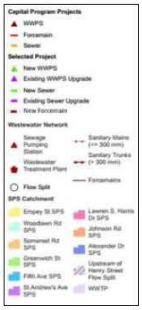
PROJECT NO.:	WW-SS-049	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Clarence St		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Clarence St from 450/600mm to 525/675mm, from Colbourne St to Marlborough St.





REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	EA exempt because the sewer will be on existing road ROW.
OBJECTIVES:	.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	675 mm	
TOTAL LENGTH:	737 m	
Tunnelled	0 m	0%
Open Cut	737 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	737 m	$1,907	$1,405,451	
Pipe Construction - Tunneling			m	0 m	$11,664	$0	
Minor Creek Crossings			ea.	0	$404,106	$0	
Major Creek Crossings			ea.	0	$1,913,055	$0	
Road Crossings			ea.	0	$868,398	$0	
Major Road Crossings (Highway)			ea.	0	$1,913,055	$0	
Utility Crossings			ea.	0	$868,398	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$140,545	
	15%						
Additional Construction Costs	10%		ea.			$154,600	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$154,600	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$1,855,000	
Geotechnical / Hydrogeological / Materials	1.0%					$18,600	
Geotechnical Sub-Total Cost						$18,600	
Property Requirements	1.5%					$ 27,800	
Property Requirements Sub-Total						$27,800	
Consultant Engineering/Design	15%					$ 278,300	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$278,300	
In House Labour/Engineering/Wages/CA	8%					$ 148,400	
In-house Labour/Wages Sub-Total						$148,400	
Project Contingency	15%					$349,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$349,000	
Non-Refundable HST	1.76%					$44,500	
Non-Refundable HST Sub-Total						$44,500	
Total (2024 Dollars)						$2,733,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$2,733,000	2024 Estimate

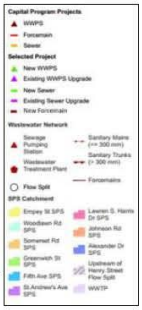
PROJECT NO.:	WW-SS-050	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Clarence St S		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Sewer upgrades on Clarence St S from 675/750mm to 750/900mm, just south of Colborne St.





REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	900 mm	
TOTAL LENGTH:	172 m	
Tunnelled	0 m	0%
Open Cut	172 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	172 m	$2,671	$459,432	
Pipe Construction - Tunnelling			m	0 m	$14,400	$0	
Minor Creek Crossings			ea.	0	$630,210	$0	
Major Creek Crossings			ea.	0	$2,393,110	$0	
Road Crossings			ea.	0	$1,103,410	$0	
Major Road Crossings (Highway)			ea.	0	$2,393,110	$0	
Utility Crossings			ea.	0	$1,103,410	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$45,943	
	15%						
Additional Construction Costs	10%		ea.			$50,537	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$50,537	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$606,000	
Geotechnical / Hydrogeological / Materials	1.0%					$6,100	
Geotechnical Sub-Total Cost						$6,100	
Property Requirements	1.5%					$ 9,100	
Property Requirements Sub-Total						$9,100	
Consultant Engineering/Design	15%					$ 90,900	includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$90,900	
In House Labour/Engineering/Wages/CA	8%					$ 48,500	
In-house Labour/Wages Sub-Total						$48,500	
Project Contingency	15%					$114,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$114,000	
Non-Refundable HST	1.76%					$14,500	
Non-Refundable HST Sub-Total						$14,500	
Total (2024 Dollars)						$900,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$900,000	2024 Estimate

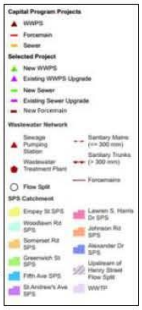
PROJECT NO.:	WW-SS-051	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Water St		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
Sewer upgrades on Water St from 300mm to 250mm to opposite direction.





REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
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CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out Contained restoration

PROPOSED DIAMETER:	250 mm	
TOTAL LENGTH:	315 m	
Tunnelled	0 m	0%
Open Cut	315 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

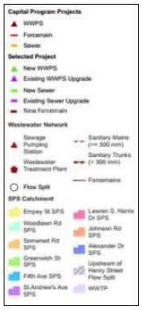
COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study		6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA				$0	
Sub-Total Study Costs					$11,000	
Construction Cost						
Pipe Construction - Open Cut		m	315 m	$795	$250,509	
Pipe Construction - Tunnelling		m	0 m	$2,016	$0	
Minor Creek Crossings		ea.	0	$97,444	$0	
Major Creek Crossings		ea.	0	$358,250	$0	
Road Crossings		ea.	0	$177,692	$0	
Major Road Crossings (Highway)		ea.	0	$358,250	$0	
Utility Crossings		ea.	0	$177,692	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$25,051	
	15%					
Additional Construction Costs	10%	ea.			$27,556	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%	ea.			$27,556	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$331,000	
Geotechnical / Hydrogeological / Materials	1.0%				$3,300	
Geotechnical Sub-Total Cost					$3,300	
Property Requirements	1.5%				$ 5,000	
Property Requirements Sub-Total					$5,000	
Consultant Engineering/Design	15%				$ 49,700	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$49,700	
In House Labour/Engineering/Wages/CA	8%				$ 26,500	
In-house Labour/Wages Sub-Total					$26,500	
Project Contingency	15%				$62,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$62,000	
Non-Refundable HST	1.76%				$7,900	
Non-Refundable HST Sub-Total					$7,900	
Total (2024 Dollars)					$496,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$496,000	2024 Estimate

PROJECT NO.:	WW-SS-052	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Easement		
PROJECT OVERVIEW:	Sewer upgrades or various diameters to service Downtown Brantford intensification core.		

MAP







SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
New sewer on easement at 375mm, between Water St and Icomm Dr.

REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Costs by cost and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Costs by cost, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	375 mm	
TOTAL LENGTH:	74 m	
Tunnelled	0 m	0%
Open Cut	74 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study		6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA				$0	
Sub-Total Study Costs:					$11,000	
Construction Cost						
Pipe Construction - Open Cut		m	74 m	$1,037	$76,741	
Pipe Construction - Tunneling		m	0 m	$9,072	$0	
Minor Creek Crossings		ea.	0	$237,878	$0	
Major Creek Crossings		ea.	0	$1,411,505	$0	
Road Crossings		ea.	0	$598,994	$0	
Major Road Crossings (Highway)		ea.	0	$1,411,505	$0	
Utility Crossings		ea.	0	$598,994	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$7,674	
	15%					
Additional Construction Costs	10%	ea.			$8,441	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%	ea.			$8,441	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$101,000	
Geotechnical / Hydrogeological / Materials	1.0%				$1,000	
Geotechnical Sub-Total Cost					$1,000	
Property Requirements	1.5%				$ 1,500	
Property Requirements Sub-Total					$1,500	
Consultant Engineering/Design	15%				$ 15,200	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$15,200	
In House Labour/Engineering/Wages/CA	8%				$ 8,100	
In-house Labour/Wages Sub-Total					$8,100	
Project Contingency	15%				$19,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$19,000	
Non-Refundable HST	1.76%				$2,400	
Non-Refundable HST Sub-Total					$2,400	
Total (2024 Dollars)					$159,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$159,000	2024 Estimate

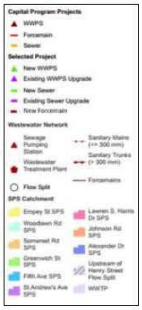
PROJECT NO.:	WW-SS-053	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Market St Erie Ave		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
Sewer upgrades on Market St and Erie Ave from 250mm to 375mm, north of Eagle Ave.





REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
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CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	375 mm	
TOTAL LENGTH:	462 m	
Tunnelled	0 m	0%
Open Cut	462 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION		ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost						
Study	Feasibility Study		6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA				$0	
Sub-Total Study Costs					$11,000	
Construction Cost						
Pipe Construction - Open Cut		m	462 m	$1,037	$479,112	
Pipe Construction - Tunnelling		m	0 m	$9,072	$0	
Minor Creek Crossings		ea.	0	$237,878	$0	
Major Creek Crossings		ea.	0	$1,411,505	$0	
Road Crossings		ea.	0	$598,994	$0	
Major Road Crossings (Highway)		ea.	0	$1,411,505	$0	
Utility Crossings		ea.	0	$598,994	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%				$47,911	
	15%					
Additional Construction Costs	10%	ea.			$52,702	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%	ea.			$52,702	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs					$632,000	
Geotechnical / Hydrogeological / Materials	1.0%				$6,300	
Geotechnical Sub-Total Cost					$6,300	
Property Requirements	1.5%				$ 9,500	
Property Requirements Sub-Total					$9,500	
Consultant Engineering/Design	15%				$ 94,800	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total					$94,800	
In House Labour/Engineering/Wages/CA	8%				$ 50,600	
In-house Labour/Wages Sub-Total					$50,600	
Project Contingency	15%				$119,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total					$119,000	
Non-Refundable HST	1.76%				$15,200	
Non-Refundable HST Sub-Total					$15,200	
Total (2024 Dollars)					$938,000	Rounded to nearest $1,000
Other Estimate						
Chosen Estimate					$938,000	2024 Estimate

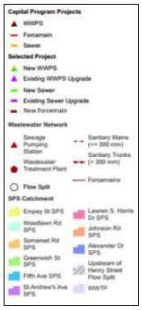
PROJECT NO.:	WW-SS-054	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Eagle Ave		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
Sewer upgrades on Eagle Ave from 300/375mm to 525mm, east of Eric Ave





REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES:
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CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	525 mm	
TOTAL LENGTH:	363 m	
Tunnelled	0 m	0%
Open Cut	363 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA					$0	
Sub-Total Study Costs						$11,000	
Construction Cost							
Pipe Construction - Open Cut			m	363 m	$1,217	$441,757	
Pipe Construction - Tunnelling			m	0 m	$9,360	$0	
Minor Creek Crossings			ea.	0	$286,600	$0	
Major Creek Crossings			ea.	0	$1,497,485	$0	
Road Crossings			ea.	0	$659,180	$0	
Major Road Crossings (Highway)			ea.	0	$1,497,485	$0	
Utility Crossings			ea.	0	$659,180	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$44,176	
	15%						
Additional Construction Costs	10%		ea.			$48,593	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$48,593	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$583,000	
Geotechnical / Hydrogeological / Materials	1.0%					$5,800	
Geotechnical Sub-Total Cost						$5,800	
Property Requirements	1.5%					$ 8,700	
Property Requirements Sub-Total						$8,700	
Consultant Engineering/Design	15%					$ 87,500	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$87,500	
In House Labour/Engineering/Wages/CA	8%					$ 46,600	
In-house Labour/Wages Sub-Total						$46,600	
Project Contingency	15%					$110,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$110,000	
Non-Refundable HST	1.76%					$14,000	
Non-Refundable HST Sub-Total						$14,000	
Total (2024 Dollars)						$867,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$867,000	2024 Estimate

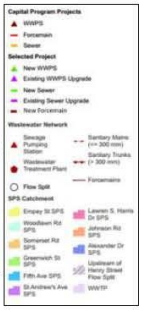
PROJECT NO.:	WW-SS-055	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Veterans Memorial Pkwy		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
Sewer upgrades near Veterans Memorial Pkwy from 600mm to 675mm, east of Erie Ave.





REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: Schedule B EA because it will not be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out cost and restoration

PROPOSED DIAMETER:	675 mm	
TOTAL LENGTH:	221 m	
Tunnelled	0 m	0%
Open Cut	221 m	100%

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$161,000	
Construction Cost							
Pipe Construction - Open Cut			m	221 m	$1,907	$421,445	
Pipe Construction - Tunnelling			m	0 m	$11,664	$0	
Minor Creek Crossings			ea.	0	$404,108	$0	
Major Creek Crossings			ea.	0	$1,913,055	$0	
Road Crossings			ea.	0	$868,398	$0	
Major Road Crossings (Highway)			ea.	0	$1,913,055	$0	
Utility Crossings			ea.	0	$868,398	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$42,144	
	15%						
Additional Construction Costs	10%		ea.			$46,359	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$46,359	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$556,000	
Geotechnical / Hydrogeological / Materials	1.0%					$5,600	
Geotechnical Sub-Total Cost						$5,600	
Property Requirements	1.5%					$ 8,300	
Property Requirements Sub-Total						$8,300	
Consultant Engineering/Design	15%					$ 83,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$83,400	
In House Labour/Engineering/Wages/CA	8%					$ 44,500	
In-house Labour/Wages Sub-Total						$44,500	
Project Contingency	15%					$105,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$105,000	
Non-Refundable HST	1.76%					$13,300	
Non-Refundable HST Sub-Total						$13,300	
Total (2024 Dollars)						$977,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$977,000	2024 Estimate

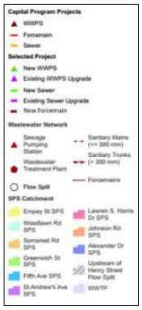
PROJECT NO.:	WW-SS-056	TIMELINE:	0-20 Years
PROJECT NAME:	Downtown Sewers - Greenwich WWPS Inlet		
PROJECT OVERVIEW:	Sewer upgrades on various diameters to service Downtown Brantford intensification core.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:
Sewer upgrades at inlet of Greenwich WWPS from 600/750mm to 900mm.





REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE:
Schedule B EA because some sections (Hwy403 crossing) will not be on existing road ROW.

OBJECTIVES:
-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out Contained restoration

PROPOSED DIAMETER:	900 mm	
TOTAL LENGTH:	107 m	
Tunnelled	0 m	0%
Open Cut	107 m	100%

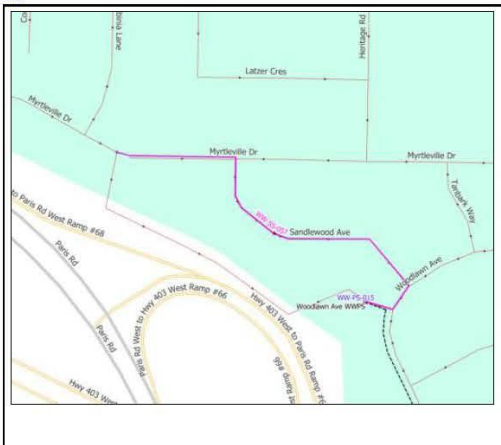
CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			6%	$200,000	$11,111	One Feasibility Study assumed to capture all 18 downtown sewers projects therefore feasibility study cost split equally.
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$161,000	
Construction Cost							
Pipe Construction - Open Cut			m	107 m	$2,671	$285,809	
Pipe Construction - Tunnelling			m	0 m	$14,400	$0	
Minor Creek Crossings			ea.	0	$530,210	$0	
Major Creek Crossings			ea.	0	$2,293,110	$0	
Road Crossings			ea.	0	$1,103,410	$0	
Major Road Crossings (Highway)			ea.	0	$2,293,110	$0	
Utility Crossings			ea.	0	$1,103,410	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$28,581	
	15%						
Additional Construction Costs	10%		ea.			$31,439	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$31,439	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$377,000	
Geotechnical / Hydrogeological / Materials	1.0%					$3,800	
Geotechnical Sub-Total Cost						$3,800	
Property Requirements	1.5%					$ 5,700	
Property Requirements Sub-Total						$5,700	
Consultant Engineering/Design	15%					$ 56,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$56,600	
In House Labour/Engineering/Wages/CA	8%					$ 30,200	
In-house Labour/Wages Sub-Total						$30,200	
Project Contingency	15%					$71,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$71,000	
Non-Refundable HST	1.76%					$9,000	
Non-Refundable HST Sub-Total						$9,000	
Total (2024 Dollars)						$714,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$714,000	2024 Estimate

PROJECT NO.:	WW-SS-057	TIMELINE:	5-10 Years
PROJECT NAME:	Myrtleville Sewer		
PROJECT OVERVIEW:	Sewer upgrades on Myrtleville Dr and Sandlewood Ave		

MAP



SANITARY CATCHMENT: Woodlawn Road WWPS

PROJECT DESCRIPTION:
Sewer diversion on Myrtleville Dr and Sandlewood Ave to avoid easement





REQUIRED STUDIES: -

STUDY SCOPE:
EA exempt because the sewer will be on existing road ROW.

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contact restoration

PROPOSED DIAMETER:	300 mm	
TOTAL LENGTH:	441 m	
Tunnelled	0 m	0%
Open Cut	441 m	100%

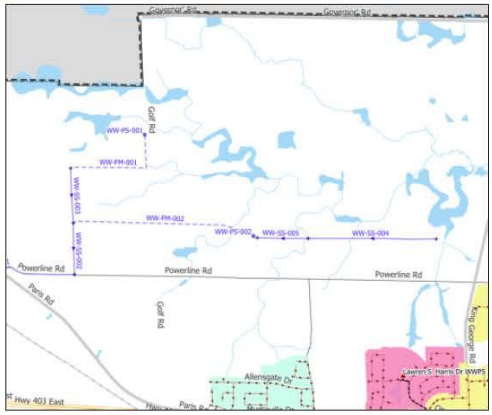
CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Sewer 5m

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study					$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	441 m	$971	$428,147	
Pipe Construction - Tunneling			m	0 m	$2,089	$0	
Minor Creek Crossings			ea.	0	$98,877	$0	
Major Creek Crossings			ea.	0	$369,714	$0	
Road Crossings			ea.	0	$181,991	$0	
Major Road Crossings (Highway)			ea.	0	$369,714	$0	
Utility Crossings			ea.	0	$181,991	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$42,815	
	15%						
Additional Construction Costs	10%		ea.			$47,096	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$47,096	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$565,000	
Geotechnical / Hydrogeological / Materials	1.0%					$5,700	
Geotechnical Sub-Total Cost						$5,700	
Property Requirements	1.5%					$ 8,500	
Property Requirements Sub-Total						$8,500	
Consultant Engineering/Design	15%					$ 84,800	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$84,800	
In House Labour/Engineering/Wages/CA	8%					$ 45,200	
In-house Labour/Wages Sub-Total						$45,200	
Project Contingency	15%					$105,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$105,000	
Non-Refundable HST	1.76%					$13,600	
Non-Refundable HST Sub-Total						$13,600	
Total (2024 Dollars)						$829,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$829,000	2024 Estimate

PROJECT NO.:	WW-FM-001	TIMELINE:	10-20 Years
PROJECT NAME:	Northwest-1 WWPS Forcemain		
PROJECT OVERVIEW:	New forcemain for Northwest-1 WWPS		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
New forcemain extending from Northwest-1 WWPS to north-south collector road trunk sewer. Forcemain sized to accommodate North Expansion Lands flows with space to allow for potential twinning for full buildout flows.

REQUIRED STUDIES:	Municipal Class EA
STUDY SCOPE:	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-1 WWPS (Costs included in Capital Program project WW-PS-001).
OBJECTIVES:	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contract restoration

PROPOSED DIAMETER:	250 mm	
TOTAL LENGTH:	859 m	
Tunnelled	0 m	0%
Open Cut	859 m	100%

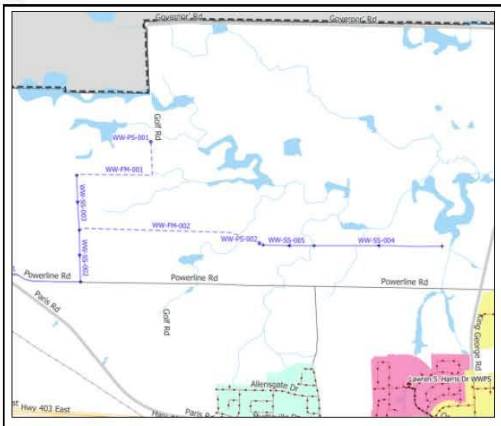
CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$150,000	
Construction Cost							
Pipe Construction - Open Cut			m	859 m	$964	$828,265	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$2,016	$0	
Minor Creek Crossings			ea.	0	$465,856	$0	
Major Creek Crossings			ea.	0	$306,662	$0	
Road Crossings			ea.	0	$126,104	$0	
Major Road Crossings (Highway)			ea.	0	$306,662	$0	
Utility Crossings			ea.	0	$126,104	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$82,826	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$82,826	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$994,000	
Geotechnical / Hydrogeological / Materials	0.5%					$5,000	
Geotechnical Sub-Total Cost						$5,000	
Property Requirements	1.0%					$ 9,900	
Property Requirements Sub-Total						$9,900	
Consultant Engineering/Design	15%					$ 149,100	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$149,100	
In House Labour/Engineering/Wages/CA	8%					$ 79,500	
In-house Labour/Wages Sub-Total						$79,500	
Project Contingency	10%					$124,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$124,000	
Non-Refundable HST	1.76%					$22,600	
Non-Refundable HST Sub-Total						$22,600	
Total (2024 Dollars)						$1,534,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,534,000	2024 Estimate

PROJECT NO.:	WW-FM-002	TIMELINE:	5-10 Years
PROJECT NAME:	Northwest-2 WWPS Forcemain		
PROJECT OVERVIEW:	New Northwest-2 WWPS forcemain		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
New forcemain extending from Northwest-2 WWPS to north-south collector road trunk sewer. Forcemain sized to accommodate existing flows and full buildout flows.

REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-2 WWPS (Costs included in Capital Program project WW-PS-002).

OBJECTIVES: Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	500 mm	
TOTAL LENGTH:	1432 m	
Tunnelled	0 m	0%
Open Cut	1432 m	100%

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$150,000	
Construction Cost							
Pipe Construction - Open Cut			m	1432 m	$1,671	$2,393,215	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$9,289	$0	
Minor Creek Crossings			ea.	1	$313,827	$313,827	
Major Creek Crossings			ea.	0	$1,516,114	$0	
Road Crossings			ea.	0	$683,541	$0	
Major Road Crossings (Highway)			ea.	0	$1,516,114	$0	
Utility Crossings			ea.	0	$683,541	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$270,704	
	15%						
Additional Construction Costs	10%		ea.			$297,775	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$297,775	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$3,573,000	
Geotechnical / Hydrogeological / Materials	1.0%					$35,700	
Geotechnical Sub-Total Cost						$35,700	
Property Requirements	1.5%					$ 53,600	
Property Requirements Sub-Total						$53,600	
Consultant Engineering/Design	15%					$ 536,000	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$536,000	
In House Labour/Engineering/Wages/CA	8%					$ 285,800	
In-house Labour/Wages Sub-Total						$285,800	
Project Contingency	15%					$673,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$673,000	
Non-Refundable HST	1.76%					$85,700	
Non-Refundable HST Sub-Total						$85,700	
Total (2024 Dollars)						$5,393,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$5,393,000	2024 Estimate

PROJECT NO.:	WW-FM-003	TIMELINE:	10-20 Years
PROJECT NAME:	North WWPS Forcemain		
PROJECT OVERVIEW:	New North WWPS forcemain		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
New forcemain from North WWPS to east-west collector road trunk sewer. Forcemain sized to accommodate existing flows and trigger land flows.

REQUIRED STUDIES:	Municipal Class EA
STUDY SCOPE:	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the North WWPS (Costs included in Capital Program project WW-PS-003).
OBJECTIVES:	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contract restoration

PROPOSED DIAMETER:	350 mm
TOTAL LENGTH:	1508 m

Tunnelled	0 m	0%
Open Cut	1508 m	100%

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$150,000	
Construction Cost							
Pipe Construction - Open Cut			m	1508 m	$1,193	$1,799,622	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$2,232	$0	
Minor Creek Crossings			ea.	1	$73,083	$73,083	
Major Creek Crossings			ea.	0	$362,540	$0	
Road Crossings			ea.	0	$161,929	$0	
Major Road Crossings (Highway)			ea.	0	$362,540	$0	
Utility Crossings			ea.	0	$161,929	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$187,270	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$187,270	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,247,000	
Geotechnical / Hydrogeological / Materials	0.5%					$11,200	
Geotechnical Sub-Total Cost						$11,200	
Property Requirements	1.0%					$ 22,500	
Property Requirements Sub-Total						$22,500	
Consultant Engineering/Design	15%					$ 337,100	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$337,100	
In House Labour/Engineering/Wages/CA	8%					$ 179,800	
In-house Labour/Wages Sub-Total						$179,800	
Project Contingency	10%					$280,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$280,000	
Non-Refundable HST	1.76%					$51,000	
Non-Refundable HST Sub-Total						$51,000	
Total (2024 Dollars)						$3,279,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$3,279,000	2024 Estimate

PROJECT NO.: WW-FM-004
PROJECT NAME: Northeast WWPS Forcemain
PROJECT OVERVIEW: New Northeast WWPS forcemain.

TIMELINE: 0-5 Years

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
New forcemain from Northeast WWPS to Coulbeck Road trunk sewer. Forcemain sized to accommodate existing flows and full buildout.





REQUIRED STUDIES: Municipal Class EA
STUDY SCOPE: The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northeast WWPS (Costs included in Capital Program project WW-PS-004).
OBJECTIVES: Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED DIAMETER:	300 mm
TOTAL LENGTH:	525 m

Tunnelled	0 m	0%
Open Cut	525 m	100%

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$150,000	
Construction Cost							
Pipe Construction - Open Cut			m	525 m	$874	$458,765	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$2,089	$0	
Minor Creek Crossings			ea.	1	$57,320	$57,320	
Major Creek Crossings			ea.	0	$328,157	$0	
Road Crossings			ea.	0	$140,434	$0	
Major Road Crossings (Highway)			ea.	0	$328,157	$0	
Utility Crossings			ea.	0	$140,434	$0	
Pipe Construction Uplift (Based on Area Conditions)	0%					$0	
	10%						
Additional Construction Costs	10%		ea.			$51,609	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$51,609	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$619,000	
Geotechnical / Hydrogeological / Materials	0.5%					$3,100	
Geotechnical Sub-Total Cost						$3,100	
Property Requirements	1.0%					$ 6,200	
Property Requirements Sub-Total						$6,200	
Consultant Engineering/Design	15%					$ 92,900	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$92,900	
In House Labour/Engineering/Wages/CA	8%					$ 49,500	
In-house Labour/Wages Sub-Total						$49,500	
Project Contingency	10%					$77,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$77,000	
Non-Refundable HST	1.76%					$14,000	
Non-Refundable HST Sub-Total						$14,000	
Total (2024 Dollars)						$1,012,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,012,000	2024 Estimate

PROJECT NO.:	WW-FM-005	TIMELINE:	5-10 Years
PROJECT NAME:	East WWPS Forcemain		
PROJECT OVERVIEW:	New East WWPS forcemain		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
New forcemain extending from East WWPS to Lynden Road trunk sewer





REQUIRED STUDIES:	Municipal Class EA
STUDY SCOPE:	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the East WWPS (Costs included in Capital Program project WW-PS-005).
OBJECTIVES:	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	350 mm
TOTAL LENGTH:	1626 m

Tunnelled	0 m	0%
Open Cut	1626 m	100%

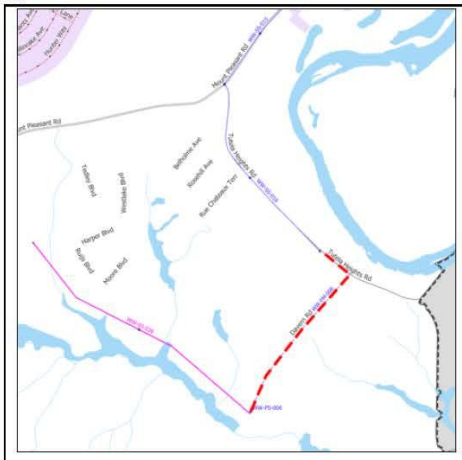
CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$150,000	
Construction Cost							
Pipe Construction - Open Cut			m	1626 m	$1,193	$1,940,441	Proposed Collector Road and Existing road ROW
Pipe Construction - Tunneling			m	0 m	$2,232	$0	
Minor Creek Crossings			ea.	0	$73,083	$0	
Major Creek Crossings			ea.	0	$362,540	$0	
Road Crossings			ea.	0	$161,929	$0	
Major Road Crossings (Highway)			ea.	0	$362,549	$0	
Utility Crossings			ea.	1	$161,929	$161,929	Railway
Pipe Construction Uplift (Based on Area Conditions)	10%					$210,237	
	15%						
Additional Construction Costs	10%		ea.			$231,261	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$231,261	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,775,000	
Geotechnical / Hydrogeological / Materials	1.0%					$27,800	
Geotechnical Sub-Total Cost						$27,800	
Property Requirements	1.5%					$ 41,600	
Property Requirements Sub-Total						$41,600	
Consultant Engineering/Design	15%					$ 416,300	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$416,300	
In House Labour/Engineering/Wages/CA	8%					$ 222,000	
In-house Labour/Wages Sub-Total						$222,000	
Project Contingency	15%					$522,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$522,000	
Non-Refundable HST	1.76%					$66,600	
Non-Refundable HST Sub-Total						$66,600	
Total (2024 Dollars)						$4,221,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$4,221,000	2024 Estimate

PROJECT NO.:	WW-FM-006	TIMELINE:	10-20 Years
PROJECT NAME:	Tutela Heights WWPS Forcemain		
PROJECT OVERVIEW:	New Tutela Heights WWPS forcemain.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
New forcemain extending from Tutela Heights WWPS to Tutela Heights Road trunk sewer





REQUIRED STUDIES:	Municipal Class EA
STUDY SCOPE:	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Tutela Heights WWPS (Costs included in Capital Program project WW-PS-006).
OBJECTIVES:	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	350 mm
TOTAL LENGTH:	467 m

Tunnelled	0 m	0%
Open Cut	467 m	100%

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$150,000	
Construction Cost							
Pipe Construction - Open Cut			m	467 m	$1,193	$557,310	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$2,232	$0	
Minor Creek Crossings			ea.	0	$73,083	$0	
Major Creek Crossings			ea.	0	$362,540	$0	
Road Crossings			ea.	0	$161,929	$0	
Major Road Crossings (Highway)			ea.	0	$362,549	$0	
Utility Crossings			ea.	0	$161,929	$0	
Pipe Construction Uplift (Based on Area Conditions)	10%					$55,731	
	10%						
Additional Construction Costs	10%		ea.			$61,304	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$61,304	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$736,000	
Geotechnical / Hydrogeological / Materials	0.5%					$3,700	
Geotechnical Sub-Total Cost						$3,700	
Property Requirements	1.0%					$ 7,400	
Property Requirements Sub-Total						$7,400	
Consultant Engineering/Design	15%					$ 110,400	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$110,400	
In House Labour/Engineering/Wages/CA	8%					$ 58,900	
In-house Labour/Wages Sub-Total						$58,900	
Project Contingency	10%					$92,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$92,000	
Non-Refundable HST	1.76%					$16,700	
Non-Refundable HST Sub-Total						$16,700	
Total (2024 Dollars)						$1,175,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,175,000	2024 Estimate

PROJECT NO.:	WW-FM-007	TIMELINE:	10-20 Years
PROJECT NAME:	Empey WWPS Forcemain Extension		
PROJECT OVERVIEW:	Increase length of forcemain for Empey WWPS to mitigate capacity and depth of cover constraints.		

MAP



REQUIRED STUDIES: -

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	900 mm	
TOTAL LENGTH:	248 m	
Tunnelled	0 m	0%
Open Cut	248 m	100%

CLASS EA REQUIREMENTS:	Eligible for Screening
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			50%	$300,000	$150,000	
Sub-Total Study Costs						$150,000	
Construction Cost							
Pipe Construction - Open Cut			m	248 m	$2,692	$667,629	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$14,400	$0	
Minor Creek Crossings			ea.	0	$544,540	$0	
Major Creek Crossings			ea.	0	$2,407,440	$0	
Road Crossings			ea.	2	$1,117,740	$2,235,480	
Major Road Crossings (Highway)			ea.	0	$2,407,440	$0	
Utility Crossings			ea.	0	$1,117,740	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$580,622	
	20%						
Additional Construction Costs	10%		ea.			$348,373	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$348,373	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$4,180,000	
Geotechnical / Hydrogeological / Materials	2.0%					$83,600	
Geotechnical Sub-Total Cost						$83,600	
Property Requirements	2.0%					$ 83,600	
Property Requirements Sub-Total						$83,600	
Consultant Engineering/Design	15%					$ 627,000	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$627,000	
In House Labour/Engineering/Wages/CA	8%					$ 334,400	
In-house Labour/Wages Sub-Total						$334,400	
Project Contingency	25%					$1,227,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,227,000	
Non-Refundable HST	1.76%					$110,900	
Non-Refundable HST Sub-Total						$110,900	
Total (2024 Dollars)						$6,897,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$6,897,000	2024 Estimate

PROJECT NO.:	WW-FM-008	TIMELINE:	5-10 Years
PROJECT NAME:	Johnson WWPS Forcemain Upgrades		
PROJECT OVERVIEW:	Upsize forcemain for Johnson WWPS		

MAP







SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Upsize forcemain for Johnson WWPS from 200mm to 300mm

REQUIRED STUDIES: -

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contract restoration

PROPOSED DIAMETER:	300 mm	
TOTAL LENGTH:	489 m	
Tunnelled	0 m	0%
Open Cut	489 m	100%

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA			0		$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	489 m	$874	$427,386	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$2,099	$0	
Minor Creek Crossings			ea.	0	$57,320	$0	
Major Creek Crossings			ea.	0	$328,157	$0	
Road Crossings			ea.	1	$140,434	$140,434	
Major Road Crossings (Highway)			ea.	0	$328,157	$0	
Utility Crossings			ea.	1	$140,434	$140,434	railroad crossing
Pipe Construction Uplift (Based on Area Conditions)	10%					$70,818	
	15%						
Additional Construction Costs	10%		ea.			$77,898	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$77,898	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$935,000	
Geotechnical / Hydrogeological / Materials	1.0%					$9,400	
Geotechnical Sub-Total Cost						$9,400	
Property Requirements	1.5%					$ 14,000	
Property Requirements Sub-Total						$14,000	
Consultant Engineering/Design	15%					$ 140,300	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$140,300	
In House Labour/Engineering/Wages/CA	8%					$ 74,800	
In-house Labour/Wages Sub-Total						$74,800	
Project Contingency	15%					$176,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$176,000	
Non-Refundable HST	1.76%					$22,400	
Non-Refundable HST Sub-Total						$22,400	
Total (2024 Dollars)						$1,372,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$1,372,000	2024 Estimate

PROJECT NO.:	WW-FM-009	TIMELINE:	5-10 Years
PROJECT NAME:	Empey WWPS Forcemain Replacement		
PROJECT OVERVIEW:	Increase length of forcemain for Empey WWPS to mitigate capacity and depth of cover constraints.		

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
Increase length of forcemain for Empey WWPS to mitigate capacity and depth of cover constraints.





REQUIRED STUDIES: -
STUDY SCOPE: -
OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Urban	Area Condition splits out contact restoration

PROPOSED DIAMETER:	900 mm	
TOTAL LENGTH:	285 m	
Tunnelled	0 m	0%
Open Cut	285 m	100%

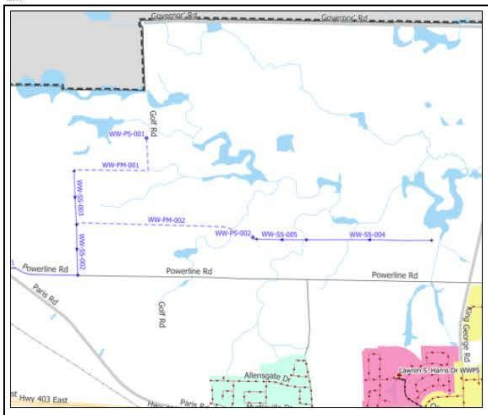
CLASS EA REQUIREMENTS:	Eligible for Screening
CONSTRUCTION ASSUMPTION:	Forcemain

COST ESTIMATION SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION			ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost							
Study	Feasibility Study			0		$0	
Study	EA					$0	
Sub-Total Study Costs						$0	
Construction Cost							
Pipe Construction - Open Cut			m	285 m	$2,692	$767,235	Existing road ROW
Pipe Construction - Tunneling			m	0 m	$14,400	$0	
Minor Creek Crossings			ea.	0	$544,540	$0	
Major Creek Crossings			ea.	0	$2,407,440	$0	
Road Crossings			ea.	2	$1,117,740	$2,235,480	
Major Road Crossings (Highway)			ea.	0	$2,407,440	$0	
Utility Crossings			ea.	0	$1,117,740	$0	
Pipe Construction Uplift (Based on Area Conditions)	20%					$600,543	
	20%						
Additional Construction Costs	10%		ea.			$360,326	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$360,326	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$4,324,000	
Geotechnical / Hydrogeological / Materials	2.0%					$86,500	
Geotechnical Sub-Total Cost						$86,500	
Property Requirements	2.0%					$ 86,500	
Property Requirements Sub-Total						$86,500	
Consultant Engineering/Design	15%					$ 648,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$648,600	
In House Labour/Engineering/Wages/CA	8%					$ 345,900	
In-house Labour/Wages Sub-Total						$345,900	
Project Contingency	25%					$1,373,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,373,000	
Non-Refundable HST	1.76%					$114,700	
Non-Refundable HST Sub-Total						$114,700	
Total (2024 Dollars)						$6,979,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$6,979,000	2024 Estimate

PROJECT NO.:	WW-PS-001	TIMELINE:	10-20 Years
PROJECT NAME:	Northwest-1 Wastewater Pumping Station		
PROJECT DESCRIPTION:	New WWPS located northeast of Golf Road.		

MAP



SANITARY CATCHMENT: Northwest-1 WWPS

PROJECT DESCRIPTION:

New WWPS located northeast of Golf Road. Flows will be pumped to the trunk sewer along north-south collector road, draining to Oak Park Road. Pumping Station sized for North Expansion Lands while securing site capacity to allow for upgrades for full buildout flows post 2051.





REQUIRED STUDIES:	Municipal Class EA
STUDY SCOPE:	The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-1 WWPS forcemain alignment (Capital Program project WW-FM-001).
OBJECTIVES:	Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out Contact Restoration

PROPOSED CAPACITY	30 L/s

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	50%	$300,000	$150,000	
Sub-Total Study Costs				$150,000	

COST ESTIMATION SPREADSHEET

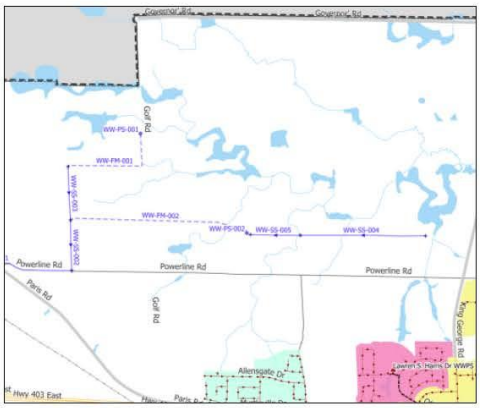
COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction				Base Cost	$5,600,000	$5,600,000	
			L/s	30 L/s	$31,500	$945,000	
Additional Construction Costs	15%		ea.			$981,750	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$762,675	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$8,279,000	
Geotechnical / Hydrogeological / Materials	1.0%					$82,800	
Geotechnical Sub-Total Cost						$82,800	
Property Requirements	1.5%					$ 124,200	
Property Requirements Sub-Total						$124,200	
Consultant Engineering/Design	15%					$ 1,241,900	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$1,241,900	
In House Labour/Engineering/Wages/CA	8%					$ 662,300	
In-house Labour/Wages Sub-Total						$662,300	
Project Contingency	15%					$1,559,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,559,000	
Non-Refundable HST	1.76%					$198,600	
Non-Refundable HST Sub-Total						$198,600	
Total (2024 Dollars)						$12,290,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$12,290,000	2024 Estimate

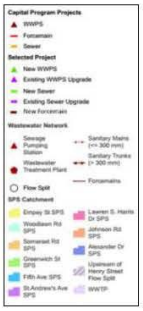
PROJECT NO.: WW-PS-002 TIMELINE: 5-10 Years

PROJECT NAME: Northwest-2 Wastewater Pumping Station

PROJECT DESCRIPTION: New WWPS located east of Golf Road.

MAP







SANITARY CATCHMENT: Northwest-2 WWPS

PROJECT DESCRIPTION:

New SPS located east of Golf Road on east-west collector's road. Flows will be pumped to the trunk sewer along the north-south collector road, draining to Oak Park Road. Pumping Station sized for North Expansion Lands while securing site capacity to allow for upgrades for full buildout flows post 2051.

REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northwest-12 WWPS forcemain alignment (Capital Program project WW-FM-002).

OBJECTIVES: Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED CAPACITY	190 L/s

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	50%	$300,000	$150,000	
Sub-Total Study Costs				$150,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction				Base Cost	$5,600,000	$5,600,000	
			L/s	190 L/s	$31,500	$5,985,000	
Additional Construction Costs	15%		ea.			$1,737,750	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$1,332,275	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$14,655,000	
Geotechnical / Hydrogeological / Materials	1.0%					$146,600	
Geotechnical Sub-Total Cost						$146,600	
Property Requirements	1.5%					$ 219,800	
Property Requirements Sub-Total						$219,800	
Consultant Engineering/Design	12%					$ 1,758,600	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$1,758,600	
In House Labour/Engineering/Wages/CA	6%					$ 879,300	
In-house Labour/Wages Sub-Total						$879,300	
Project Contingency	15%					$2,649,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$2,649,000	
Non-Refundable HST	1.76%					$342,000	
Non-Refundable HST Sub-Total						$342,000	
Total (2024 Dollars)						$20,800,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$20,800,000	2024 Estimate

PROJECT NO.: WW-PS-003 TIMELINE: 10-20 Years

PROJECT NAME: North Wastewater Pumping Station

PROJECT DESCRIPTION: New WWPS located along the East-West Collector's Road

MAP



SANITARY CATCHMENT: North WWPS

PROJECT DESCRIPTION:

New WWPS located along the east-west collector's road between King George Road and Park Road, south of Jones Creek. Pumping Station sized for North Expansion Lands while securing site capacity to allow for upgrades for full buildout flows post 2051.

REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the North WWPS forcemain alignment (Capital Program project WW-FM-003).

OBJECTIVES: Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED CAPACITY	97 L/s

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	50%	$300,000	$150,000	
Sub-Total Study Costs				$150,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction				Base Cost	$5,600,000	$5,600,000	
			L/s	97 L/s	$31,500	$3,055,500	
Additional Construction Costs	15%		ea.			$1,299,225	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$995,383	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$10,949,000	
Geotechnical / Hydrogeological / Materials	1.0%					$109,500	
Geotechnical Sub-Total Cost						$109,500	
Property Requirements	1.5%					$ 164,200	
Property Requirements Sub-Total						$164,200	
Consultant Engineering/Design	12%					$ 1,313,900	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$1,313,900	
In House Labour/Engineering/Wages/CA	6%					$ 656,900	
In-house Labour/Wages Sub-Total						$656,900	
Project Contingency	15%					$1,979,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,979,000	
Non-Refundable HST	1.76%					$255,500	
Non-Refundable HST Sub-Total						$255,500	
Total (2024 Dollars)						$15,578,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$15,578,000	2024 Estimate

PROJECT NO.: WW-PS-004 TIMELINE: 0-5 Years

PROJECT NAME: Northeast Wastewater Pumping Station

PROJECT DESCRIPTION: New WWPS located along Powerline Road, east of Coulbeck Road.

MAP



SANITARY CATCHMENT: Northeast WWPS

PROJECT DESCRIPTION:
New WWPS located along Powerline Road, east of Coulbeck Road. Flows will be pumped to Coulbeck Road trunk sewer.





REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Northeast WWPS forcemain alignment (Capital Program project WW-FM-004).

OBJECTIVES: Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED CAPACITY	75 L/s

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	50%	$300,000	$150,000	
Sub-Total Study Costs				$150,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction				Base Cost	$5,600,000	$5,600,000	
			L/s	75 L/s	$31,500	$2,362,500	
Additional Construction Costs	15%		ea.			$1,194,375	Includes Mob/Demob connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$815,688	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$10,073,000	
Geotechnical / Hydrogeological / Materials	1.0%					$100,700	
Geotechnical Sub-Total Cost						$100,700	
Property Requirements	1.5%					$ 151,100	
Property Requirements Sub-Total						$151,100	
Consultant Engineering/Design	12%					$ 1,208,800	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$1,208,800	
In House Labour/Engineering/Wages/CA	6%					$ 604,400	
In-house Labour/Wages Sub-Total						$604,400	
Project Contingency	15%					$1,821,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,821,000	
Non-Refundable HST	1.76%					$235,000	
Non-Refundable HST Sub-Total						$235,000	
Total (2024 Dollars)						$14,344,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$14,344,000	2024 Estimate

PROJECT NO.: WW-PS-005 TIMELINE: 5-10 Years

PROJECT NAME: East Wastewater Pumping Station

PROJECT DESCRIPTION: New WWPS located in southeast East Expansion Lands

MAP



SANITARY CATCHMENT: East WWPS

PROJECT DESCRIPTION:

New WWPS located along Lyndey Road, north of the East Expansion Lands. Flows will be pumped to trunk sewer on Lynden Road





REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the East WWPS forcemain alignment (Capital Program project WW-FM-005).

OBJECTIVES: Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED CAPACITY	105 L/s

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	50%	$300,000	$150,000	
Sub-Total Study Costs				$150,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction				Base Cost	$5,600,000	$5,600,000	
			L/s	105 L/s	$31,500	$3,307,500	
Additional Construction Costs	15%		ea.			$1,336,125	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$1,024,363	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$11,268,000	
Geotechnical / Hydrogeological / Materials	1.0%					$112,700	
Geotechnical Sub-Total Cost						$112,700	
Property Requirements	1.5%					$ 169,000	
Property Requirements Sub-Total						$169,000	
Consultant Engineering/Design	12%					$ 1,352,200	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$1,352,200	
In House Labour/Engineering/Wages/CA	6%					$ 676,100	
In-house Labour/Wages Sub-Total						$676,100	
Project Contingency	15%					$2,037,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$2,037,000	
Non-Refundable HST	1.76%					$262,900	
Non-Refundable HST Sub-Total						$262,900	
Total (2020 Dollars)						$16,028,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$16,028,000	2024 Estimate

PROJECT NO.: WW-PS-006 TIMELINE: 10-20 Years

PROJECT NAME: Tutela Heights Wastewater Pumping Station

PROJECT DESCRIPTION: New WWPS located in Tutela Heights

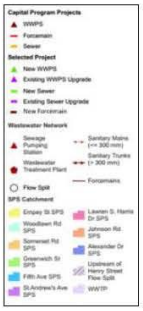
MAP



SANITARY CATCHMENT: Tutela Heights WWPS

PROJECT DESCRIPTION:

New WWPS located in south Tutela Heights along collector road. Flows to be pumped to trunk sewer on Tutela Heights Road, extending to Mount Pleasant Road trunk sewer.





REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment. This study will be done in conjunction with the Tutela Heights WWPS forcemain alignment (Capital Program project WW-FM-006).

OBJECTIVES: Determine the best construction methodology for the new wastewater pumping station including location of buildings. Determine forcemain alignment and if it can be coordinated with local development.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	High	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	50%	
Area Condition:	Rural	Area Condition splits out Contract Restoration

PROPOSED CAPACITY	80 L/s

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	50%	$300,000	$150,000	Additional Local Issues
Sub-Total Study Costs				$150,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction				Base Cost	$5,600,000	$5,600,000	
			L/s	80 L/s	$31,500	$2,520,000	
Additional Construction Costs	20%		ea.			$1,624,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$974,400	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$10,718,000	
Geotechnical / Hydrogeological / Materials	2.0%					$214,400	
Geotechnical Sub-Total Cost						$214,400	
Property Requirements	2.0%					$ 214,400	
Property Requirements Sub-Total						$214,400	
Consultant Engineering/Design	12%					$ 1,286,200	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$1,286,200	
In House Labour/Engineering/Wages/CA	6%					$ 643,100	
In-house Labour/Wages Sub-Total						$643,100	
Project Contingency	25%					$3,269,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$3,269,000	
Non-Refundable HST	1.76%					$276,400	
Non-Refundable HST Sub-Total						$276,400	
Total (2020 Dollars)						$16,772,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$16,772,000	2024 Estimate

PROJECT NO.: WW-PS-007 TIMELINE: 0-5 Years
PROJECT NAME: Empey Street WWPS Storage Upgrades
PROJECT DESCRIPTION: Increase existing Empey Street WWPS storage

MAP



SANITARY CATCHMENT: Empey Street WWPS
PROJECT DESCRIPTION:
2185 m3 in new emergency storage tank (EST) plus 1100 m3 in collection system and 500 m3 in wet well for a total of 3600 m3, includes 4 new pumps and a new



REQUIRED STUDIES: Municipal Class EA
STUDY SCOPE:
The study will be a Schedule 'B' project in accordance with all requirements of the Municipal Class Environmental Assessment.
OBJECTIVES: Determine the best construction methodology for the wastewater pumping station expansion and upgrades including wet well construction.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED CAPACITY	1000

CLASS EA REQUIREMENTS:	Schedule B
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	50%	$300,000	$150,000	
Sub-Total Study Costs				$150,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			m³	1000	$3,600	$3,600,000	
Additional Construction Costs	15%		ea.			$540,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$414,000	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$4,554,000	
Geotechnical / Hydrogeological / Materials	1.0%					$45,500	
Geotechnical Sub-Total Cost						$45,500	
Property Requirements	1.5%					$ 68,300	
Property Requirements Sub-Total						$68,300	
Consultant Engineering/Design	15%					$ 683,100	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$683,100	
In House Labour/Engineering/Wages/CA	8%					$ 364,300	
In-house Labour/Wages Sub-Total						$364,300	
Project Contingency	15%					$857,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$857,000	
Non-Refundable HST	1.76%					$109,300	
Non-Refundable HST Sub-Total						$109,300	
Total (2024 Dollars)						$6,832,000	Rounded to nearest $1,000
Other Estimate						$9,568,000	From 'Class D' Construction Capital Cost Estimate ($2023), adjusted for inflation to $2024.
Chosen Estimate						$9,568,000	2024 Estimate

PROJECT NO.:	WW-PS-008	TIMELINE:	0-5 Years
PROJECT NAME:	Empey Street WWPS Rehabilitation and Improvements		
PROJECT DESCRIPTION:	Address operational concerns related to station capacity to reachieve 1600 L/s.		

MAP



SANITARY CATCHMENT: Empey Street WWPS

PROJECT DESCRIPTION:
Renewal to meet current flow needs including maintenance and repair, rehabilitation, renewal to meet current flow needs.



REQUIRED STUDIES: Feasibility Study

STUDY SCOPE:
The study will be a feasibility study to determine the rehab required at Empey WWPS.

OBJECTIVES:
Determine the best rehabilitation strategy for the Empey WWPS to address known existing issues, facility age, condition and performance.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED CAPACITY	1600 L/s

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	1	$500,000	$500,000	
Study	EA			$0	
Sub-Total Study Costs				$500,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			L/s	1600 L/s	$11,000	$17,600,000	
Additional Construction Costs	15%		ea.			$2,640,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$2,024,000	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$22,264,000	
Geotechnical / Hydrogeological / Materials	1.0%					$222,600	
Geotechnical Sub-Total Cost						$222,600	
Property Requirements	1.5%					$ 334,000	
Property Requirements Sub-Total						$334,000	
Consultant Engineering/Design	12%					$ 2,671,700	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$2,671,700	
In House Labour/Engineering/Wages/CA	6%					$ 1,335,800	
In-house Labour/Wages Sub-Total						$1,335,800	
Project Contingency	15%					$4,024,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$4,024,000	
Non-Refundable HST	1.76%					$519,500	
Non-Refundable HST Sub-Total						$519,500	
Total (2024 Dollars)						$31,872,000	Rounded to nearest $1,000
Other Estimate						$7,800,000	From 'Class D' Construction Capital Cost Estimate ($2023), adjusted for inflation to $2024.
Chosen Estimate						$7,800,000	2024 Estimate

PROJECT NO.:	WW-PS-009	TIMELINE:	Completion 2021
PROJECT NAME:	Fifth Avenue Wastewater Pumping Station Upgrades		
PROJECT DESCRIPTION:	Upgrade capacity to accommodate existing and future flows.		

MAP



SANITARY CATCHMENT: Fifth Ave WWPS

PROJECT DESCRIPTION:

Station upgrades at existing WWPS including upgrading capacity to 130 L/s, and a new forcemain (twinned).



en completed and not a part of the 2025

REQUIRED STUDIES: -

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contact restoration

PROPOSED CAPACITY	72 L/s	CLASS EA REQUIREMENTS:	Exempt
		CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA	1	$300,000	$300,000	
Sub-Total Study Costs				$300,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			L/s	72 L/s	$31,500	$2,268,000	
Additional Construction Costs	15%		ea.			$340,200	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$260,820	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,869,000	
Geotechnical / Hydrogeological / Materials	1.0%					$28,700	
Geotechnical Sub-Total Cost						$28,700	
Property Requirements	1.5%					$ 43,000	
Property Requirements Sub-Total						$43,000	
Consultant Engineering/Design	15%					$ 430,400	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$430,400	
In House Labour/Engineering/Wages/CA	8%					$ 229,500	
In-house Labour/Wages Sub-Total						$229,500	
Project Contingency	15%					$540,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$540,000	
Non-Refundable HST	1.76%					$68,800	
Non-Refundable HST Sub-Total						$68,800	
Total (2024 Dollars)						$4,509,000	Rounded to nearest $1,000
Other Estimate						$5,057,280	Carried over from previous MSP with inflation. From Detailed Design Opinion of Costs
Chosen Estimate						$5,057,000	2024 Estimate

PROJECT NO.:	WW-PS-010	TIMELINE:	0-5 Years
PROJECT NAME:	Fifth Avenue WWPS Storage Upgrades		
PROJECT DESCRIPTION:	Upgrade wet well capacity to accommodate existing and future flows.		

MAP



SANITARY CATCHMENT: Fifth Ave WWPS

PROJECT DESCRIPTION:
Add 1 hour of storage to accommodate peak flows, 468 m3 of storage, to address existing and future peak weather flow storage deficit.



REQUIRED STUDIES: Feasibility Study
STUDY SCOPE: -
OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out Land Restoration

PROPOSED CAPACITY	468

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	1	$200,000	$200,000	
Study	EA			$0	
Sub-Total Study Costs				$200,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			m3	468	$3,600	$1,684,800	
Additional Construction Costs	15%		ea.			$252,720	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$193,752	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$2,131,000	
Geotechnical / Hydrogeological / Materials	1.0%					$21,300	
Geotechnical Sub-Total Cost						$21,300	
Property Requirements	1.5%					$ 32,000	
Property Requirements Sub-Total						$32,000	
Consultant Engineering/Design	15%					$ 319,700	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$319,700	
In House Labour/Engineering/Wages/CA	8%					$ 170,500	
In-house Labour/Wages Sub-Total						$170,500	
Project Contingency	15%					$401,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$401,000	
Non-Refundable HST	1.76%					$51,100	
Non-Refundable HST Sub-Total						$51,100	
Total (2024 Dollars)						$3,327,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$3,327,000	2024 Estimate

PROJECT NO.:	WW-PS-011	TIMELINE:	10-20 Years
PROJECT NAME:	Greenwich Wastewater Pumping Station Rehabilitation and Improvements		
PROJECT DESCRIPTION:	Address operational concerns related to station capacity to 578 L/s.		

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:

Renewal to meet current flow needs including maintenance and repair, rehabilitation and replacing existing pumps with new pumps and non-clog impellers to reduce plugging. Pumps to be selected to match current firm capacity to preserve the existing station capacity.

REQUIRED STUDIES:	Feasibility Study
STUDY SCOPE:	-
OBJECTIVES:	-

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Suburban	Area Condition splits out contact restoration

PROPOSED CAPACITY	141 L/s	CLASS EA REQUIREMENTS:	Eligible for Screening
		CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

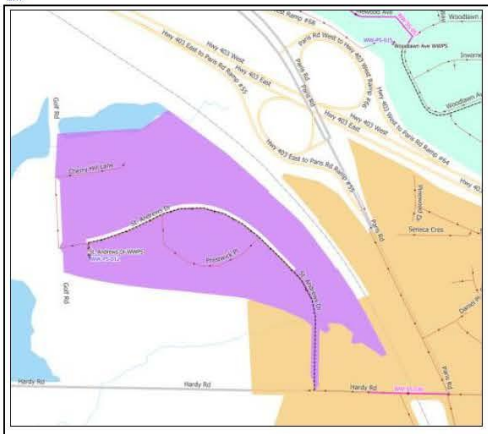
COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	1	$200,000	$200,000	
Study	EA			$0	
Sub-Total Study Costs				$200,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			L/s	141 L/s	$31,500	$4,441,500	
Additional Construction Costs	15%		ea.			$666,225	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$510,773	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$5,618,000	
Geotechnical / Hydrogeological / Materials	1.0%					$56,200	
Geotechnical Sub-Total Cost						$56,200	
Property Requirements	1.5%					$ 84,300	
Property Requirements Sub-Total						$84,300	
Consultant Engineering/Design	15%					$ 842,700	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$842,700	
In House Labour/Engineering/Wages/CA	8%					$ 449,400	
In-house Labour/Wages Sub-Total						$449,400	
Project Contingency	15%					$1,058,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,058,000	
Non-Refundable HST	1.76%					$134,800	
Non-Refundable HST Sub-Total						$134,800	
Total (2024 Dollars)						$8,443,000	Rounded to nearest $1,000
Other Estimate						$1,296,000	Carried over from previous MSP with inflation. From Capacity Analysis and Condition Assessment Report
Chosen Estimate						$1,296,000	2024 Estimate

PROJECT NO.:	WW-PS-012	TIMELINE:	0-5 Years
PROJECT NAME:	St. Andrews WWPS Storage Upgrades		
PROJECT DESCRIPTION:	Upgrade wet well capacity to accommodate existing and future flows.		

MAP



SANITARY CATCHMENT: St. Andrews WWPS

PROJECT DESCRIPTION:
Add an additional 25 m3 of storage plus collection system 7 m3 and wet well 20 m3 for a total of 52 m3 to address existing and future peak weather flow storage



REQUIRED STUDIES: Feasibility Study
STUDY SCOPE:

OBJECTIVES: Determine the best construction methodology for the wastewater pumping station expansion and upgrades including wet well construction.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition splits out Contained Restoration

PROPOSED CAPACITY	25

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	1	$200,000	$200,000	
Study	EA			$0	
Sub-Total Study Costs				$200,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			m3	25	$7,200	$180,000	
Additional Construction Costs	10%		ea.			$18,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$19,800	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$218,000	
Geotechnical / Hydrogeological / Materials	0.5%					$1,100	
Geotechnical Sub-Total Cost						$1,100	
Property Requirements	1.0%					$ 2,200	
Property Requirements Sub-Total						$2,200	
Consultant Engineering/Design	15%					$ 32,700	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$32,700	
In House Labour/Engineering/Wages/CA	8%					$ 17,400	
In-house Labour/Wages Sub-Total						$17,400	
Project Contingency	10%					$27,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$27,000	
Non-Refundable HST	1.76%					$4,900	
Non-Refundable HST Sub-Total						$4,900	
Total (2024 Dollars)						$503,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$503,000	2024 Estimate

PROJECT NO.: WW-PS-013 TIMELINE: 0-5 Years
PROJECT NAME: Johnson WWPS Storage Upgrades
PROJECT DESCRIPTION: Upgrade wet well capacity to accommodate existing and future flows.

MAP



SANITARY CATCHMENT: Johnson Road WWPS
PROJECT DESCRIPTION:
Add an additional 115 m3 of storage to address existing and future peak weather flow storage deficit.



REQUIRED STUDIES: Feasibility Study
STUDY SCOPE:

OBJECTIVES: Determine the best construction methodology for the wastewater pumping station expansion and upgrades including wet well construction.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition splits out Contained Restoration

PROPOSED CAPACITY	115

CLASS EA REQUIREMENTS:	Eligible for Screening
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

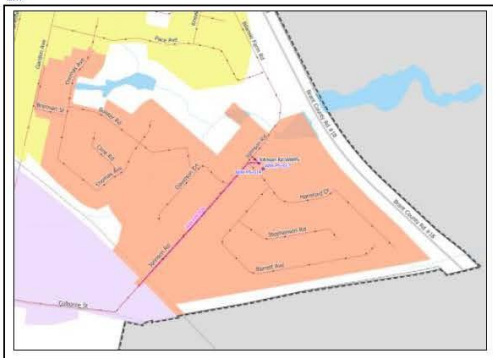
COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	1	$200,000	$200,000	
Study	EA			$0	
Sub-Total Study Costs				$200,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			m3	115	$3,600	$414,000	
Additional Construction Costs	10%		ea.			$41,400	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$45,540	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$501,000	
Geotechnical / Hydrogeological / Materials	0.5%					$2,500	
Geotechnical Sub-Total Cost						$2,500	
Property Requirements	1.0%					$ 5,000	
Property Requirements Sub-Total						$5,000	
Consultant Engineering/Design	15%					$ 75,200	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$75,200	
In House Labour/Engineering/Wages/CA	8%					$ 40,100	
In-house Labour/Wages Sub-Total						$40,100	
Project Contingency	10%					$62,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$62,000	
Non-Refundable HST	1.76%					$11,400	
Non-Refundable HST Sub-Total						$11,400	
Total (2024 Dollars)						$897,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$897,000	2024 Estimate

PROJECT NO.:	WW-PS-014	TIMELINE:	0-5 Years
PROJECT NAME:	Johnson WWPS Rehabilitation		
PROJECT DESCRIPTION:	Upgrade capacity to accommodate existing and future flows.		

MAP



SANITARY CATCHMENT: Johnson Road WWPS

PROJECT DESCRIPTION:

Rehabilitation, maintenance and repair to address operational concerns related to WWPS.

REQUIRED STUDIES: Feasibility Study

STUDY SCOPE: The study will be a feasibility study to determine the rehab required at the Johnson WWPS

OBJECTIVES: Determine the best rehabilitation strategy for the Johnson WWPS to address known existing issues, facility age, condition and performance.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition splits out curb and restoration

PROPOSED CAPACITY	70 L/s

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

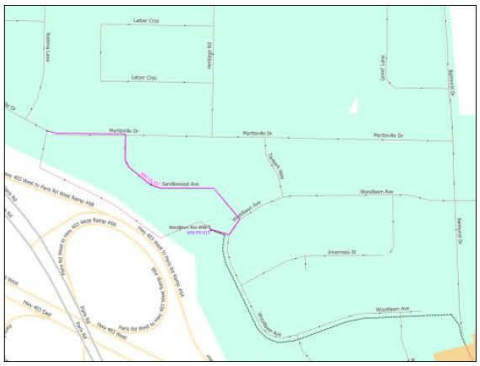
COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	1	$200,000	$200,000	
Study	EA			$0	
Sub-Total Study Costs				$200,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Facility Construction			L/s	42 L/s	$31,500	$1,323,000	from existing 64 L/s to 106 L/s
Additional Construction Costs	10%		ea.			$132,300	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$145,530	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$1,601,000	
Geotechnical / Hydrogeological / Materials	0.5%					$8,000	
Geotechnical Sub-Total Cost						$8,000	
Property Requirements	1.0%					$ 16,000	
Property Requirements Sub-Total						$16,000	
Consultant Engineering/Design	15%					$ 240,200	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$240,200	
In House Labour/Engineering/Wages/CA	8%					$ 128,100	
In-house Labour/Wages Sub-Total						$128,100	
Project Contingency	10%					$199,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$199,000	
Non-Refundable HST	1.76%					$36,300	
Non-Refundable HST Sub-Total						$36,300	
Total (2024 Dollars)						$2,429,000	Rounded to nearest $1,000
Other Estimate						$576,000	Carried over from previous MSP with inflation. From Capacity Analysis and Condition Assessment Report
Chosen Estimate						$576,000	2024 Estimate

PROJECT NO.:	WW-PS-015	TIMELINE:	0-5 Years
PROJECT NAME:	Woodlawn WWPS Rehabilitation		
PROJECT DESCRIPTION:	Upgrade capacity to accommodate existing and future flows.		

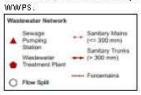
MAP



SANITARY CATCHMENT: Woodlawn Road WWPS

PROJECT DESCRIPTION:

Rehabilitation, maintenance and repair to address operational concerns related to WWPS.



REQUIRED STUDIES: Feasibility Study

STUDY SCOPE: The study will be a feasibility study to determine the rehab required at the Woodlawn WWPS

OBJECTIVES: Determine the best rehabilitation strategy for the Woodlawn WWPS to address known existing issues, facility age, condition and performance.

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition splits out Curb and Restoration

PROPOSED CAPACITY	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

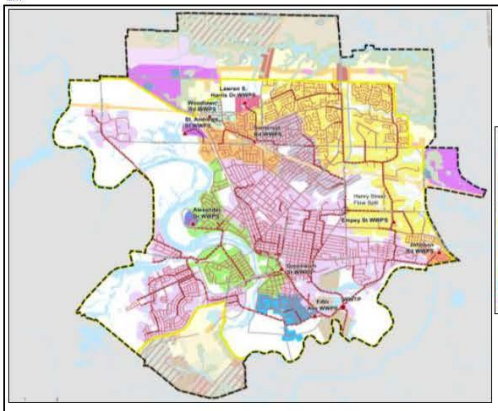
COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	1	$200,000	$200,000	
Study	EA			$0	
Sub-Total Study Costs				$200,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Rehabilitation			Lump Sum			$0	
Additional Construction Costs	10%		ea.			$0	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$0	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$0	
Geotechnical / Hydrogeological / Materials	0.5%					$0	
Geotechnical Sub-Total Cost						$0	
Property Requirements	1.0%					$ -	
Property Requirements Sub-Total						$0	
Consultant Engineering/Design	15%					$ -	Includes planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$0	
In House Labour/Engineering/Wages/CA	8%					$ -	
In-house Labour/Wages Sub-Total						$0	
Project Contingency	10%					$0	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$0	
Non-Refundable HST	1.76%					$0	
Non-Refundable HST Sub-Total						$0	
Total (2025 Dollars)						$200,000	Rounded to nearest $1,000
Other Estimate						$576,000	Carried over from previous MSP with inflation. From Capacity Analysis and Condition Assessment Report
Chosen Estimate						$576,000	2025 Estimate

PROJECT NO.: WW-I-001 TIMELINE: 0-5 Years
PROJECT NAME: Flow Monitoring
PROJECT DESCRIPTION: City wide flow monitoring program.

MAP



SANITARY CATCHMENT: WWTP
PROJECT DESCRIPTION:
City wide flow monitoring program to address existing issues and provide guidance for wet weather flow management practices.





REQUIRED STUDIES: -
STUDY SCOPE: -
OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Low	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	30%	
Area Condition:	Suburban	Area Condition splits out contact restoration

PROPOSED CAPACITY	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA			$0	
Sub-Total Study Costs				$0	

COST ESTIMATION SPREADSHEET

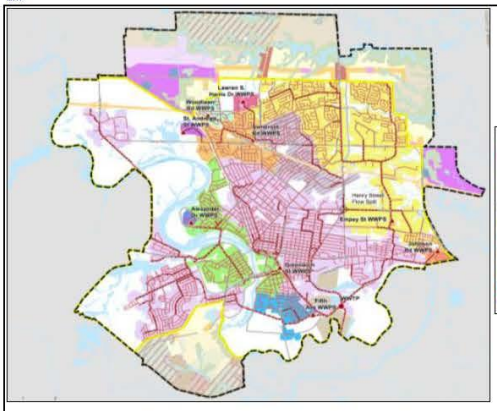
COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
Flow Monitoring Program			years	20	$360,000	$7,200,000	
Additional Construction Costs	10%		ea.			$720,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$792,000	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$8,712,000	
Geotechnical / Hydrogeological / Materials	0.5%					$43,600	
Geotechnical Sub-Total Cost						$43,600	
Property Requirements	1.0%					$ 87,100	
Property Requirements Sub-Total						$87,100	
Consultant Engineering/Design	15%					$ 1,306,800	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$1,306,800	
In House Labour/Engineering/Wages/CA	8%					$ 697,000	
In-house Labour/Wages Sub-Total						$697,000	
Project Contingency	10%					$1,085,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,085,000	
Non-Refundable HST	1.76%					$197,700	
Non-Refundable HST Sub-Total						$197,700	
Total (2025 Dollars)						$12,129,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$12,129,000	2025 Estimate

PROJECT NO.: WW-I-002 TIMELINE: 0-5 Years

PROJECT NAME: City Wide I&I Program

PROJECT DESCRIPTION: Wet weather management program to address growth and existing issues.

MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:
City wide I&I reduction program based on flow monitoring results to address existing issues.

REQUIRED STUDIES: -

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

= Field has drop down
= Field must be manually populated
= Field auto-filled based on project details

PROPOSED CAPACITY	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA			$0	
Sub-Total Study Costs				$0	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
I&I Reduction				100	$216,000	$21,600,000	
Additional Construction Costs	15%		ea.			$3,240,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$2,484,000	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$27,324,000	
Geotechnical / Hydrogeological / Materials	1.0%					$273,200	
Geotechnical Sub-Total Cost						$273,200	
Property Requirements	1.5%					$ 409,900	
Property Requirements Sub-Total						$409,900	
Consultant Engineering/Design	12%					$ 3,278,900	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$3,278,900	
In House Labour/Engineering/Wages/CA	6%					$ 1,639,400	
In-house Labour/Wages Sub-Total						$1,639,400	
Project Contingency	15%					$4,939,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$4,939,000	
Non-Refundable HST	1.76%					$637,600	
Non-Refundable HST Sub-Total						$637,600	
Total (2025 Dollars)						$38,502,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$38,502,000	2025 Estimate

PROJECT NO.: WW-II-003 TIMELINE: 0-5 Years

PROJECT NAME: Greenwich WWPS I&I Reduction

PROJECT DESCRIPTION: I&I program to manage peak flows in Greenwich WWPS catchment

MAP



SANITARY CATCHMENT: Greenwich Street WWPS

PROJECT DESCRIPTION:

Greenwich WWPS catchment subject to high I&I in catchment. Initiate I&I program to manage peak flows to free up capacity at existing WWPS.



REQUIRED STUDIES: -

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

= Field has drop down

= Field must be manually populated

= Field auto-filled based on project details

PROPOSED CAPACITY	

CLASS EA REQUIREMENTS:	Exempt
CONSTRUCTION ASSUMPTION:	

COST ESTIMATE SPREADSHEET

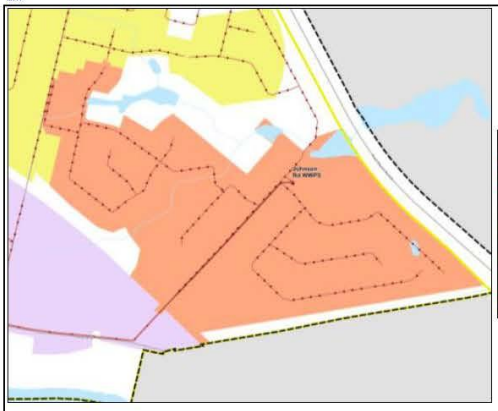
COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA			$0	
Sub-Total Study Costs				$0	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
I&I Program				20	$216,000	$4,320,000	
Additional Construction Costs	15%		ea.			$648,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$496,800	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$5,465,000	
Geotechnical / Hydrogeological / Materials	1.0%					$54,700	
Geotechnical Sub-Total Cost						$54,700	
Property Requirements	1.5%					$ 82,000	
Property Requirements Sub-Total						$82,000	
Consultant Engineering/Design	15%					$ 819,800	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$819,800	
In House Labour/Engineering/Wages/CA	8%					$ 437,200	
In-house Labour/Wages Sub-Total						$437,200	
Project Contingency	15%					$1,029,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,029,000	
Non-Refundable HST	1.76%					$131,100	
Non-Refundable HST Sub-Total						$131,100	
Total (2025 Dollars)						$8,019,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$8,019,000	2025 Estimate

PROJECT NO.:	WW-II-004	TIMELINE:	0-5 Years
PROJECT NAME:	Johnson WWPS I&I Reduction		
PROJECT DESCRIPTION:	I&I program to manage peak flows in John WWPS catchment		

MAP





SANITARY CATCHMENT: Johnson Road WWPS

PROJECT DESCRIPTION:

Johnson WWPS catchment subject to very high I&I in catchment. Initiate I&I program to manage peak flows to free up capacity at existing WWPS.

REQUIRED STUDIES: -

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class adjusts Construction Contingency and expected accuracy
Project Complexity	Med	Complexity adjusts Construction Contingency, and expected accuracy
Accuracy Range:	40%	
Area Condition:	Rural	Area Condition splits out contact restoration

PROPOSED CAPACITY		CLASS EA REQUIREMENTS:	Exempt
		CONSTRUCTION ASSUMPTION:	

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study			$0	
Study	EA			$0	
Sub-Total Study Costs				$0	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
I&I Program			L/s	20 L/s	$216,000	$4,320,000	
Additional Construction Costs	15%		ea.			$648,000	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$496,800	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$5,465,000	
Geotechnical / Hydrogeological / Materials	1.0%					$54,700	
Geotechnical Sub-Total Cost						$54,700	
Property Requirements	1.5%					$ 82,000	
Property Requirements Sub-Total						$82,000	
Consultant Engineering/Design	15%					$ 819,800	Includes planning, pre-design, detailed design, training , CA, commissioning
Engineering/Design Sub-Total						$819,800	
In House Labour/Engineering/Wages/CA	8%					$ 437,200	
In-house Labour/Wages Sub-Total						$437,200	
Project Contingency	15%					$1,029,000	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$1,029,000	
Non-Refundable HST	1.76%					$131,100	
Non-Refundable HST Sub-Total						$131,100	
Total (2025 Dollars)						$8,019,000	Rounded to nearest $1,000
Other Estimate							
Chosen Estimate						$8,019,000	2025 Estimate

PROJECT NO.:	WW-TP-001	TIMELINE:	0-5 Years
PROJECT NAME:	Wastewater Treatment Plant Upgrades - 0 - 5 Years		
PROJECT DESCRIPTION:	Increase plant capacity with a new raw sewage pumping station and forcemain		

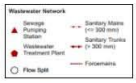
MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:

Construct a new raw sewage pumping station with new forcemain to bring the pumping capacity to 230 MLD to match the current preliminary treatment capacity. Forcemain and wet well to be sized to the full build out capacity with provisions for future pumping and electrical capacity upgrades.



REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class as per AACE Construction Contingency and expected accuracy
Project Complexity:	Med	Complexity as per AACE Construction Contingency, and expected accuracy
Accuracy Range:	-40%	
Area Condition:	Rural	Area Condition as per AACE Construction

PROPOSED CAPACITY	

CLASS EA REQUIREMENTS:	Schedule C
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	0	$200,000	$0	
Study	EA	33%	$300,000	$100,000	
Sub-Total Study Costs				$100,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
New Chlorine Contact Chamber						$0	
Additional Construction Costs	15%		ea.			$0	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$0	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$0	
Geotechnical / Hydrogeological / Materials	1.0%					$0	
Geotechnical Sub-Total Cost						$0	
Property Requirements	1.5%					$ -	
Property Requirements Sub-Total						$0	
Consultant Engineering/Design	15%					$ -	Includes: planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$0	
In House Labour/Engineering/Wages/CA	8%					$ -	
In-house Labour/Wages Sub-Total						$0	
Project Contingency	15%					$0	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$0	
Non-Refundable HST	1.76%					$0	
Non-Refundable HST Sub-Total						$0	
Total (2025 Dollars)						$100,000	Rounded to nearest $1,000
Other Estimate						$19,500,000	
Chosen Estimate						$19,500,000	2025 Estimate

COST ESTIMATE SUMMARY - FOR PHASING ESTIMATING ONLY

PROJECT COMPONENT	PROJECT COMPONENT DESCRIPTION	PERCENTAGE	TOTAL	YEAR	COMMENTS
Study	Feasibility study, EA	2%	$390,000		
Design	Design fees, Town fees for design, contract admin	13%	$2,535,000		
Construction	City fees, base costs and project contingency	85%	$16,575,000		
TOTAL			$19,500,000		

PROJECT NO.:	WW-TP-002	TIMELINE:	5-10 Years
PROJECT NAME:	Wastewater Treatment Plant Upgrades - 5-10 Years		
PROJECT DESCRIPTION:	Increase plant capacity with restoration of secondary clarifiers and sludge thickening		

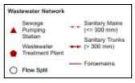
MAP



SANITARY CATCHMENT: WWTP

PROJECT DESCRIPTION:

Bring all existing secondary clarifiers back into service.
Implement sludge thickening in the biosolids management infrastructure. Monitor the impact to the primary treatment, digesters and biosolids storage to determine the need for future upgrades to support full buildout capacity.



REQUIRED STUDIES: Municipal Class EA

STUDY SCOPE: -

OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class as per AACE Construction Contingency and expected accuracy
Project Complexity	Med	Complexity as per AACE Construction Contingency, and expected accuracy
Accuracy Range:	-40%	
Area Condition:	Rural	Area Condition split: full cost and reduction

PROPOSED CAPACITY	

CLASS EA REQUIREMENTS:	Schedule C
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	0	$200,000	$0	
Study	EA	33%	$300,000	$100,000	
Sub-Total Study Costs				$100,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
New Chlorine Contact Chamber						$0	
Additional Construction Costs	15%		ea.			$0	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$0	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$0	
Geotechnical / Hydrogeological / Materials	1.0%					$0	
Geotechnical Sub-Total Cost						$0	
Property Requirements	1.5%					$ -	
Property Requirements Sub-Total						$0	
Consultant Engineering/Design	15%					$ -	Includes: planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$0	
In House Labour/Engineering/Wages/CA	8%					$ -	
In-house Labour/Wages Sub-Total						$0	
Project Contingency	15%					$0	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$0	
Non-Refundable HST	1.76%					$0	
Non-Refundable HST Sub-Total						$0	
Total (2025 Dollars)						$100,000	Rounded to nearest $1,000
Other Estimate						$9,750,000	
Chosen Estimate						$9,750,000	2025 Estimate

COST ESTIMATE SUMMARY - FOR PHASING ESTIMATING ONLY

PROJECT COMPONENT	PROJECT COMPONENT DESCRIPTION	PERCENTAGE	TOTAL	YEAR	COMMENTS
Study	Feasibility study, EA	2%	$195,000		
Design	Design fees, Town fees for design, contract admin	13%	$1,267,500		
Construction	City fees, base costs and project contingency	85%	$8,287,500		
TOTAL			$9,750,000		

PROJECT NO.: WW-TP-003 TIMELINE: 10-20 Years
PROJECT NAME: Wastewater Treatment Plant Upgrades - 10-20 Years
PROJECT DESCRIPTION: Increase plant capacity for both primary and secondary treatment capacity

MAP



SANITARY CATCHMENT: WWTP
PROJECT DESCRIPTION:
4.Increase preliminary treatment capacity (Raw sewage pumping, Screening, Grit Removal, Primary clarifier)
5.Increase secondary treatment capacity (aeration tank and blower)

REQUIRED STUDIES: Municipal Class EA
STUDY SCOPE: -
OBJECTIVES: -

CONSTRUCTION

Class Estimate Type:	Class 4	Class as per AACE Cost Estimate Classification System
Project Complexity	Med	Complexity as per AACE Cost Estimate Classification System
Accuracy Range:	-40%	
Area Condition:	Rural	Area Condition as per AACE Cost Estimate Classification System

PROPOSED CAPACITY	

CLASS EA REQUIREMENTS:	Schedule C
CONSTRUCTION ASSUMPTION:	Other

COST ESTIMATE SPREADSHEET

COMPONENT	PROJECT COMPONENT DESCRIPTION	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Study Cost					
Study	Feasibility Study	0	$200,000	$0	
Study	EA	33%	$300,000	$100,000	
Sub-Total Study Costs				$100,000	

COST ESTIMATION SPREADSHEET

COMPONENT	RATE (%)	RATE ($)	UNIT	ESTIMATED QUANTITY	COST PER UNIT	SUB-TOTAL	COMMENTS
Construction Cost							
New Chlorine Contact Chamber						$0	
Additional Construction Costs	15%		ea.			$0	Includes Mob/Demob,connections, inspection, hydrants, signage, traffic management, bonding, insurance
Provisional & Allowance	10%		ea.			$0	Provisional Labour and Materials in addition to base construction cost
Sub-Total Construction Base Costs						$0	
Geotechnical / Hydrogeological / Materials	1.0%					$0	
Geotechnical Sub-Total Cost						$0	
Property Requirements	1.5%					$ -	
Property Requirements Sub-Total						$0	
Consultant Engineering/Design	15%					$ -	Includes: planning, pre-design, detailed design, training, CA, commissioning
Engineering/Design Sub-Total						$0	
In House Labour/Engineering/Wages/CA	8%					$ -	
In-house Labour/Wages Sub-Total						$0	
Project Contingency	15%					$0	Construction Contingency is dependent on Cost Estimate Class and Project Complexity
Project Contingency Sub-Total						$0	
Non-Refundable HST	1.76%					$0	
Non-Refundable HST Sub-Total						$0	
Total (2025 Dollars)						$100,000	Rounded to nearest $1,000
Other Estimate						$75,400,000	$69,430,000
Chosen Estimate						$75,400,000	2025 Estimate

COST ESTIMATE SUMMARY - FOR PHASING ESTIMATING ONLY

PROJECT COMPONENT	PROJECT COMPONENT DESCRIPTION	PERCENTAGE	TOTAL	YEAR	COMMENTS
Study	Feasibility study, EA	2%	$1,508,000		
Design	Design fees, Town fees for design, contract admin	13%	$9,802,000		
Construction	City fees, base costs and project contingency	85%	$64,090,000		
TOTAL			$75,400,000		