



AGENDA
Strategic Priorities Committee

September 17, 2019

9:00 am

Council Chambers, Town Hall
175 Queen Street East, St. Marys

Pages

1. **CALL TO ORDER**
2. **DECLARATIONS OF PECUNIARY INTEREST**
3. **AMENDMENTS AND APPROVAL OF THE AGENDA**

RECOMMENDATION

THAT the September 17, 2019 Strategic Priorities Committee agenda be accepted as presented.

4. STRATEGIC PRIORITIES REVIEW

4.1 DEV 50-2019 Proposed Fire Hall Design and Pre-Tender Cost Estimate

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RECOMMENDATION

THAT DEV 50-2019 Proposed Fire Hall Design and Pre-Tender Cost Estimate report be received; and

THAT Strategic Priorities Committee recommend to Council:

THAT Council directs Design Team 2 to complete a final line by line review of the design details and furnishings and equipment budget to determine what items are a critical need today, and what items could be eliminated or delayed; and

THAT Council directs the design be modified to demolish the existing hose drying tower and mezzanine area to create an entirely “build new” administrative area; and

THAT once the design modifications are made by Design Team 2, staff are authorized to release the fire hall upgrade tender, and authorized to include provisions to allow a flexible completion date of within 24 months of the awarding of the project (i.e. construction within either the 2020 or 2021 construction season), with a requirement for completion of within 8 months of breaking ground.

4.2 PW 51-2019 Water and Sewer Rates

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RECOMMENDATION

THAT Report PW 51-2019 Water and Sewer Rates be received for discussion; and

THAT the Committee recommends to Council:

THAT water rates be increased by 2.0% for 2020 in accordance with the Town’s current Water System Financial Plan; and

THAT wastewater rates be increased by 2.4% for 2020 in accordance with the Town’s current Wastewater System Financial Plan.

RECOMMENDATION

THAT Report PW 56-2019, Water and Sewer Policies be received for discussion; and

THAT the Strategic Priorities Committee recommends to Council:

THAT Council adopt the amended Water and Sewer policies regarding “Frozen Water Service”, “Sewer Blockage” and “Water Repair and Restoration”.

4.4 PW 52-2019 Waste Management Services and Fees By-law Review

RECOMMENDATION

THAT Report PW 52-2019, Waste Management Services and Fees By-law Review be received for discussion; and

THAT the Committee recommends to Council:

THAT a Mattress and Box Spring program be incorporated into the by-law update with the program to be self-funded through per unit charges; and,

THAT At Home Diversion Initiatives be supported by Council with inclusion of an annual budget allotment of \$5,000.00; and,

THAT Waste dumping restrictions at the Site within 30-minutes of site closure and on Saturdays be incorporated into the proposed waste management by-law; and,

THAT Waste Diversion Initiatives such as Recycling, Leaf and Yard Waste and At Home Diversion initiatives be incorporated into a self-funded Waste Management System to be funded through Wheelie Bin fees and landfill site operations.

5. NEXT MEETING

September 24, 2019 - 9:00 am, Council Chambers

- Corporate Core Services Review (Closed Session - Library and Museum Review)

October 1, 2019 - 9:00 am, Council Chambers

- Corporate Core Services Review (Closed Session) **If necessary**

October 15, 2019 - 9:00 am, Council Chambers

- Finance Pre-Budget Report
- Review of 2020 Council Priorities

6. ADJOURNMENT

RECOMMENDATION

THAT this meeting of the Strategic Priorities Committee adjourn at _____ pm.

FORMAL REPORT

To:	Chair Stratthdee and Members of Strategic Priorities Committee
Prepared by:	Grant Brouwer, Director of Building and Development
Date of Meeting:	17 September 2019
Subject:	DEV 50-2019 Proposed Fire Hall Design and Pre-Tender Cost Estimate

PURPOSE

The purpose of this report is to provide Council with a detailed floor plan and budget analysis regarding the fire hall facility project. The pre-tender cost estimate for the project has come in higher than expected at a construction cost of \$3.5M plus \$261,530 in furnishings and equipment (F&E) that the Fire Chief has indicated is required. Staff have completed a line-by-line analysis of the cost estimate, and adjusted our own internal budget and expect the actual construction and F&E costs to be in the order of \$2.3 – 3.3 M.

Staff are recommending that Council provide direction to the staff-Council design team (Design Team 2) to review the design and F&E requests a final time to remove any item that is not considered a critical need. After this task, staff are recommending that the project be put to tender as that is the only way to confirm the project price, and it will allow the Town to have the ability to secure preferred pricing for either the 2020 or 2021 construction year.

The Director of Finance has reviewed financing options for this project. Although the Class C estimate (explained further on) was higher than originally projected, the Town's financial outlook is good due to the preparations Council has made. In the worst case scenario of a \$3.5M project, the project could be funded with a blend of options (development charges, reserves, and debt). The combination of debt servicing costs and increased operating costs for the new hall would not increase the annual levy so long as cost containment efforts are maintained throughout the project. This is accomplished by redirecting the \$112,500 transfer to reserve levied in 2019 to debt servicing and operating costs of the new fire hall.

RECOMMENDATION

THAT DEV 50-2019 Proposed Fire Hall Design and Pre-Tender Cost Estimate report be received; and

THAT Strategic Priorities Committee recommend to Council:

THAT Council directs Design Team 2 to complete a final line by line review of the design details and furnishings and equipment budget to determine what items are a critical need today, and what items could be eliminated or delayed; and

THAT Council directs the design be modified to demolish the existing hose drying tower and mezzanine area to create an entirely "build new" administrative area; and

THAT once the design modifications are made by Design Team 2, staff are authorized to release the fire hall upgrade tender, and authorized to include provisions to allow a flexible completion date of within

24 months of the awarding of the project (i.e. construction within either the 2020 or 2021 construction season), with a requirement for completion of within 8 months of breaking ground.

BACKGROUND

The review of the fire hall started in the fall of 2018, because we knew we had a building that was lacking in a few areas. Most critically, it was identified that there were a number of deficiencies in the fire hall that affect the health and safety of the volunteer firefighters. Firefighters had no place to properly clean up after car accidents and fire calls. They were required to go home to change and clean up. Bunker gear was stored in the compartments of the trucks with no place to dry out and gas off. Concerns were also made that new trucks may have difficulty fitting into the existing truck bays.

Staff was asked to review the space and to come up with options for the existing site at James Street South. Review of the existing building as well as reaching out to fire services that had a new hall built in 2018 were used to base our proposals. In March 2019 staff presented three options.

Option #1 – Renovate to meet the minimum requirements

- A 5,000 sq. ft building adding what was necessary to provide the minimum requirements needed at the hall.
- Budget = \$1,322,400

Option #2 – Renovate to meet recommended requirements

- A 7,700 sq. ft. building that would use parts of the existing building, add additional truck bays and new suppression area for bunker gear.
- Budget = \$1,636,800

Option #3 – Construct a new 8,000 sq. ft fire hall on the existing site.

- Budget = \$2,416,150

Option #2, the 7,700 sq. ft option was provided authorization to proceed by Council in March 2019 during budget deliberations. After that, an in-depth review by Council liaisons, staff and the fire department representatives began. Council granted the go ahead to put a design team together that consisted of seven volunteer fire fighters and one staff. The job was to review the needs and wants of the fire department today and going forward in to the future. The parameter of the 7,700 sq. ft was the bench mark to work with.

The team met weekly going through all aspects of the operation of the fire hall. The types of operational questions asked to inform the design were: what is the flow of the hall when the alarm goes off, where does all your gear get stored, where do you shower and get dressed? Over the next several months a preliminary floor plan was created which reflected the needs of the fire department.

The proposed draft floor plan included inclusive washroom and shower area, bunker gear room, workshop, storage room, meeting room, six truck bays and administration area. This floor layout was presented to Design Team 2 on April 8th, 2019. Design Team 2 consisted of several members of management, Fire Chief, two members of Council and the Mayor. Good dialog was had in the meeting and it was agreed that some tweaks to the floor plans layout and space were needed. The approved preliminary plan was ready to hand over to the Architect. This preliminary version had increased to a build of 8,400 sq.ft. An Open House was held on Sunday May 04, 2019 at the Firefighters Annual Breakfast to inform the public of the Town's intent to upgrade the fire hall, with many positive comments from the public.

At the same time as the internal design work was being completed the Town had a design tender out in the market, and on May 14th, 2019, Council approved the hiring of Masri O Inc. Architects from Waterloo, Ontario.

REPORT

Design

All the hours of work refining the preliminary floor plans of the fire hall were handed over to the Architect for them to review and make their professional comments.

Over the next three months several meetings between the Architect, Engineers and staff occurred. By the end of August 2019 the Architect's proposed design was reviewed by Design Team 1 and 2, as well the Accessibility Advisory Committee through a staff report (DEV 31- 2019). The Committee had five recommendations for the project. From barrier free parking width, gender neutral signage, to floor finish contrast. The proposed layout was very similar to the staff's proposal, but a few adjustments to enhance the layout and flow of the space were made.

Now, the most up to date design has come in at 9,009 sq. ft and 775 sq. ft on the second story mezzanine. This is a 1,300 sq. ft increase from the initial proposal presented on March 2019, and 609 sq. ft from April 2019 layout that was handed over to the Architect. The final draft floor plan, and other concept designs are attached to this report.

The final proposed layout of the fire hall includes approximately 1,700 sq. ft allocated to the suppression side of the fire department. In this proposed area there is a work room, compressor room and storage for gear and equipment, bunker gear room that has the potential to house 41 firefighters, inclusive washroom and shower area that has three showers and four toilets stalls. The radio room is also located in this area at the front of the building next to the most south truck bay exterior door. A 5,000 sq. ft truck bay is proposed to accommodate the possibility of six trucks. The administration side of the building has approximately 1,800 sq. ft. There are two offices, a universal washroom, two piece washroom, storage, lunchroom and a 675 sq. ft meeting room.

The final design represents a total of 9,759 sq. ft. Overall the layout corrects the short comings of the existing fire hall. It also has the space to allow for the expansion of trucks and firefighters for the Town of St. Marys future needs.

Cost Estimate

As a part of their scope of work, Masri O Inc. Architects was to develop a cost estimate to complete the fire hall renovation. This is usually completed by a third party, and in this case the work was sub-contracted to Hanscomb Consultants Inc. Cost estimates can be completed a number of different ways, and the path chosen was a Class C. A Class C Estimate is intended to provide a realistic allocation of direct construction costs and is a determination of fair market value. Pricing shown reflects probable construction costs obtainable in the St. Marys area. Class C Estimates are qualified as not being a prediction of low bid. In a Class C Estimate pricing can fluctuate +/- 15%-20% because it assumes a competitive bidding process for every portion of the work.

The estimate received for the fire hall upgrade is shown below in detail, with a current construction cost projection at \$3,537,100. This does not include a budget for furnishings and equipment required by the fire department, currently projected at \$261,530 and shown below in more detail.

Upon receiving the Estimate, Town staff flagged that it is significantly higher than our own internal estimate at the outset of the project. It is also staff's sense that the cost estimate is significantly higher than what the market will dictate when the project is tendered.

To get an understanding of the probable range of costs for the project staff undertook two tasks. The Hanscomb Estimate was reviewed line by line and discussed with the architect who designed the renovation to determine if certain cost items are overestimated. Secondly, the original internal estimate from March 2019 was adjusted to reflect the project changes that have occurred since then.


First, to help understand where the differences occurred, staff undertook a line by line review of the estimate, and compared our own estimate to recent tender closings to get a sense of where the current

estimate falls on the +/- 20% scale. Staff also discussed the estimate with the Architect who was completing her own line by-line review of the estimate. Through this review, the following key points were noted:

- The current design is for a facility of 9,759 square feet. This is more than the original budget which provided for a 7,700 square foot facility. The cost impact of this is an additional construction cost of \$412,560.00 on the original Town estimate. This extra square footage contributes to \$734,300.00 of the Hanscomb estimate.
- The estimate also contains \$841,000 in different fees for various items are simply estimated a percentage of the construction price. If we are able to obtain a lower price from the tender process, the fees then would be lowered as well.
- Staff and the Architect believe the Hanscomb estimate includes items that are not necessary for the project. Staff have come up with approximately \$380,480.00 that we believe is over estimated, can be done by internal forces, or procured through other contracts that the Town procures on an annual basis. The top 10 items that staff have flagged are shown below in more detail:

Item	Proposed Cost	Reduction	New Cost	Comments
Allowance for de-watering	\$ 25,000.00	\$ 25,000.00	\$ -	No need to de-water for a 4' frost wall
Allowance for projections/canopy/overhangs	\$ 50,880.00	\$ 25,880.00	\$ 25,000.00	Overestimated
Extra for Acoustic Sound Absorbant Ceiling cloud panels c/w support	\$ 25,400.00	\$ 25,400.00	\$ -	Not needed
Fire Alarm System	\$ 40,900.00	\$ 40,900.00	\$ -	Not required under OBC
Site Demolitions-remove existing asphalt	\$ 41,700.00	\$ 31,700.00	\$ 10,000.00	Completed internally
Site Demolitions-allowance for Misc Demolitions	\$ 38,400.00	\$ 28,400.00	\$ 10,000.00	
Site Demolitions-allowance for site grading	\$ 38,400.00	\$ 28,400.00	\$ 10,000.00	
Allowances for landscaping	\$ 15,000.00	\$ 10,000.00	\$ 5,000.00	Re-use existing LED sign.
Remove existing siding	\$ 46,800.00	\$ 40,000.00	\$ 6,800.00	Overestimated
Allowances for removal of hazardous materials (Lead and Asbestos)	\$ 97,400.00	\$ 72,500.00	\$ 25,000.00	Completed internally.
Total	\$ 419,880.00	\$ 328,180.00	\$ 91,800.00	

The chart above identifies \$328,180.00 in work included in the Estimate that staff feels can be removed or reduced. In addition, upon the line by line review staff have come across many situations where Hanscomb identified “allowances for misc items” above and beyond \$20,000. Typically, the project budget would generally capture these sorts of items with our overall contingency. For these reasons, staff believe that the Hanscomb Estimate can be reduced by \$400,000. An updated cost estimate is shown below which compares the original Hanscomb Estimate to the adjusted version:

Item	Sq Ft	Hanscomb Price (9,759 sq. ft.)	Town Amendend Hanscomb Price (9,759 sq. ft.)	
New Construction	4,542.00	\$ 1,773,800.00	\$ 1,373,800.00	 <div data-bbox="1101 483 1383 856"> <p>Staff removed \$400,000.00 from the quoted provided from Hanscomb for items that were not needed (i.e. fire alarm, site demo, new water service,</p> </div>
Site Development	82,656.00	\$ 329,400.00	\$ 329,400.00	
Demolition & Alterations	5,242.00	\$ 592,900.00	\$ 592,900.00	
Sub-total	9,784.00	\$ 2,696,100.00	\$ 2,296,100.00	
General Requirements	8%	\$ 215,700.00	\$ 183,688.00	
Fee	3%	\$ 87,400.00	\$ 74,394.00	
Sub-total		\$2,999,200	\$ 2,554,182.00	
Design and Pricing Allowance	8%	\$ 239,900.00	\$ 204,335.00	
Escalation Allowance	4%	\$ 129,600.00	\$ 110,341.00	
Construction Allowance	5%	\$ 168,400.00	\$ 143,443.00	
Total Construction Cost	9,784.00	\$ 3,537,100.00	\$ 3,012,301.00	

Next, staff undertook a review of the original project budget that was developed by staff and presented to Council in March 2019. Staff updated this budget to reflect the changes in the project that were made by the Design Teams and the Architect, most notably the increase in square footage from 7,700 to 9,759.

This resulted in an increase to the internal estimate as compared to March 2019, with the original internal estimate and the adjusted internal estimate shown below:

Item	Orginal Town Price (7,700 sq. ft. @210.00 per sq ft)	Orginal Town Price adjusted to 9,759 sq. ft. @210.00 per sq ft
Construction	\$ 1,179,000.00	\$ 1,522,800.00
Site Works	\$ 25,000.00	\$ 25,000.00
Comms Tower	\$ 50,000.00	\$ 50,000.00
Generator	\$ 100,000.00	\$ 100,000.00
Relocation	\$ 10,000.00	\$ 10,000.00
Demolition & Alterations		
Sub-total	\$ 1,364,000.00	\$ 1,707,800.00
Escalation Allowance 5%	\$ 68,200.00	\$ 85,390.00
Construction Allowance 15%	\$ 204,600.00	\$ 256,170.00
Total Construction Cost	\$ 1,636,800.00	\$ 2,049,360.00

Finally, one item that was not included in original internal estimate, and is not included in the Hanscomb Estimate is the costs for furniture and equipment (F & E) to outfit the fire hall. As a part of the cost estimate process the Fire Chief was tasked with determining what F&E will be required for the new fire hall. At this point in time the Chief has identified a total of \$261,530.00 in F&E that is required. A detailed list of the items is shown below (the lines highlighted in grey are items that we are still waiting to confirm pricing on):

	Area	Item	Quantity	Net HST
1	Meeting Room	Uline Economy Training Tables H-6933 - 72" x 24"	9	\$ 2,765.84
3		Uline Economy Training Tables H-6932 - 60" x 24"	2	\$ 531.19
4		Uline Lecterns H-7825 Lectern 26" x 21" x 47	1	\$ 340.90
5		Uline Skyview Stack Chairs H-7629 -	32	\$ 5,014.73
6		Uline Plastic Seminar Tables H-3080 – 60" x 18"	2	\$ 205.56
7	Kitchen	Fridge	1	\$ 508.80
8		Microwave	1	\$ 203.52
9	Brian's office	Big and Tall Leather Chair H-5522	1	\$ 401.95
10	Work Room	Uline Welded Steel Workbenches H-3626 - 96" x 36"	1	\$ 1,356.46
11		Uline Welded Storage Cabinets H-4460 - 48" x 24" x 74"	2	\$ 2,686.46
12		Canadian tire - Tool storage cabinet bottom 9 drawer 57" Product #058-1371-4	1	\$ 1,424.64
13		Canadian tire - Tool storage cabinet top 8 drawer 57" Product # 058-1370-6	1	\$ 1,170.24
14		Gear Grid LA Drying System 72" x 20" x 81.5" times 2 -	2	\$ -
15		Gear Grid Gear Dryer hangar times 12	12	\$ -
16	Washer/Dryer Room	Washer Milnor MWT18X4 - 34.5" x 47.41" x 52.7"	1	\$ 10,982.96
17		Dryer Milnor FC3 Drying Cabinet - 31" x 35.25" x 86"	1	\$ 12,720.00
18	Compressor Room	Gear Grid Slinger Workstation 75" x 30" x 41"		\$ -
19		Gear Grid Slinger tool grid 72" x 18 5/8"		\$ -
20		AJ Stone 6000 PSI Compressor M13-1EV	1	\$ 35,809.34
21		AJ Stone Fill Station/Cascade System	1	\$ 26,660.10
22		AJ Stone 4 Cylinders 6000 psi	1	\$ 2,182.75
23	Storage Room	Costco - Whalen Industrial Shelf – 5 tier 72" x 24" x 84" 3000 lbs per shelf	3	\$ 610.53
24		Uline – Bulk Storage Rack – 3 tier 72" x 24" x 96" 2750 lbs per shelf	3	\$ 1,303.55
25	Mezzanine or Bathroom	Uline Lockers H-7578 Six tier 3 wide (18 total Lockers) 36" x 18" x 72"	2	\$ 2,004.67
26	Gear Room	Gear Grid Standard Wall Mount 24" x 24" x 74 1/2" Lockers	31	\$ 31,000.00
27		Gear Grid Helmet Holders	31	\$ -
28		Gear Grid Gear Hangars	31	\$ -
29		Gear Grid Gear Dryer	1	\$ -
30		Gear Grid Fire Bench 6' x 2'	4	\$ -
31	Radio Tower		1	\$ 50,880.00
35	IT Equipment	Phones. Radio room, lunch room	2	\$ 407.04
36		Phone conference phone	1	\$ 508.80
37		Wifi Access Point in meeting room	1	\$ 508.80
38		Projector/mounting	1	\$ 2,645.76
39		TV 60" smart. With wall mount brackets	2	\$ 5,088.00
40		Larger Capacity Network Switch	1	\$ 2,035.20
41		Network Cabling Runs	24	\$ 7,326.72
42		Patch Panel 48 port Cat6	1	\$ 183.17
43		HDMI Computer Stick. (Emergency 411 computer)	1	\$ 305.28
44		Small Equipment Rack 8U	1	\$ 152.64
45		Fiber Re-Termination	1	\$ 2,035.20
46		Security System Install. 2 entries, 2 arm/disarms, 5 door contacts, 4 motions	1	\$ 30,528.00
	Shipping Container	for storage of items during the construction portion and for long term storage of fixtures that belong to the Volunteer Fire Fighter (namley cooking equipment for the firefighters breakfast)	1	\$ 4,070.40
48	Building Permit		1	\$ 9,000.00
49	Moving Costs	moving of comms from fire hall to MOC during the construction process***		\$ 5,000.00
50	Total			\$261,529.99

Upon this analysis, staff have developed what is believed to be a probable range for the total costs of this project. This range is shown below:

Cost Item	Adjusted Internal Estimate	Adjusted Hanscomb Estimate
Construction Costs	\$2,049,360	\$3,012,301
Furniture and Equipment	\$261,530	\$261,530
Total	\$2,310,890	\$3,273,831

At this point in time, staff believe that the reasonable range of costs for this project will fall in the range of \$2.3 - \$3.3M. The only sure way to confirm the cost will be to tender the project.

This range of costs is higher than originally estimated. As such, staff have presented several options below to consider for moving forward.

Options for Moving Forward

With the cost estimate coming in higher than expected staff have determined five options to consider.

1. Defer the project for a year to allow a financing plan to be developed, grants to be applied for (if available), and reserves to be built.
 - a. Pro: This allows time to better save for the entire scope of the project.
 - b. Con: Deferring the project does not deal with the health and safety issues that have been identified.
2. Re-scope the project to lower the floor area from the proposed 9,759 sq. ft. to the original agreed upon floor area of 7,700sq.ft.
 - a. Pro: This options allows Council to deal with the immediate health and safety needs of the firehall, and should allow for some growth into the future as originally projected in March 2019.
 - b. Cons: The larger foot print allows for a more efficient use of space. Reducing the size eliminates this efficiently. Additionally, there is reduced space for future growth.
3. Move forward with tender process with the design and scope of project as it and make a decision once the tendered costs have been submitted.
 - a. Pros: This allows everyone to know the true costs of the project.
 - b. Cons: If the tender comes in over budget, and the Town wants to retender, this option may present some legal challenges. Contract law would require the Town to negotiate costs with the winning bidder unless the project could be rescope. This typically requires a 30% change from the original scope to qualify as a “new” tender.
4. Direct Design Team 2 to complete a final line by line review of the design details and F&E to determine what items are a critical need today, and what items could be eliminated or delayed. Once complete, move to tender for the construction of the facility as amended.
 - a. Pro: This allows the primary facility to be constructed to address the deficiencies identified, ensures that the full building envelope is constructed for today and the future, and reduces the immediate cost of the project.
 - b. Cons: This option may not allow for the most up to date and furnished facility at the time of construction. This option may also represent a simple deferral of costs that are required anyway. If that is the case, it may make more sense to incur the costs today.

5. A final option could be to demolish the existing fire hall, and reconstruct a new fire hall at the same location using the design we have.
 - a. This option may require additional design fees, and may result in the highest construction cost. At the time of writing this report staff do not have enough information to fully analyze this option.

Staff have reached out to the Architect to see if there is any cost benefit to the renovation, or should we remove the existing building and start new. With speaking with Masri O Inc. Architects they overall agreed with staff in that the structural steel was a beneficial cost savings to the overall project.

However, the Architect has identified that there will be costs savings if the design were modified to demolish the existing hose drying tower and mezzanine rather than trying to repurpose this existing space into new offices and storage. Instead, the administrative area would be built new on the north side of the building. The rationale is that in the current design the architect is carrying extra costs based around repurposing the hose tower and mezzanine. These costs are related to dealing with headroom issues in the mezzanine to create the proper headroom in the offices below, and installing a fire separation between the offices and mezzanine area.

If the mezzanine is demolished and not included, this would also represent approximately 750 sq.ft of space that would no longer required to be renovated, and the capital costs would further be reduced. If the mezzanine is removed from the design this would also free up some floor space on the first floor as the stairs would no longer be needed. Currently there is no intended use for the mezzanine space (except for as storage) as all mechanical systems are either roof top units or located on the main floor.

Staff are recommending that Council provide direction to proceed in this manner, and directs the the design be modified to demolish the existing hose drying tower and mezzanine area to create an entirely “build new” administrative area.

FINANCIAL IMPLICATIONS

Annual Fire Capital Contribution

The current fire capital equipment lifecycle costs using life of the asset to determine replacement needs would require an annual fire capital contribution of \$145,000. The current annual contribution is \$127,000. There is an annual shortfall of \$18,000 per year. There is no surplus that can be utilized for any capital costs for building renovations.

It is recommended that in order to reduce the annual equipment reserve shortfall, a needs analysis of the equipment be performed to determine if the life of any assets can be increased based on conditions or based on future needs. As the costs of fire services is partly shared with Perth South, the annual equipment contribution should be increased to the revised required annual contribution in 2020.

Development Charge Contribution

The 2017 DC study contemplated an expansion of an equipment bay and increased office space. While a larger expansion was not originally included in the DC study, it does not preclude the Town from using development charges to fund a portion of the expansion that is attributable to growth. The amount eligible to be utilized would be \$513,536.

It should be noted that this would impact the DC rates in the future – it is estimated that the single/semi-detached fee would need to increase by approximately \$475. As the DC Fire reserve would not currently have enough funding, it would be recommended that it be used to partially fund the annual debt payment (equivalent to the eligible \$513,536).

Reserves – Capital Reserve and PUC Reserve Fund

In previous reports, it was recommended that \$1,000,000 could be available through the Town's Capital Reserve to help fund the Fire Hall. Before moving forward with this recommendation, Finance will need to properly analyze the latest capital budget estimates for the entire corporation and refine the asset management plan to ensure the Town would have capacity to fund future capital priorities. By the end of October, Finance will have the proper information to perform this analysis as the draft 2020 budget will be completed. As well, the PUC reserve could be utilized to fund a one-time contribution to the fire hall.

Donations:

To date, service clubs have come forward to offer to fundraise and make donations to the fire hall. This is an extremely generous offer, and will ultimately help to offset the costs of the project. However, the project financing plan shown below does not include these donations as they are not necessarily guaranteed. Also, Council will need to decide how donations will be applied to the project. Will the donations be used to offset the bottom line capital cost of the project, or will donations be used to purchase furnishings and equipment that are over and above the approved budget? Direction from Council on this consideration is important to know at the outset of the project so that staff can advise the service clubs accordingly.

Long Term Debt:

As this is an expansion and renewal, long term debt is a good option. Furthermore, as Perth South contributes to Fire capital costs, it makes sense to properly distribute the costs over the life of the assets with debt servicing being an operating cost of the service. Interest rates remain quite competitive, which further supports the idea of allowing debt to partially fund this project.

The expected life of the Fire Hall renewal would be 50 years; as such, the Town can look at options for long term debt with an amortization period between 15 – 25 years. Interest rates will vary from 2.5% - 3.5%.

A sample blended financing plan is shown below based on the worst case scenario that the current Class C estimate from Hanscomb represents the actual costs of the project:

Fire Hall Renovation				
Capital Cost		3,500,000		
DC recoverable		-513,536		
Other Funding		-1,000,000	Capital Reserve or PUC Reserve	
Net - to be financed		1,986,464		
Debt annual payment		\$116,451.00	25 years	
Perth South Portion (25%)		\$29,112.75		
St. Marys Net Portion		\$87,338.25		
2019 Budget Reserve - Fire Hall		\$112,500.00		

Overall:

Overall, the Town's financial outlook is good because Council has made decisions to prepare the Town to finance this project. In 2019, the capital reserve transfer was increased by \$112,500 to assist funding

the Fire Hall expansion. As shown above, by using a 25 year debenture and \$1M from reserves – the Town can remain relatively close to the \$112,500 allocation.

Once further refined information is received by Finance, final pre-tender calculations can and analysis can be completed. The equipment reserve will have to possibly increase, and staff will need to estimate the operational budget increase once the new hall is constructed.

The best case scenario is that if a financing plan and cost containment strategies are developed to keep annual contribution at the \$112,500 level. If this occurs, no further tax levy increase would be required to fund the debt servicing costs or the increased operating costs of the new fire hall.

SUMMARY

Although the Class C estimate was higher than originally projected, the Town's financial outlook is good and the Town has the ability to manage the costs of this project due to the preparations Council has made. It is staff's opinion that the tender prices will come in lower than the estimate based on the various costings that we reviewed on the estimate, and based on recent comparable.

Overall, the design presented is a good use of floor space, reflecting mostly the needs of the department without extravagant wants. It is staff's recommendation that Council move forward with Option 4 presented above, and tender the project after it has undergone a final review by design Team 2. Specifically, staff recommends:

- That Council directs Design Team 2 to complete a final line by line review of the design details and F&E to determine what items are a critical need today, and what items could be eliminated or delayed.
- That Council directs the the design be modified to demolish the existing hose drying tower and mezzanine area to create an entirely "build new" administrative area.
- That the tender be released with provisions to allow a flexible completion date of within 24 months of the awarding of the project (i.e. construction within wither the 2020 or 2021 construction season), but within 8 months of breaking ground.

STRATEGIC PLAN

☒ This initiative is supported by the following priorities, outcomes, and tactics in the Plan.

- Pillar #1: Infrastructure - Developing a comprehensive and progressive infrastructure plan
 - Outcome: St Marys is committed to developing a progressive and sustainable infrastructure plan that meets the infrastructure needs of today and tomorrow. This will require a balance between building and regular maintenance

OTHERS CONSULTED

- Jason Silcox-Building Inspector
- Richard Anderson – Director of Emergency Services/Fire Chief
- Design Team One- Jason Silcox and delegation of Fire Fighters
- Design Team Two- Andy Anderson, Grant Brouwer, Brent Kittmer, Mayor Strathdee, Councillor Luna, Councillor Craigmile, Brent Dundas, Dale Robinson and, Jason Silcox
- Accessibility Advisory Committee
- Masri O Inc. Architects

ATTACHMENTS


1-Site Plan

2-Floor Plan

3-Elevations

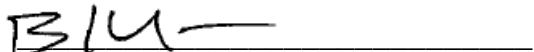
REVIEWED BY

Recommended by the Department



Grant Brouwer
Director of Building and Development

Recommended by the CAO



Brent Kittmer, CAO / Clerk



ARCHITECTURAL DRAWINGS

- A0.0 WD TITLE PAGE
- A0.1 OBC MATRIX & DETAILS
- A1.1 SITE PLAN
- A2.0 DEMOLITION PLANS & NOTES
- A2.1 FLOOR PLANS
- A2.2 ROOF FLOOR PLAN
- A3.1 REFLECTED CEILING PLANS
- A4.1 ELEVATIONS
- A5.1 BUILDING SECTIONS
- A5.2 BUILDING SECTIONS
- A6.1 WALL SECTIONS
- A6.2 WALL SECTIONS
- A7.1 DETAILS
- A8.1 INTERIOR ELEVATIONS & MILLWORK
- A8.2 INTERIOR ELEVATIONS & MILLWORK
- A11.1 WALL, FLOOR, ROOF & CEILING SCHEDULES AND NOTES
- A11.2 DOOR SCHEDULES AND NOTES
- A11.3 WINDOW SCHEDULE

PROPOSED FIRE STATION ADDITION AND RENOVATION
172 JAMES STREET SOUTH, ST. MARYS, ONTARIO

TOWN OF ST. MARYS

Architect: Masrio Inc. Architects



Kumpf Drive, Suite 101
Waterloo, Ontario, N2V 1K8
Phone: (519) 579-0072
www.masrio.ca

Structural Engineer: MTE Consultants Inc.



Civil Engineer: 520 Bingemans Centre Drive
Kitchener, Ontario, N2B 3X9
Phone: (519) 743-6500
Fax: (519) 743-6513

Mechanical Engineer: CoPa Engineering Ltd.

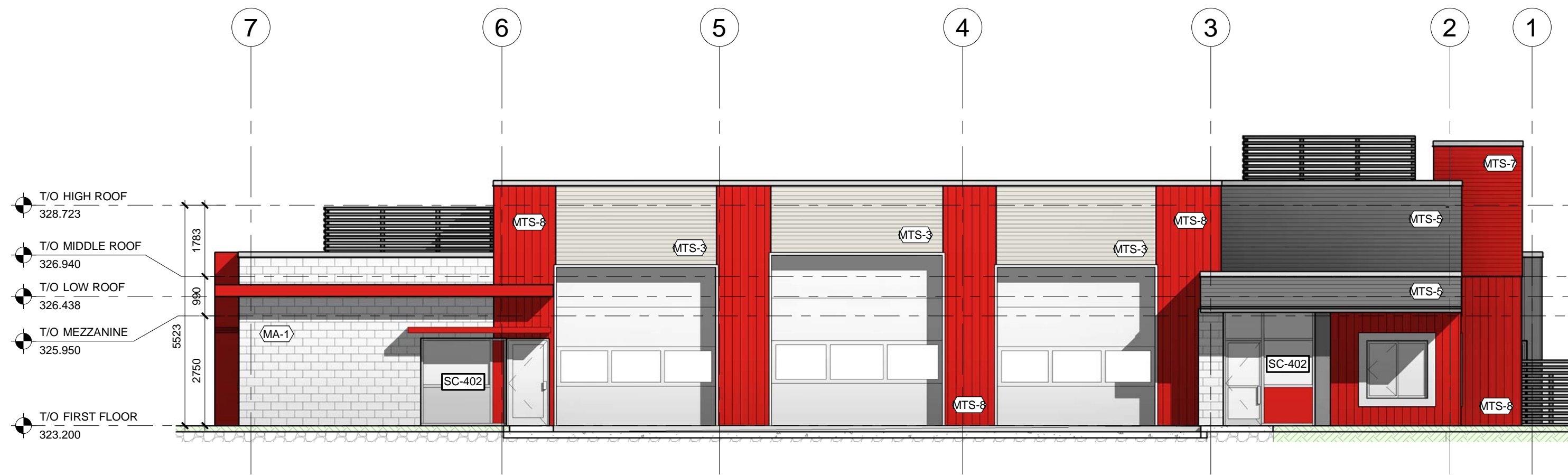


29 Rolling Acres. Drive
Kitchener, Ontario N2A 3W5
Phone: (519) 894-0022
Fax: (519) 894-4548

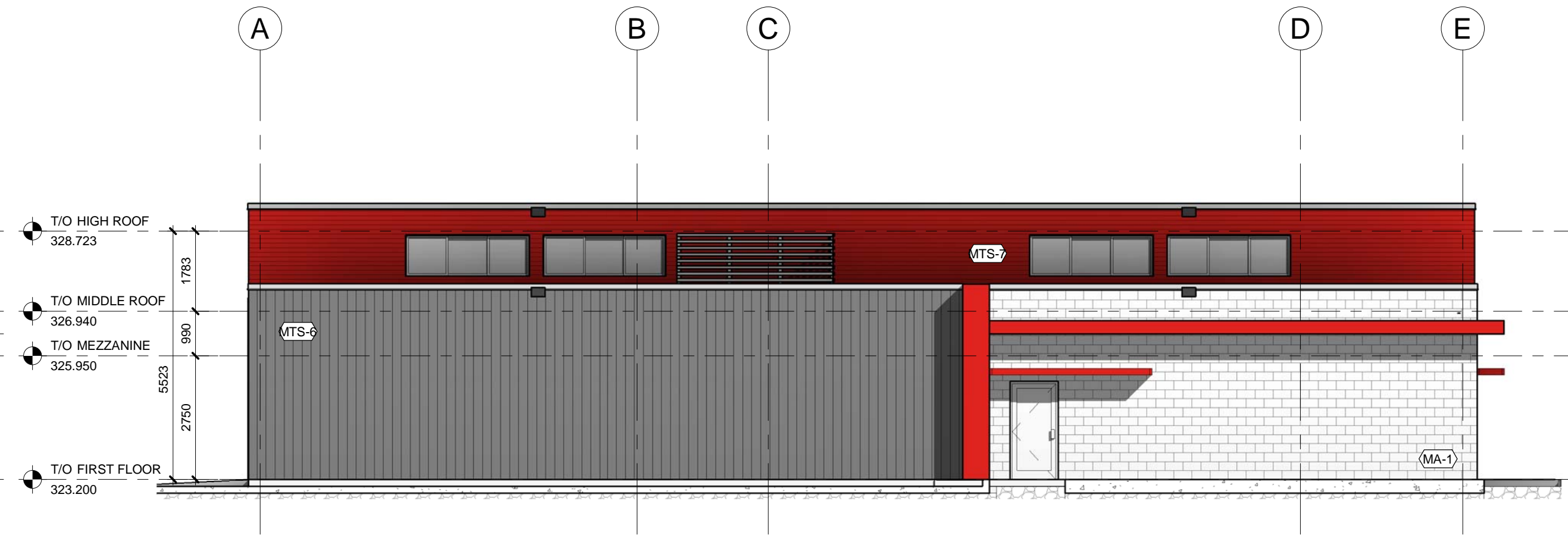
Electrical Engineer: Mantric Engineering



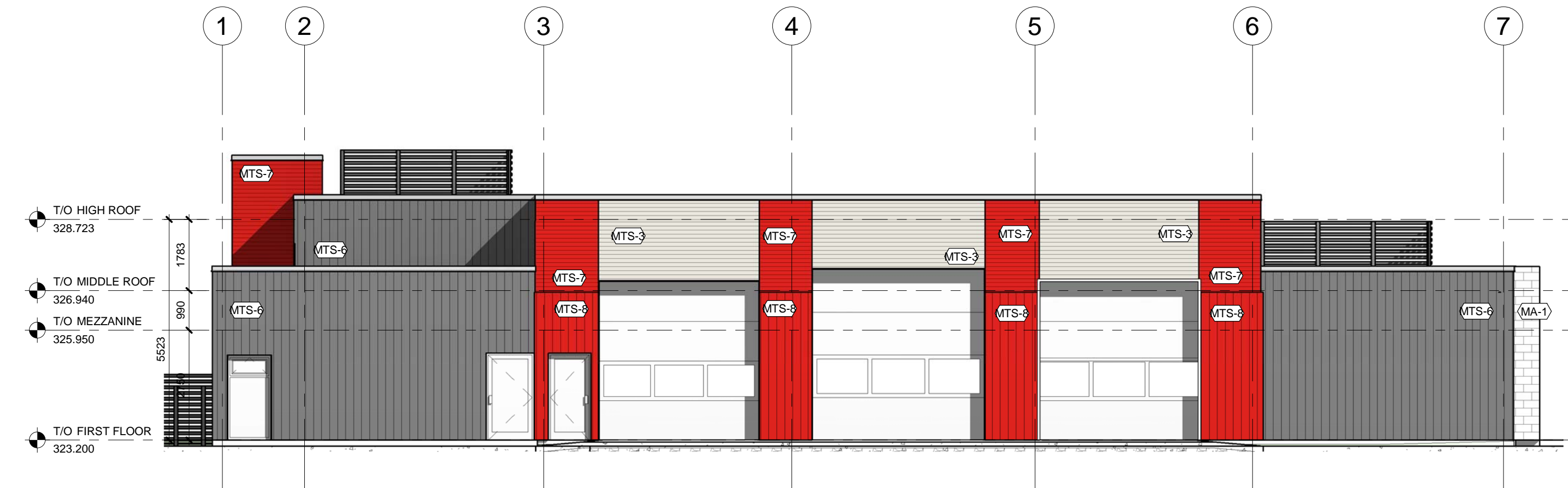
1595 16th Ave Suite 301,
Richmond Hill, ON L4B 3N9
Phone: (289) 271-5151
Fax: (289) 867-0742



1 EAST ELEVATION
SCALE: 1 : 100



2 SOUTH ELEVATION
SCALE: 1 : 100



3 WEST ELEVATION
SCALE: 1 : 100



4 NORTH ELEVATION
SCALE: 1 : 100

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND REPORT ALL ERRORS AND DISCREPANCIES TO THE CONSULTANT.

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REVISIONS:

NO.:	DATE:	ISSUED:
1	2019.08.13	DESIGN REVIEW

ELEVATION SCHEDULE

(MA-1)	ARCH. BLOCK VENEER #1 MASONRY UNITS SMOOTH FACE
(MTS-3)	EXISTING METAL SIDING DARK BROWN HORIZONTAL PATTERN
(MTS-3)	LIGHT TAN VERTICAL PATTERN
(MTS-3)	VICWEST SIDING #1 CL 815 PROFILE, LIGHT GREY HORIZONTAL PATTERN
(MTS-3)	VERTICAL PATTERN
(MTS-3)	VICWEST SIDING #2 CL 815 PROFILE, DARK GREY HORIZONTAL PATTERN
(MTS-3)	VERTICAL PATTERN
(MTS-3)	VICWEST SIDING #3 CL 815 PROFILE, RED HORIZONTAL PATTERN
(MTS-3)	VERTICAL PATTERN
(ACP-1)	ALUM. COMPOSITE PANEL #1 ALCOA REYNOLBOND CADET GREY
(SP-1)	SPANDREL PANEL #1 ICD, COLOUR WARM GREY
	GALVANIZED STEEL SUNSHADE
(VR-1)	RUSKING LOUVER #1 DARK GREY

ELEVATION NOTES:

1. EXTERIOR WINDOW FRAMES TO BE CLEAR ANODIZED ALUMINUM FINISH. PREFINISHED METAL FLASHING AND TRIM TO MATCH.
2. EXTERIOR METAL DOORS AND FRAMES ARE TO BE PAINTED TO MATCH THE COLOUR OF THE ADJACENT EXTERIOR MATERIAL, UNLESS NOTED OTHERWISE.
3. ALL EXTERIOR FLASHING SHALL BE PREFINISHED METAL, COLOUR-MATCHED TO THE ADJACENT MATERIAL, UNLESS NOTED OTHERWISE.
4. ALL MECHANICAL GRILLES & LOUVERS ARE TO BE OF PREFINISHED METAL, COLOUR-MATCHED TO THE ADJACENT MATERIAL, UNLESS NOTED OTHERWISE.
5. ALL PERIMETER SEALANT SHALL BE COLOUR-MATCHED TO ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.
6. PARKING AND SITE LIGHT FIXTURES WILL BE CONTAINED WITHIN THE SITE AND FULL-CUT OFF WITH NO GLARE



PROJECT:

TOWN OF ST. MARYS
FIRE STATION ADDITION
172 JAMES STREET SOUTH
ST. MARYS, ON

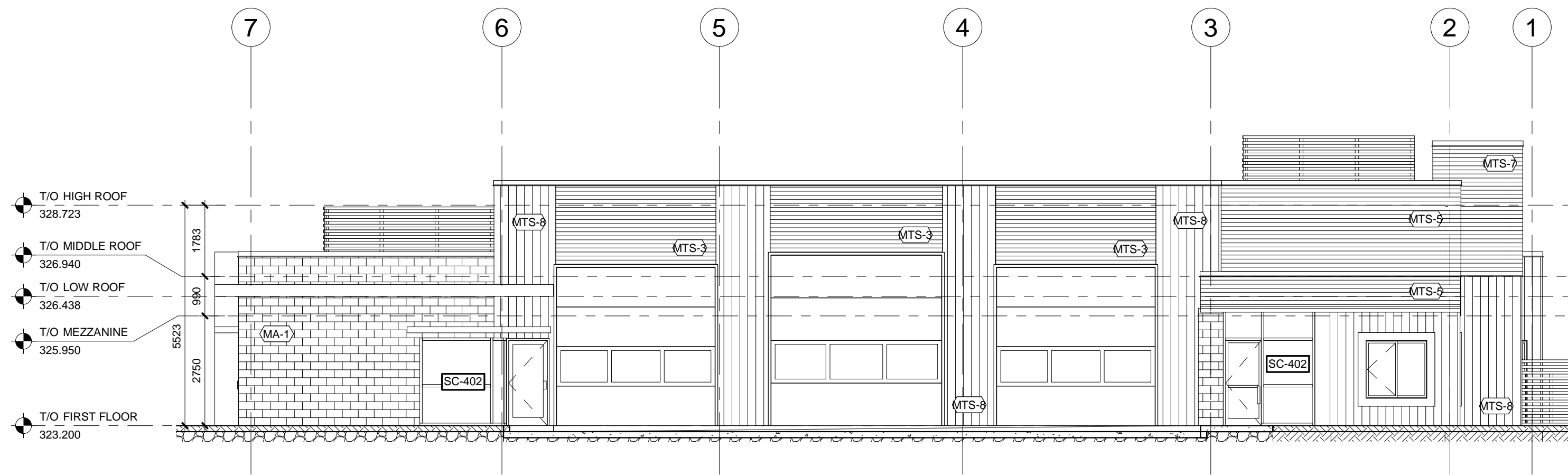
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ELEVATIONS

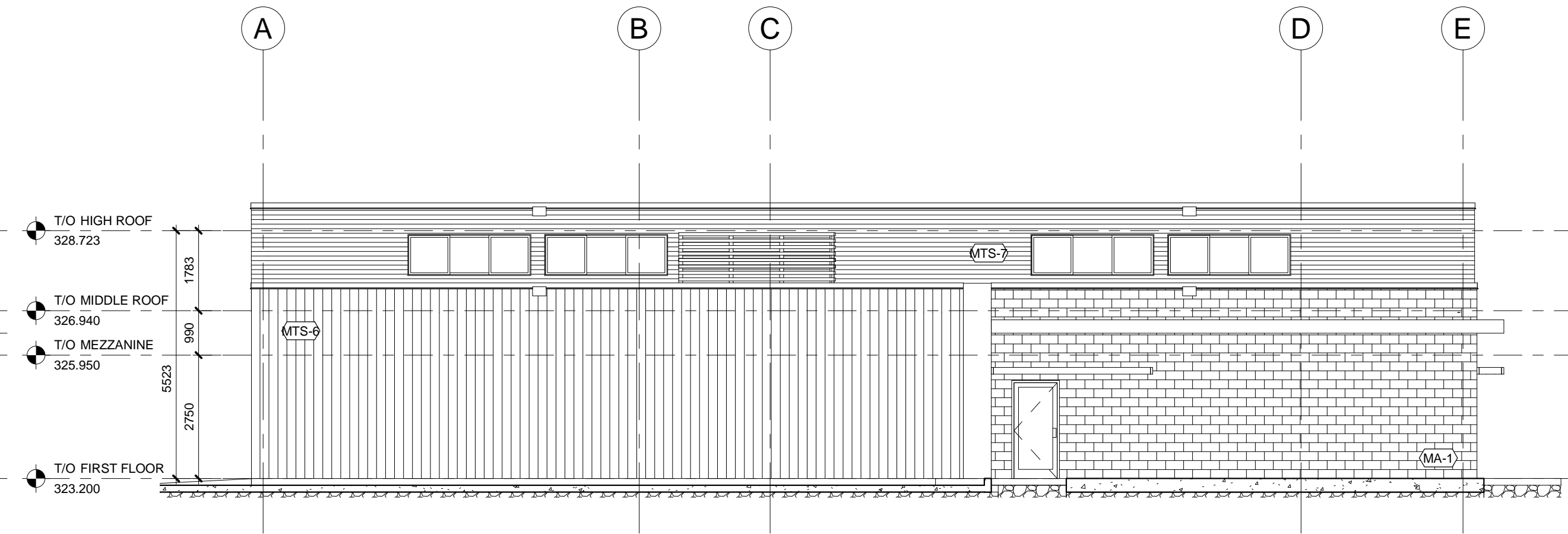
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STATUS: WD
JOB NO.: 1912

DRAWING NO.:

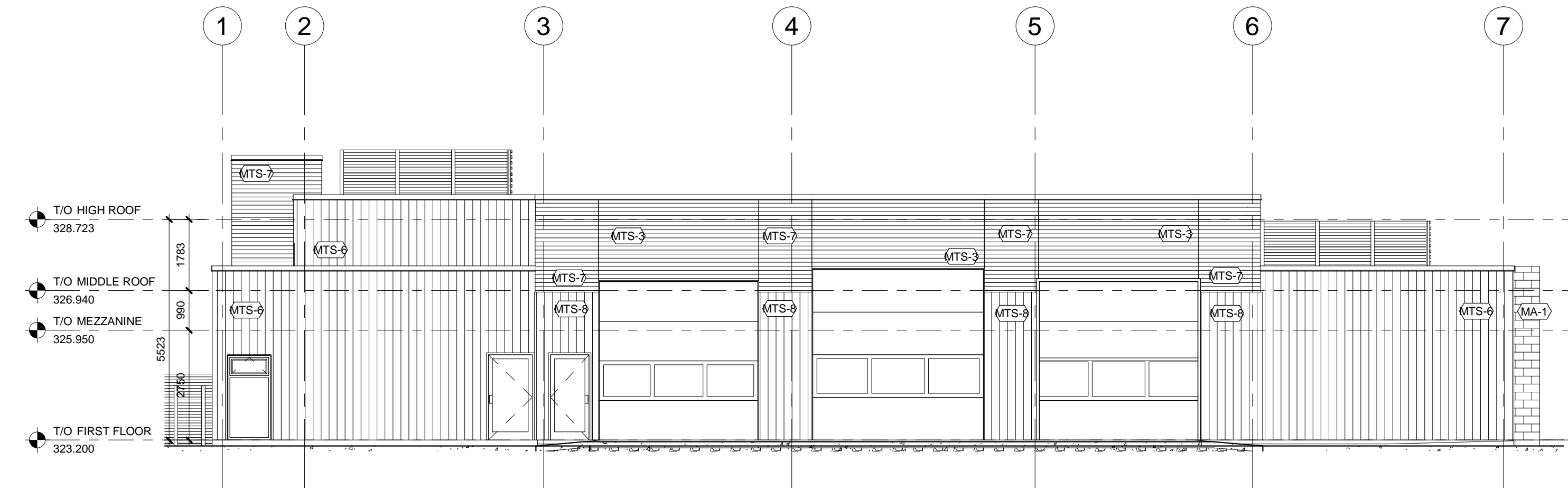
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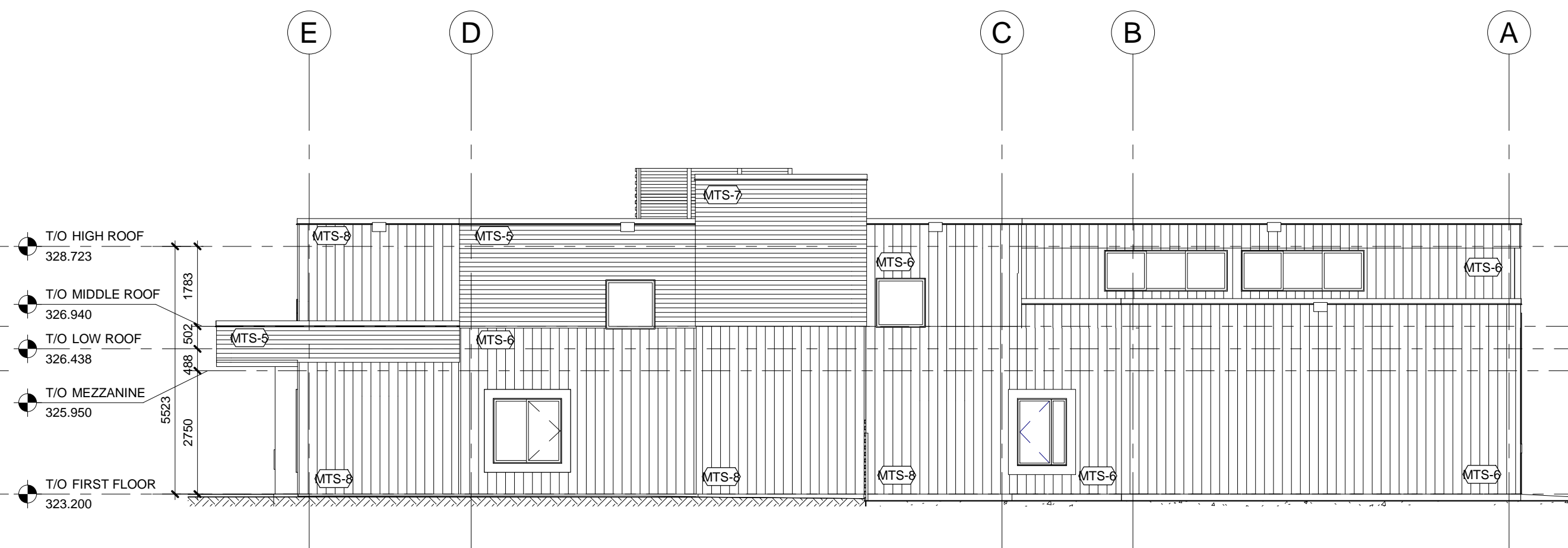
1 EAST ELEVATION
SCALE: 1 : 100



3 SOUTH ELEVATION
SCALE: 1 : 100



4 WEST ELEVATION
SCALE: 1 : 100



2 NORTH ELEVATION
SCALE: 1 : 100

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NO.:	DATE:	ISSUED:
1	2019.08.13	DESIGN REVIEW

ELEVATION SCHEDULE

(MA-1)	ARCH. BLOCK VENEER #1 MASONRY UNITS SMOOTH FACE
(MTS-7)	EXISTING METAL SIDING DARK BROWN HORIZONTAL PATTERN
(MTS-3)	LIGHT TAN VERTICAL PATTERN
(MTS-3)	VICWEST SIDING #1 CL 815 PROFILE, LIGHT GREY HORIZONTAL PATTERN
(MTS-3)	VERTICAL PATTERN
(MTS-3)	VICWEST SIDING #2 CL 815 PROFILE, DARK GREY HORIZONTAL PATTERN
(MTS-3)	VERTICAL PATTERN
(MTS-7)	VICWEST SIDING #3 CL 815 PROFILE, RED HORIZONTAL PATTERN
(MTS-3)	VERTICAL PATTERN
(ACP-1)	ALUM. COMPOSITE PANEL #1 ALCOA REYNOLBOND CADET GREY
(SP-1)	SPANDREL PANEL #1 ICD, COLOUR WARM GREY
	GALVANIZED STEEL SUNSHADE
(LVR-1)	RUSKING LOUVER #1 DARK GREY

ELEVATION NOTES:

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5. ALL PERIMETER SEALANT SHALL BE COLOUR-MATCHED TO ADJACENT MATERIALS, UNLESS NOTED OTHERWISE.
6. PARKING AND SITE LIGHT FIXTURES WILL BE CONTAINED WITHIN THE SITE AND FULL-CUT OFF WITH NO GLARE



PROJECT:

TOWN OF ST. MARYS

FIRE STATION ADDITION

172 JAMES STREET SOUTH
ST. MARYS, ON

DRAWING TITLE:

ELEVATIONS

DATE: 2019.08.13

SCALE: As indicated

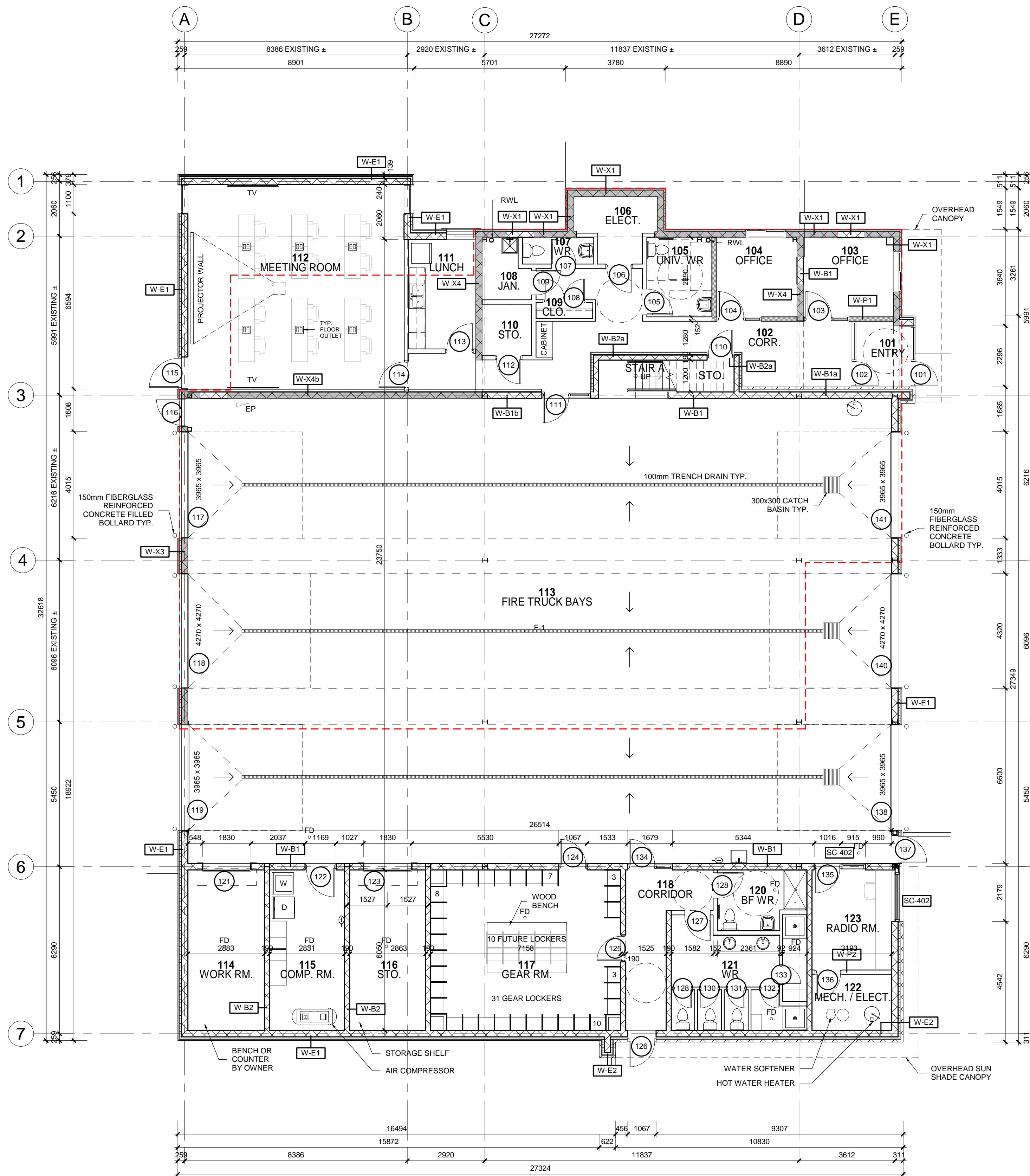
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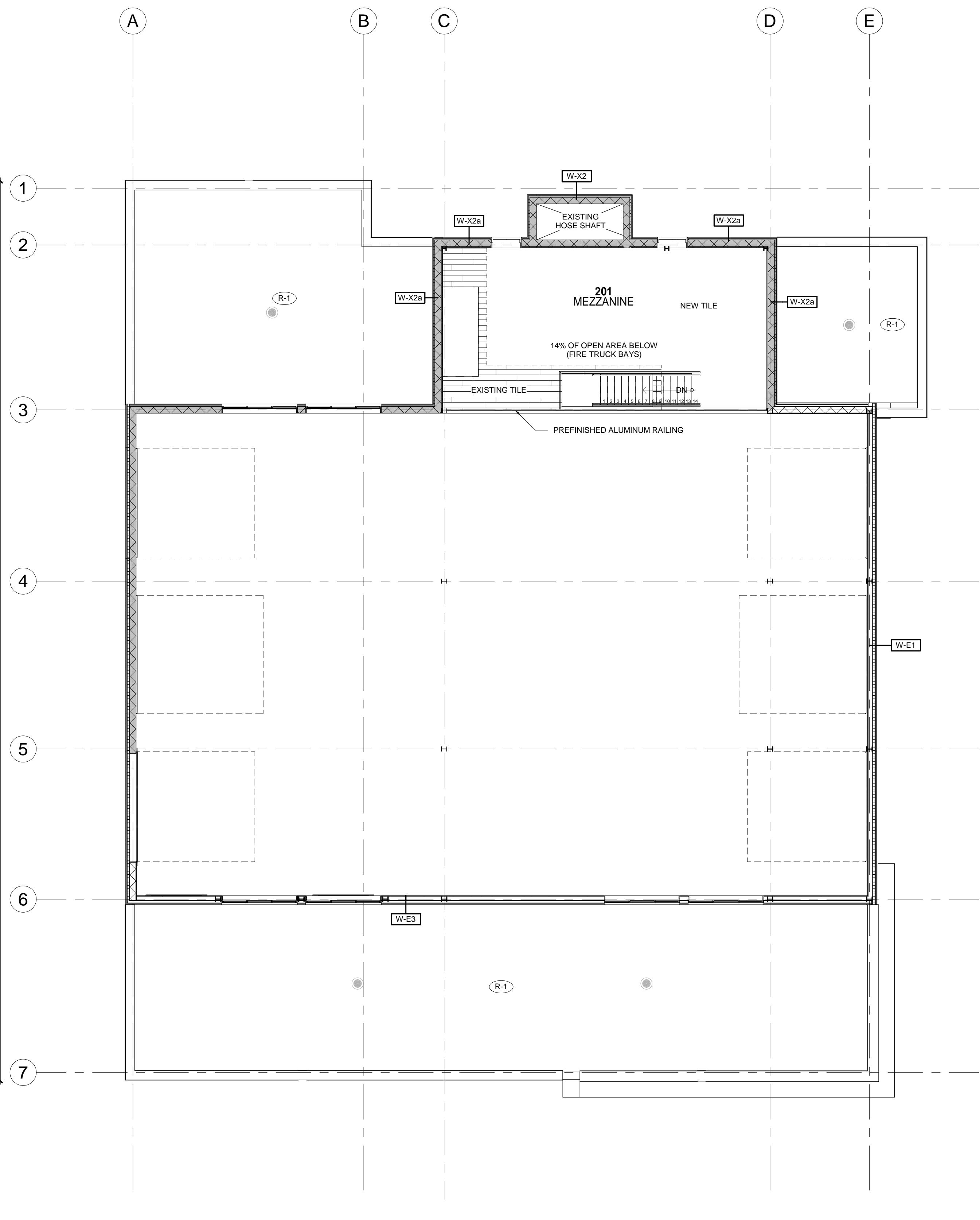
JOB NO.: 1912

DRAWING NO.:

A4.1



1
A2.1
FIRST FLOOR PLAN
SCALE: 1:100



2
A2.1
MEZZANINE FLOOR PLAN
SCALE: 1:100

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NO.:	DATE:	ISSUED:
1	2019.08.13	DESIGN REVIEW

FLOOR AREA CHART		
	EXISTING	NEW
FIRST FLOOR	428m ²	431m ²
MEZZANINE	80m ²	
GFA TOTAL:	939m ²	

LEGEND	
---	EXTENT OF EXISTING BUILDING
---	EXISTING WALL
---	NEW WALL

FIRE SEPARATION LEGEND	
---	DENOTES FIRE SEPARATION WITH 3/4 hr F.R.R.
---	DENOTES FIRE SEPARATION WITH 1 hr F.R.R.
FIRE SEPARATION & FIRE RESISTANT RATING NOTES:	
1. ILLUSTRATIONS SHOWN ARE FOR FIRE SEPARATIONS AND DO NOT DENOTE FIRE RESISTANT RATINGS FOR SUPPORTING ELEMENTS.	
2. ALL SUPPORTING WALLS, COLUMNS WILL BE FIRE RATED TO MATCH FIRE RESISTANT RATING OF SUPPORTED FLOORS. 3/4 HRS FOR ALL MEZZANINE FLOORS AND 0 HRS FOR ROOF.	
3. MECHANICAL DUCTS PENETRATING FIRE SEPARATIONS WILL BE ENCLOSED IN FIRE RATED BULKHEADS WITH A RATING EQUAL TO THAT OF SEPARATION PENETRATED OR EQUIPPED WITH FIRE DAMPERS.	



PROJECT:

TOWN OF ST. MARYS
FIRE STATION ADDITION

172 JAMES STREET SOUTH
ST. MARYS, ON

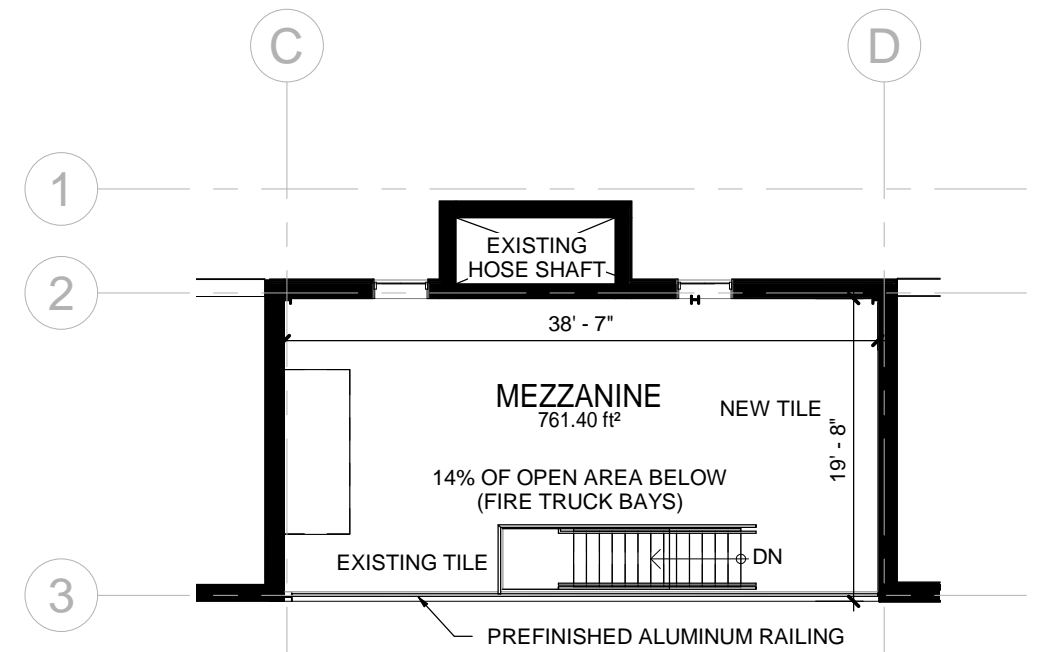
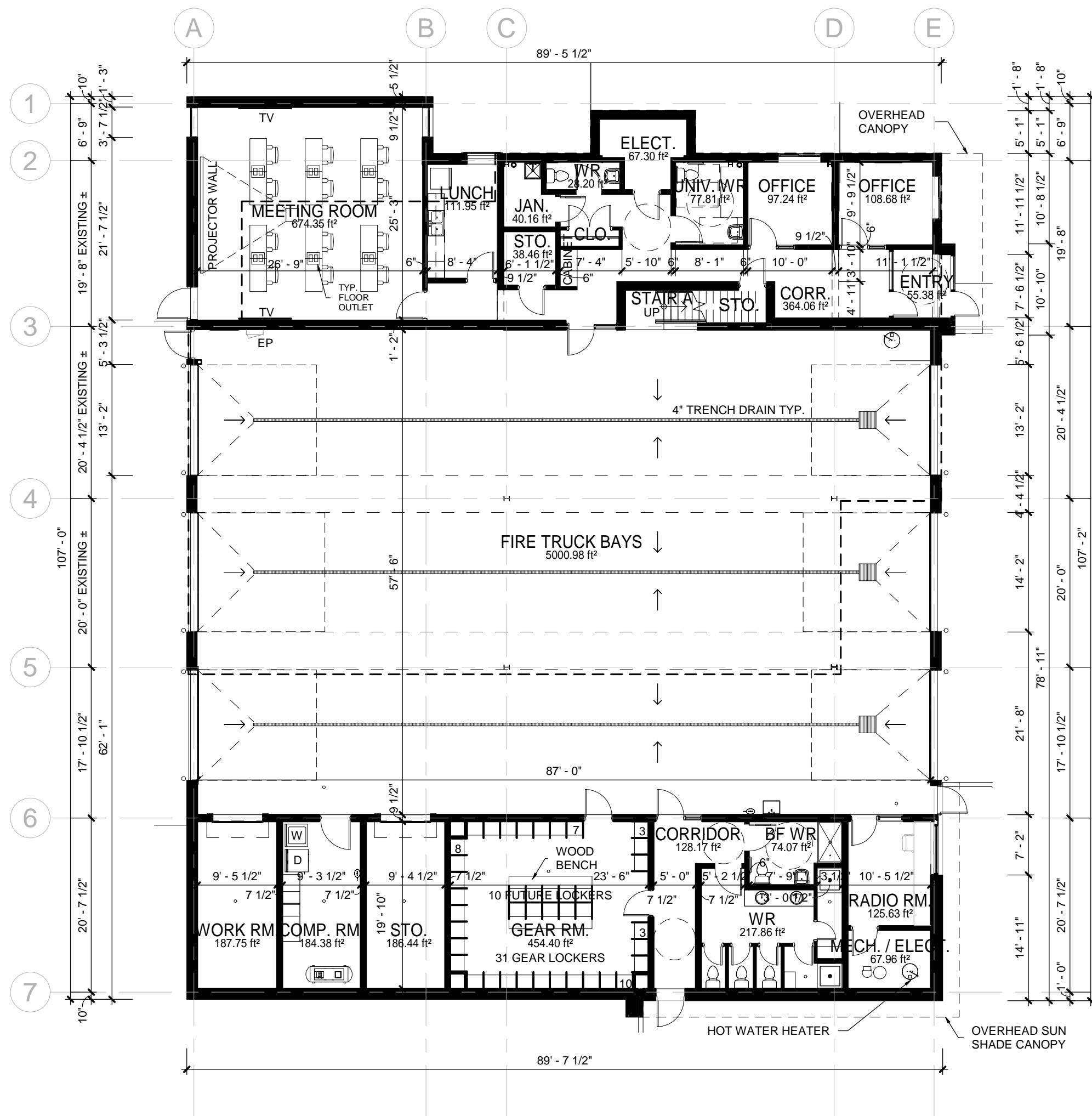
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FLOOR PLANS

DATE: 2019.08.13
SCALE: As indicated
DRAWN: AG
STATUS: WD
JOB NO.: 1912

DRAWING NO.:

A2.1



MEZZANINE FLOOR PLAN

FIRE STATION ADDITION

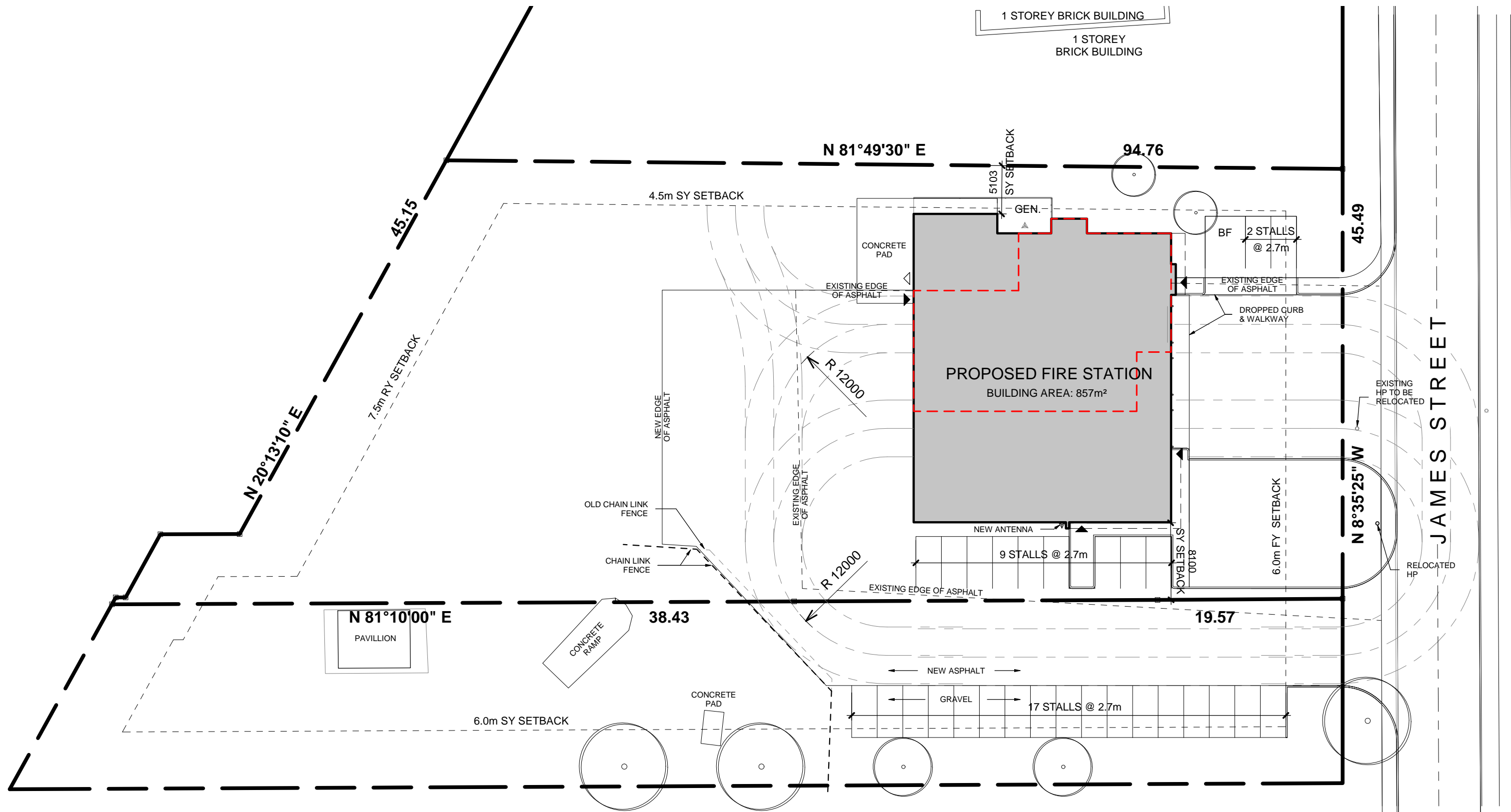
172 JAMES STREET SOUTH
ST. MARYS, ON
TOWN OF ST. MARYS
2019.08.13



MASRI O Inc.
ARCHITECTS
101-609 KUMPF DRIVE
WATERLOO, ON, N2V 1K8
PH. 519.579.0872
www.masri-o.ca

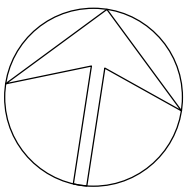
FLOOR PLANS

SCALE: 1 : 150



LEGEND:

- EXTENT OF EXISTING BUILDING
- EXISTING WALL
- NEW WALL



SITE PLAN - PROPOSED SCALE: 1 : 400

FIRE STATION ADDITION

172 JAMES STREET SOUTH
ST. MARYS, ON
TOWN OF ST. MARYS
2019.07.04



**MASRI O Inc.
ARCHITECTS**

101-609 KUMPF DRIVE
WATERLOO, ON, N2V 1K8
PH: 519.579.9072
www.masrio.ca



FORMAL REPORT

To:	Chair Stratthdee and Members of Strategic Priorities Committee
Prepared by:	Dave Blake, Environmental Services Supervisor
Date of Meeting:	17 September 2019
Subject:	PW 51-2019 Water and Sewer Rates

PURPOSE

This report presents the Strategic Priorities Committee with information related to Water and Sewer Rates for discussion. The Committee is asked to consider the rate(s) presented for discussion and recommend a preferred option for implementation in January 2020.

RECOMMENDATION

THAT Report PW 51-2019 Water and Sewer Rates be received for discussion; and

THAT the Committee recommends to Council:

THAT water rates be increased by 2.0% for 2020 in accordance with the Town's current Water System Financial Plan; and

THAT wastewater rates be increased by 2.4% for 2020 in accordance with the Town's current Wastewater System Financial Plan.

BACKGROUND

In October 2014, Council approved By-Law 46-2014 which governs water, wastewater and stormwater within the Town of St. Marys. As part of the By-Law, a five (5) year rate plan was incorporated into Schedule "A". At the request of Council, rates for water and wastewater were to be reviewed and approved annually for the subsequent years.

This report provides the annual review of the rate structure detailed within the By-Law, as amended; presents multiple rate options and scenarios for discussions; and details staff recommendations for the water and wastewater rates for 2020.

REPORT

Both Water and Wastewater within the Town have individual rate structures and represent separately funded departments. As such, rates for both water and wastewater need to be reviewed and subsequently approved by Council.

Assumptions:

When developing the rate projections, Town Staff made several assumptions related to the operation of the water and wastewater system to ensure a consistent basis for revenue generation and financial position. The following assumptions were used:

- The volume of water used and the volume of wastewater to be treated will remain constant over the review period. Increases in usage from new customers or from new builds will be off-set by conservation activities within the Town and through existing customers.
- The amount of customers utilizing the system would increase by 45 units each year to coincide with the approximate number of new builds historically experienced within the Town. (Should the Town grow at a rate either slower or quicker than the above assumption, such as the target growth rate of 1.5%, future annual rate reviews would account for actual growth experienced in the Town and revenue projections would be adjusted at that time).
- Customers will remain in the tiered rates as presently experienced. No assumptions were made to increase high water user consumption, nor reductions in water use.

Water & Wastewater Rate Options:

In 2019, the Town was required to update the financial plan for the water system as per Ontario Regulation 453/07. The drinking water financial plan was completed by B.M. Ross and Associates Limited (BM Ross) which covered a 10 year period from 2019 through 2028. The Financial Plan identified rate increases over the period of the financial plan to move towards full system sustainability. The financial plan identified rate increases of 2% from 2019 through 2028.

Additionally, at the same time that the Water System Financial Plan was being developed, the Town completed and approved its first financial plan for the Wastewater System. The Wastewater System Financial Plan was also completed by B.M. Ross and covered a 10 year period from 2019 through 2028. The financial plan identified rate increases over the period of the plan to maintain the “rate of replacement”. The Financial Plan identified rate increases of 2.4% from 2019 through 2028.

Although the Financial Plans were completed and approved, they are a guiding document for financial management. Conditions or circumstances can change from one year to the next which may not necessarily have been accounted for in the development of the Financial Plans, but are captured in the annual review of system rates (i.e. the assessment completed by this report). As such, the following options have been presented for discussion with regards to water and wastewater rates, ranging from **0.0-6.8%** annually, and the financial assessment for each.

Option No. 1 – 0% Increase:

In Option No. 1 a zero (0) percent increase is presented for consideration.

Please refer to Attachment A1 for full financial projections related to this option for Water.

Please refer to Attachment B1 for full financial projections related to this option for Wastewater.

This option is presented as a baseline for consideration, also known as the “Do Nothing” approach. Over the ten (10) year review period, water projections show a steady reserve growth year over year whereas wastewater projections show essentially no growth in reserves over the ten year review period.

For water, the comparison is a 2019 opening balance of \$222,438.00 compared to the closing balance of \$3,968,918.00 in 2028.

For wastewater, the comparison is a 2019 opening balance of \$817,630.00 compared to the closing balance of \$949,842.00 in 2028.

Option No. 2 – 2.0% Increase:

In Option No. 2, a 2.0% increase is presented for consideration.

Please refer to Attachment A2 for full financial projections related to this option for Water.

Please refer to Attachment B2 for full financial projections related to this option for Wastewater.

This option is presented and represents the “Consumer Price Index” (CPI) increase on an annual basis. With this option, the rates would increase annually in relation to CPI and would help to keep pace with inflation costs related to ongoing system operations. This option would see rates gradually increase each year, lessening the impact to customers while allowing some financial stability and assurance. Additionally, for water, this option represents the recommended annual rate increase as identified in the approved Water System Financial Plan.

Over the ten year review period, water projections show a steady growth year over year whereas wastewater projections see some quick increases to reserve balances through the middle of the review period when debenture payments are lessened, but overall show a modest increase in reserves over the ten year review period.

For water, the comparison is a 2019 opening balance of \$222,438.00 compared to the closing balance of \$5,639,975.00 in 2028.

For wastewater, the comparison is a 2019 opening balance of \$817,630.00 compared to the closing balance of \$2,589,249.00 in 2028.

Option No. 3 – 2.4% Increase:

In Option No. 3, a 2.4% increase is presented for consideration.

Please refer to Attachment A3 for full financial projections related to this option for Water.

Please refer to Attachment B3 for full financial projections related to this option for Wastewater.

This Option would see rates gradually increase each year, lessening the impact to customers while allowing some financial stability and assurance at a slightly accelerated rate when compared to Option 2 above. Additionally, for Wastewater, this option represents the recommended annual rate increase as identified in the approved Wastewater System Financial Plan.

Over the ten year review period, water projections show a steady growth year over year whereas wastewater projections again see some quick increases to reserve balances through the middle of the review period when debenture payments are lessened, but overall show a modest increase in reserves over the ten year review period. This Option helps to align the Wastewater system with financial planning with the recommended rate of replacement for system assets.

For water, the comparison is a 2019 opening balance of \$222,438.00 compared to the closing balance of \$5,994,377.00 in 2028.

For wastewater, the comparison is a 2019 opening balance of \$817,630.00 compared to the closing balance of \$2,936,973.00 in 2028.

Option No. 4 – 3.0% Increase:

In Option No. 4, a 3.0% increase is presented for consideration.

Please refer to Attachment A4 for full financial projections related to this option for Water.

Please refer to Attachment B4 for full financial projections related to this option for Wastewater.

This option takes a slightly more aggressive approach to increase revenues for the water and wastewater system to assist in cost recovery and capital works. With this option, rates would increase at a quicker pace which would allow the system to grow reserves, while also creating more options for debenture financing related to future capital works.

Water Reserves would grow to an excess of \$6.5 million by the end of the planning period, with this option presenting increases greater than the current financial plan suggests. With regards to wastewater, a reserve fund would be created for the system while also being in a position to fund large capital works in the future, lessening the systems reliance on debenture financing.

The Wastewater system reserve at the end of the planning period is projected to be \$3,471,513.00 in 2028.

Option No. 5 – 6.8% Increase:

Option No. 5 presents a 6.8% increase for consideration.

Please refer to Attachment A5 for full financial projections related to this option for Water.

Please refer to Attachment B5 for full financial projections related to this option for Wastewater.

This option takes a very aggressive approach to revenue generation, reserve building and debenture financing. Water Reserves would be slightly more than \$10 million by the end of the planning period, with this option representing a much more aggressive option than suggested through the current approved water system financial plan. With regards to wastewater, reserve funds are projected to increase quickly from 2021 through 2024 to a closing balance of \$7,243,726.00. This option with annual projected increases of 6.8% for wastewater, would see the system move towards full system sustainability.

Impacts to Users:

The above detailed options for rate increases would have a varying impact to users of the system, depending on which option is recommended for both water and wastewater systems, as well as which tier the user is billed from.

Please refer to Attachment C for a detailed breakdown of the impacts to users based on the options selected, and the billing tier based on average usage per tier.

Municipal Comparisons:

In an effort to assess the potential rate increases, Staff have attempted to compare how the Town's existing, and potential rate options compare to other local municipalities. The municipal comparison is completed using publically available information related to various water and wastewater rates from the area and comparing those rates against the Town of St. Marys average usage per tier.

Unfortunately, municipalities have different billing cycles, so in an effort to compare as close to "apples to apples" as possible, a one (1) month billing cycle was used, with a base rate and consumption rate adjusted accordingly.

In an effort to assist in the municipal comparison, graphical representations have been developed in Attachment D. Tier 1 users for water are slightly above the average from the comparison group with the position to the average changing based on the proposed option. Tier 1 users for wastewater are slightly less than the average from the comparison group. Tier 2, which lowers consumption prices for water would see less than average comparisons for all five (5) options and all five (5) wastewater options would remain well below the comparison average. For Tier 3 rates, all options for both water and wastewater remain well below the comparison average.

Please refer to Attachment D for a detailed water and wastewater rate comparison.

Recommendation:

Based on the information and options presented above, it is Staff's recommendation to proceed with a 2% increase to water rates (Option 2) and a 2.4% increase to wastewater rates (Option 3). These options coincide with the recommended rate increases identified in the approval system financial plans and will continue to move each system towards greater financial stability.

FINANCIAL IMPLICATIONS

None at this time.

Depending on which option(s) is recommended for adoption, will have an impact on both the Utility operations as well as the customers whom utilize the utilities.

SUMMARY

The purpose of this report has been to present information for the Strategic Priority Committee to review and discuss regarding water and wastewater rates administered at the Town of St. Marys. Several options have been presented to facilitate discussion regarding future rates. The rates proposed would be effective for the first billing cycle in January 2020. Should a rate increase be desired, but not implemented until later in 2020, a larger increase would be required as to cover revenue not collected until an increase was implemented.

To move this file forward, Staff requires the Committee to consider the options presented within this report and provide direction on the preferred future increases, if any on both water and wastewater rates.

Staff recommends that the Committee make recommendations to Council to answer the following questions:

1. Should Staff be increasing water and wastewater rates to provide greater financial stability?
2. If yes, should rates be increased slowly, moderately or aggressive per system, and if so, what is a desired increase for each system?
3. Should staff be looking for rate approvals for multiple years, or annual approvals of rates?

Based on the information presented herein, Staff recommends that water rates be increased in accordance to the Town's current financial plan for the water system at 2.0% for 2020. The Financial Plan identifies that at the recommended increases (2.0% from 2019 through 2028), the water system could achieve sustainability by 2028. In accordance with Ontario Regulation 453/07, Financial Plans must cover a period of at least six-years. The Town's Financial Plan should be updated in 2023 to maintain a 6-year projection moving forward, at which time revenue needs would be re-assessed.

With regards to wastewater rates, staff recommends a slightly larger increase of 2.4% for 2020 in accordance with the Town's current Wastewater System Financial Plan. An increase of 2.4% would see a continued reserve for the wastewater system moving forward, with reserves trending up by the end of the planning period while also positioning the system to be able to handle future debenture financing related to facility expansion(s). Historically, the wastewater system has not operated with much, or any of a reserve. As capital, operational and maintenance costs increase, the need for a reserve fund will be more significant to handle equipment repairs or replacements, facility improvements, etc.

STRATEGIC PLAN

This initiative is supported by the following priorities, outcomes, and tactics in the Plan.

- Pillar #1 – Infrastructure, Developing a Comprehensive and Progressive Infrastructure Plan:
 - Outcome: St. Marys is committed to developing a progressive and sustainable infrastructure plan that meets the infrastructure needs of today and tomorrow. This will require a balance between building and regular maintenance.
 - Tactic(s): When developing the annual capital plan, have regard for the infrastructure needs identified in the asset management plan before considering new builds or renovations that present significant service level improvements.
 - Tactic(s): To support the asset management plan, complete a financial analysis of the Town's ability to pay to establish a minimum capital budget threshold to be budgeted each year (either in actual spending, or put into reserve).

- Pillar #1 – Infrastructure, Water Reservoir Storage:
 - Outcome: If the goal is to achieve a population target of 8,000 residents by 2026/2027, (annual growth rate of 1.5%, doubling current rate), both access to potable water and fire protection needs would be best served by addressing this issue.
 - Tactic(s): Plan for an updated reservoir. Include its development in the community's capital and financial plan. As an interim measure, promote effective water conservation.
 - Tactic(s): Commence work on an updated water reservoir to meet provincial standards.
 - *This has now been completed with its financial requirements incorporated into the financial assessment*
- Pillar #1 – Infrastructure, Granting Readiness::
 - Outcome: With a change in the federal government, which has signaled a desire to fund infrastructure projects, it will be vital that the Town be in a state of readiness to compete for much needed infrastructure funding.
 - Tactic(s): Establish a nimble foresight approach to capital initiatives that creates a project inventory and plans to meet new grant opportunities. Assign a lead staff person for this task.
- Pillar #5 – Economic Development, Industrial Strategy:
 - Outcome: Industry has played, and continues to play a key role in the life of the Town in providing employment and economic stability. Seeking new opportunities to attract small, medium and large industry is in the Town's best interest as part of its growth strategy.
 - Tactic(s): Build a retention plan, identify elements needed to ensure business stay and grow in the community.

OTHERS CONSULTED

Jed Kelly, Director of Public Works – Town of St. Marys

André Morin, Director of Finance – Town of St. Marys

Morgan Dykstra, Public Works Coordinator – Town of St. Marys

ATTACHMENTS

Attachment A - Water System Financial Assessments

- A1 – Water, 0.0% Increase
- A2 – Water, 2.0% Increase
- A3 – Water, 2.4% Increase
- A4 – Water, 3.0% Increase
- A5 – Water, 6.8% Increase

Attachment B - Wastewater System Financial Assessments

- B1 – Wastewater, 0.0% Increase
- B2 – Wastewater, 2.0% Increase
- B3 – Wastewater, 2.4% Increase
- B4 – Wastewater, 3.0% Increase
- B5 – Wastewater, 6.8% Increase

Attachment C - Impacts to Users

Attachment D - Municipal Comparisons – Water and Wastewater

REVIEWED BY

Recommended by the Department

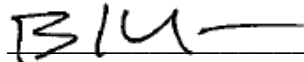


Dave Blake, C.E.T.
Environmental Services Supervisor



Jed Kelly
Director of Public Works

Recommended by the CAO



Brent Kittmer
CAO / Clerk

WATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Initial Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,724,365.74	\$ 1,732,265.94	\$ 1,740,166.14	\$ 1,748,066.34	\$ 1,755,966.54	\$ 1,763,866.74	\$ 1,771,766.94	\$ 1,779,667.14	\$ 1,787,567.34
1a	Proposed Rate Adjustment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1c	Proposed Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,724,365.74	\$ 1,732,265.94	\$ 1,740,166.14	\$ 1,748,066.34	\$ 1,755,966.54	\$ 1,763,866.74	\$ 1,771,766.94	\$ 1,779,667.14	\$ 1,787,567.34
2	Miscellaneous Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Total Operating Revenue	\$ 1,716,465.54	\$ 1,724,365.74	\$ 1,732,265.94	\$ 1,740,166.14	\$ 1,748,066.34	\$ 1,755,966.54	\$ 1,763,866.74	\$ 1,771,766.94	\$ 1,779,667.14	\$ 1,787,567.34
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,716,465.54	\$ 1,724,365.74	\$ 1,732,265.94	\$ 1,740,166.14	\$ 1,748,066.34	\$ 1,755,966.54	\$ 1,763,866.74	\$ 1,771,766.94	\$ 1,779,667.14	\$ 1,787,567.34
9	Total O&M Expenses	\$ 1,087,297.50	\$ 1,062,251.00	\$ 1,050,514.24	\$ 1,068,475.24	\$ 1,086,420.49	\$ 1,104,645.93	\$ 1,123,082.30	\$ 1,141,734.82	\$ 1,160,605.79	\$ 1,143,541.61
10	Subtotal: Net Operating Income	\$ 629,168.04	\$ 662,114.74	\$ 681,751.70	\$ 671,690.90	\$ 661,645.85	\$ 651,320.61	\$ 640,784.44	\$ 630,032.12	\$ 619,061.35	\$ 644,025.73
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
14c	Total Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (210,946.96)	\$ 615,114.74	\$ 573,751.70	\$ 421,690.90	\$ 411,645.85	\$ 401,320.61	\$ 390,784.44	\$ 380,032.12	\$ 369,061.35	\$ 394,025.73
16	PLUS: Opening Cash Balance	\$ 222,438.00	\$ 11,491.04	\$ 626,605.78	\$ 1,200,357.48	\$ 1,622,048.38	\$ 2,033,694.23	\$ 2,435,014.84	\$ 2,825,799.28	\$ 3,205,831.40	\$ 3,574,892.74
17	Ending Cash Balance (Before Reserves)	\$ 11,491.04	\$ 626,605.78	\$ 1,200,357.48	\$ 1,622,048.38	\$ 2,033,694.23	\$ 2,435,014.84	\$ 2,825,799.28	\$ 3,205,831.40	\$ 3,574,892.74	\$ 3,968,918.48
RESERVES											
18	Dedicated Water System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 11,491.04	\$ 626,605.78	\$ 1,200,357.48	\$ 1,622,048.38	\$ 2,033,694.23	\$ 2,435,014.84	\$ 2,825,799.28	\$ 3,205,831.40	\$ 3,574,892.74	\$ 3,968,918.48
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.01	0.59	1.14	1.52	1.87	2.20	2.52	2.81	3.08	3.47
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	6.93	14.34	14.77	14.55	14.33	14.11	13.88	13.65	13.41	64.40

WATER SYSTEM RATE SCALE DETERMINATION

Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	522662	522662	522662	522662	522662	522662	522662	522662	522662	522662
24	Number of Meters	2905	2950	2995	3040	3085	3130	3175	3220	3265	3310
25	Base Rate	\$ 14.63	\$ 14.63	\$ 14.63	\$ 14.63	\$ 14.63	\$ 14.63	\$ 14.63	\$ 14.63	\$ 14.63	\$ 14.63
26	Usage Rate per m3	\$ 1.55	\$ 1.55	\$ 1.55	\$ 1.55	\$ 1.55	\$ 1.55	\$ 1.55	\$ 1.55	\$ 1.55	\$ 1.55
27	Fixed Revenue	\$ 510,001.80	\$ 517,902.00	\$ 525,802.20	\$ 533,702.40	\$ 541,602.60	\$ 549,502.80	\$ 557,403.00	\$ 565,303.20	\$ 573,203.40	\$ 581,103.60
28	Variable Revenue	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10	\$ 810,126.10
29	Total Revenue - Tier 1	\$ 1,320,127.90	\$ 1,328,028.10	\$ 1,335,928.30	\$ 1,343,828.50	\$ 1,351,728.70	\$ 1,359,628.90	\$ 1,367,529.10	\$ 1,375,429.30	\$ 1,383,329.50	\$ 1,391,229.70
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	73816	73816	73816	73816	73816	73816	73816	73816	73816	73816
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 56.28	\$ 56.28	\$ 56.28	\$ 56.28	\$ 56.28	\$ 56.28	\$ 56.28	\$ 56.28	\$ 56.28	\$ 56.28
33	Usage Rate per m3	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41	\$ 1.41
34	Fixed Revenue	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84	\$ 12,831.84
35	Variable Revenue	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56	\$ 104,080.56
36	Total Revenue - Tier 2	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40	\$ 116,912.40
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	222956	222956	222956	222956	222956	222956	222956	222956	222956	222956
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 225.11	\$ 225.11	\$ 225.11	\$ 225.11	\$ 225.11	\$ 225.11	\$ 225.11	\$ 225.11	\$ 225.11	\$ 225.11
40	Usage Rate per m3	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.12	\$ 1.12
41	Fixed Revenue	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52	\$ 29,714.52
42	Variable Revenue	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72	\$ 249,710.72
43	Total Revenue - Tier 3	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24	\$ 279,425.24
44	Total Projected Revenue - Sales	\$ 1,716,465.54	\$ 1,724,365.74	\$ 1,732,265.94	\$ 1,740,166.14	\$ 1,748,066.34	\$ 1,755,966.54	\$ 1,763,866.74	\$ 1,771,766.94	\$ 1,779,667.14	\$ 1,787,567.34

WATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Initial Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,723,675.99	\$ 1,766,204.49	\$ 1,809,744.66	\$ 1,854,319.96	\$ 1,899,954.37	\$ 1,946,672.43	\$ 1,994,499.22	\$ 2,043,460.43	\$ 2,093,582.28
1a	Proposed Rate Adjustment	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 34,473.52	\$ 35,324.09	\$ 36,194.89	\$ 37,086.40	\$ 37,999.09	\$ 38,933.45	\$ 39,889.98	\$ 40,869.21	\$ 41,871.65
1c	Proposed Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,758,149.51	\$ 1,801,528.58	\$ 1,845,939.56	\$ 1,891,406.36	\$ 1,937,953.46	\$ 1,985,605.88	\$ 2,034,389.21	\$ 2,084,329.63	\$ 2,135,453.92
2	Miscellaneous Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Total Operating Revenue	\$ 1,716,465.54	\$ 1,758,149.51	\$ 1,801,528.58	\$ 1,845,939.56	\$ 1,891,406.36	\$ 1,937,953.46	\$ 1,985,605.88	\$ 2,034,389.21	\$ 2,084,329.63	\$ 2,135,453.92
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,716,465.54	\$ 1,758,149.51	\$ 1,801,528.58	\$ 1,845,939.56	\$ 1,891,406.36	\$ 1,937,953.46	\$ 1,985,605.88	\$ 2,034,389.21	\$ 2,084,329.63	\$ 2,135,453.92
9	Total O&M Expenses	\$ 1,087,297.50	\$ 1,062,251.00	\$ 1,050,514.24	\$ 1,068,475.24	\$ 1,086,420.49	\$ 1,104,645.93	\$ 1,123,082.30	\$ 1,141,734.82	\$ 1,160,605.79	\$ 1,143,541.61
10	Subtotal: Net Operating Income	\$ 629,168.04	\$ 695,898.51	\$ 751,014.34	\$ 777,464.31	\$ 804,985.87	\$ 833,307.53	\$ 862,523.57	\$ 892,654.39	\$ 923,723.84	\$ 991,912.31
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
14c	Total Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (210,946.96)	\$ 648,898.51	\$ 643,014.34	\$ 527,464.31	\$ 554,985.87	\$ 583,307.53	\$ 612,523.57	\$ 642,654.39	\$ 673,723.84	\$ 741,912.31
16	PLUS: Opening Cash Balance	\$ 222,438.00	\$ 11,491.04	\$ 660,389.55	\$ 1,303,403.90	\$ 1,830,868.21	\$ 2,385,854.08	\$ 2,969,161.61	\$ 3,581,685.18	\$ 4,224,339.57	\$ 4,898,063.41
17	Ending Cash Balance (Before Reserves)	\$ 11,491.04	\$ 660,389.55	\$ 1,303,403.90	\$ 1,830,868.21	\$ 2,385,854.08	\$ 2,969,161.61	\$ 3,581,685.18	\$ 4,224,339.57	\$ 4,898,063.41	\$ 5,639,975.73
RESERVES											
18	Dedicated Water System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 11,491.04	\$ 660,389.55	\$ 1,303,403.90	\$ 1,830,868.21	\$ 2,385,854.08	\$ 2,969,161.61	\$ 3,581,685.18	\$ 4,224,339.57	\$ 4,898,063.41	\$ 5,639,975.73
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.01	0.62	1.24	1.71	2.20	2.69	3.19	3.70	4.22	4.93
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	6.93	15.08	16.27	16.84	17.44	18.05	18.69	19.34	20.01	99.19

WATER SYSTEM RATE SCALE DETERMINATION

Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	522662	522662	522662	522662	522662	522662	522662	522662	522662	522662
24	Number of Meters	2905	2950	2995	3040	3085	3130	3175	3220	3265	3310
25	Base Rate	\$ 14.63	\$ 14.92	\$ 15.22	\$ 15.53	\$ 15.84	\$ 16.15	\$ 16.48	\$ 16.81	\$ 17.14	\$ 17.48
26	Usage Rate per m3	\$ 1.55	\$ 1.58	\$ 1.61	\$ 1.64	\$ 1.68	\$ 1.71	\$ 1.75	\$ 1.78	\$ 1.82	\$ 1.85
27	Fixed Revenue	\$ 510,001.80	\$ 528,260.04	\$ 547,044.61	\$ 566,369.26	\$ 586,248.07	\$ 606,695.49	\$ 627,726.31	\$ 649,355.68	\$ 671,599.14	\$ 694,472.59
28	Variable Revenue	\$ 810,126.10	\$ 826,328.62	\$ 842,855.19	\$ 859,712.30	\$ 876,906.54	\$ 894,444.68	\$ 912,333.57	\$ 930,580.24	\$ 949,191.84	\$ 968,175.68
29	Total Revenue - Tier 1	\$ 1,320,127.90	\$ 1,354,588.66	\$ 1,389,899.80	\$ 1,426,081.55	\$ 1,463,154.62	\$ 1,501,140.17	\$ 1,540,059.88	\$ 1,579,935.92	\$ 1,620,790.99	\$ 1,662,648.28
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	73816	73816	73816	73816	73816	73816	73816	73816	73816	73816
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 56.28	\$ 57.41	\$ 58.55	\$ 59.72	\$ 60.92	\$ 62.14	\$ 63.38	\$ 64.65	\$ 65.94	\$ 67.26
33	Usage Rate per m3	\$ 1.41	\$ 1.44	\$ 1.47	\$ 1.50	\$ 1.53	\$ 1.56	\$ 1.59	\$ 1.62	\$ 1.65	\$ 1.69
34	Fixed Revenue	\$ 12,831.84	\$ 13,088.48	\$ 13,350.25	\$ 13,617.25	\$ 13,889.60	\$ 14,167.39	\$ 14,450.74	\$ 14,739.75	\$ 15,034.55	\$ 15,335.24
35	Variable Revenue	\$ 104,080.56	\$ 106,162.17	\$ 108,285.41	\$ 110,451.12	\$ 112,660.15	\$ 114,913.35	\$ 117,211.62	\$ 119,555.85	\$ 121,946.96	\$ 124,385.90
36	Total Revenue - Tier 2	\$ 116,912.40	\$ 119,250.65	\$ 121,635.66	\$ 124,068.37	\$ 126,549.74	\$ 129,080.74	\$ 131,662.35	\$ 134,295.60	\$ 136,981.51	\$ 139,721.14
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	222956	222956	222956	222956	222956	222956	222956	222956	222956	222956
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 225.11	\$ 229.61	\$ 234.20	\$ 238.89	\$ 243.67	\$ 248.54	\$ 253.51	\$ 258.58	\$ 263.75	\$ 269.03
40	Usage Rate per m3	\$ 1.12	\$ 1.14	\$ 1.17	\$ 1.19	\$ 1.21	\$ 1.24	\$ 1.26	\$ 1.29	\$ 1.31	\$ 1.34
41	Fixed Revenue	\$ 29,714.52	\$ 30,308.81	\$ 30,914.99	\$ 31,533.29	\$ 32,163.95	\$ 32,807.23	\$ 33,463.38	\$ 34,132.64	\$ 34,815.30	\$ 35,511.60
42	Variable Revenue	\$ 249,710.72	\$ 254,704.93	\$ 259,799.03	\$ 264,995.01	\$ 270,294.91	\$ 275,700.81	\$ 281,214.83	\$ 286,839.13	\$ 292,575.91	\$ 298,427.43
43	Total Revenue - Tier 3	\$ 279,425.24	\$ 285,013.74	\$ 290,714.02	\$ 296,528.30	\$ 302,458.87	\$ 308,508.04	\$ 314,678.20	\$ 320,971.77	\$ 327,391.20	\$ 333,939.03
44	Total Projected Revenue - Sales	\$ 1,716,465.54	\$ 1,758,853.05	\$ 1,802,249.48	\$ 1,846,678.23	\$ 1,892,163.22	\$ 1,938,728.95	\$ 1,986,400.44	\$ 2,035,203.29	\$ 2,085,163.70	\$ 2,136,308.44

WATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Initial Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,723,372.51	\$ 1,772,818.59	\$ 1,823,645.43	\$ 1,875,890.80	\$ 1,929,593.54	\$ 1,984,793.50	\$ 2,041,531.61	\$ 2,099,849.90	\$ 2,159,791.55
1a	Proposed Rate Adjustment	0.0%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 41,360.94	\$ 42,547.65	\$ 43,767.49	\$ 45,021.38	\$ 46,310.25	\$ 47,635.04	\$ 48,996.76	\$ 50,396.40	\$ 51,835.00
1c	Proposed Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,764,733.45	\$ 1,815,366.24	\$ 1,867,412.92	\$ 1,920,912.18	\$ 1,975,903.79	\$ 2,032,428.54	\$ 2,090,528.36	\$ 2,150,246.30	\$ 2,211,626.55
2	Miscellaneous Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Total Operating Revenue	\$ 1,716,465.54	\$ 1,764,733.45	\$ 1,815,366.24	\$ 1,867,412.92	\$ 1,920,912.18	\$ 1,975,903.79	\$ 2,032,428.54	\$ 2,090,528.36	\$ 2,150,246.30	\$ 2,211,626.55
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,716,465.54	\$ 1,764,733.45	\$ 1,815,366.24	\$ 1,867,412.92	\$ 1,920,912.18	\$ 1,975,903.79	\$ 2,032,428.54	\$ 2,090,528.36	\$ 2,150,246.30	\$ 2,211,626.55
9	Total O&M Expenses	\$ 1,087,297.50	\$ 1,062,251.00	\$ 1,050,514.24	\$ 1,068,475.24	\$ 1,086,420.49	\$ 1,104,645.93	\$ 1,123,082.30	\$ 1,141,734.82	\$ 1,160,605.79	\$ 1,143,541.61
10	Subtotal: Net Operating Income	\$ 629,168.04	\$ 702,482.45	\$ 764,852.00	\$ 798,937.67	\$ 834,491.69	\$ 871,257.86	\$ 909,346.24	\$ 948,793.54	\$ 989,640.51	\$ 1,068,084.95
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
14c	Total Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (210,946.96)	\$ 655,482.45	\$ 656,852.00	\$ 548,937.67	\$ 584,491.69	\$ 621,257.86	\$ 659,346.24	\$ 698,793.54	\$ 739,640.51	\$ 818,084.95
16	PLUS: Opening Cash Balance	\$ 222,438.00	\$ 11,491.04	\$ 666,973.49	\$ 1,323,825.48	\$ 1,872,763.15	\$ 2,457,254.85	\$ 3,078,512.70	\$ 3,737,858.95	\$ 4,436,652.49	\$ 5,176,293.00
17	Ending Cash Balance (Before Reserves)	\$ 11,491.04	\$ 666,973.49	\$ 1,323,825.48	\$ 1,872,763.15	\$ 2,457,254.85	\$ 3,078,512.70	\$ 3,737,858.95	\$ 4,436,652.49	\$ 5,176,293.00	\$ 5,994,377.95
RESERVES											
18	Dedicated Water System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 11,491.04	\$ 666,973.49	\$ 1,323,825.48	\$ 1,872,763.15	\$ 2,457,254.85	\$ 3,078,512.70	\$ 3,737,858.95	\$ 4,436,652.49	\$ 5,176,293.00	\$ 5,994,377.95
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.01	0.63	1.26	1.75	2.26	2.79	3.33	3.89	4.46	5.24
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	6.93	15.22	16.57	17.31	18.08	18.88	19.70	20.55	21.44	106.81

WATER SYSTEM RATE SCALE DETERMINATION**Tier 1: 0-250 cubic metres**

23	Estimated Consumption (m3)	522662	522662	522662	522662	522662	522662	522662	522662	522662	522662
24	Number of Meters	2905	2950	2995	3040	3085	3130	3175	3220	3265	3310
25	Base Rate	\$ 14.63	\$ 14.98	\$ 15.34	\$ 15.71	\$ 16.09	\$ 16.47	\$ 16.87	\$ 17.27	\$ 17.69	\$ 18.11
26	Usage Rate per m3	\$ 1.55	\$ 1.59	\$ 1.63	\$ 1.66	\$ 1.70	\$ 1.75	\$ 1.79	\$ 1.83	\$ 1.87	\$ 1.92
27	Fixed Revenue	\$ 510,001.80	\$ 530,331.65	\$ 551,343.57	\$ 573,058.59	\$ 595,498.36	\$ 618,685.15	\$ 642,641.91	\$ 667,392.22	\$ 692,960.39	\$ 719,371.41
28	Variable Revenue	\$ 810,126.10	\$ 829,569.13	\$ 849,478.79	\$ 869,866.28	\$ 890,743.07	\$ 912,120.90	\$ 934,011.80	\$ 956,428.09	\$ 979,382.36	\$ 1,002,887.54
29	Total Revenue - Tier 1	\$ 1,320,127.90	\$ 1,359,900.77	\$ 1,400,822.35	\$ 1,442,924.86	\$ 1,486,241.42	\$ 1,530,806.05	\$ 1,576,653.71	\$ 1,623,820.31	\$ 1,672,342.75	\$ 1,722,258.95

Tier 2: 251-750 cubic metres

30	Estimated Consumption (m3)	73816	73816	73816	73816	73816	73816	73816	73816	73816	73816
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 56.28	\$ 57.63	\$ 59.01	\$ 60.43	\$ 61.88	\$ 63.37	\$ 64.89	\$ 66.44	\$ 68.04	\$ 69.67
33	Usage Rate per m3	\$ 1.41	\$ 1.44	\$ 1.48	\$ 1.51	\$ 1.55	\$ 1.59	\$ 1.63	\$ 1.66	\$ 1.70	\$ 1.75
34	Fixed Revenue	\$ 12,831.84	\$ 13,139.80	\$ 13,455.16	\$ 13,778.08	\$ 14,108.76	\$ 14,447.37	\$ 14,794.10	\$ 15,149.16	\$ 15,512.74	\$ 15,885.05
35	Variable Revenue	\$ 104,080.56	\$ 106,578.49	\$ 109,136.38	\$ 111,755.65	\$ 114,437.79	\$ 117,184.29	\$ 119,996.72	\$ 122,876.64	\$ 125,825.68	\$ 128,845.49
36	Total Revenue - Tier 2	\$ 116,912.40	\$ 119,718.30	\$ 122,591.54	\$ 125,533.73	\$ 128,546.54	\$ 131,631.66	\$ 134,790.82	\$ 138,025.80	\$ 141,338.42	\$ 144,730.54

Tier 3: 750 Cubic Metres +

37	Estimated Consumption (m3)	222956	222956	222956	222956	222956	222956	222956	222956	222956	222956
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 225.11	\$ 230.51	\$ 236.04	\$ 241.71	\$ 247.51	\$ 253.45	\$ 259.53	\$ 265.76	\$ 272.14	\$ 278.67
40	Usage Rate per m3	\$ 1.12	\$ 1.15	\$ 1.17	\$ 1.20	\$ 1.23	\$ 1.26	\$ 1.29	\$ 1.32	\$ 1.35	\$ 1.39
41	Fixed Revenue	\$ 29,714.52	\$ 30,427.67	\$ 31,157.93	\$ 31,905.72	\$ 32,671.46	\$ 33,455.58	\$ 34,258.51	\$ 35,080.71	\$ 35,922.65	\$ 36,784.79
42	Variable Revenue	\$ 249,710.72	\$ 255,703.78	\$ 261,840.67	\$ 268,124.84	\$ 274,559.84	\$ 281,149.28	\$ 287,896.86	\$ 294,806.38	\$ 301,881.74	\$ 309,126.90
43	Total Revenue - Tier 3	\$ 279,425.24	\$ 286,131.45	\$ 292,998.60	\$ 300,030.57	\$ 307,231.30	\$ 314,604.85	\$ 322,155.37	\$ 329,887.10	\$ 337,804.39	\$ 345,911.69

44	Total Projected Revenue - Sales	\$ 1,716,465.54	\$ 1,765,750.52	\$ 1,816,412.49	\$ 1,868,489.17	\$ 1,922,019.27	\$ 1,977,042.56	\$ 2,033,599.90	\$ 2,091,733.20	\$ 2,151,485.56	\$ 2,212,901.18
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WATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Initial Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,722,813.81	\$ 1,782,628.11	\$ 1,844,480.73	\$ 1,908,440.14	\$ 1,974,577.09	\$ 2,042,964.66	\$ 2,113,678.36	\$ 2,186,796.22	\$ 2,262,398.83
1a	Proposed Rate Adjustment	0.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 51,684.41	\$ 53,478.84	\$ 55,334.42	\$ 57,253.20	\$ 59,237.31	\$ 61,288.94	\$ 63,410.35	\$ 65,603.89	\$ 67,871.96
1c	Proposed Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,774,498.23	\$ 1,836,106.95	\$ 1,899,815.15	\$ 1,965,693.35	\$ 2,033,814.40	\$ 2,104,253.60	\$ 2,177,088.71	\$ 2,252,400.10	\$ 2,330,270.80
2	Miscellaneous Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Total Operating Revenue	\$ 1,716,465.54	\$ 1,774,498.23	\$ 1,836,106.95	\$ 1,899,815.15	\$ 1,965,693.35	\$ 2,033,814.40	\$ 2,104,253.60	\$ 2,177,088.71	\$ 2,252,400.10	\$ 2,330,270.80
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,716,465.54	\$ 1,774,498.23	\$ 1,836,106.95	\$ 1,899,815.15	\$ 1,965,693.35	\$ 2,033,814.40	\$ 2,104,253.60	\$ 2,177,088.71	\$ 2,252,400.10	\$ 2,330,270.80
9	Total O&M Expenses	\$ 1,087,297.50	\$ 1,062,251.00	\$ 1,050,514.24	\$ 1,068,475.24	\$ 1,086,420.49	\$ 1,104,645.93	\$ 1,123,082.30	\$ 1,141,734.82	\$ 1,160,605.79	\$ 1,143,541.61
10	Subtotal: Net Operating Income	\$ 629,168.04	\$ 712,247.23	\$ 785,592.71	\$ 831,339.91	\$ 879,272.86	\$ 929,168.47	\$ 981,171.30	\$ 1,035,353.89	\$ 1,091,794.31	\$ 1,186,729.19
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
14c	Total Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (210,946.96)	\$ 665,247.23	\$ 677,592.71	\$ 581,339.91	\$ 629,272.86	\$ 679,168.47	\$ 731,171.30	\$ 785,353.89	\$ 841,794.31	\$ 936,729.19
16	PLUS: Opening Cash Balance	\$ 222,438.00	\$ 11,491.04	\$ 676,738.27	\$ 1,354,330.98	\$ 1,935,670.88	\$ 2,564,943.74	\$ 3,244,112.22	\$ 3,975,283.51	\$ 4,760,637.40	\$ 5,602,431.71
17	Ending Cash Balance (Before Reserves)	\$ 11,491.04	\$ 676,738.27	\$ 1,354,330.98	\$ 1,935,670.88	\$ 2,564,943.74	\$ 3,244,112.22	\$ 3,975,283.51	\$ 4,760,637.40	\$ 5,602,431.71	\$ 6,539,160.90
RESERVES											
18	Dedicated Water System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 11,491.04	\$ 676,738.27	\$ 1,354,330.98	\$ 1,935,670.88	\$ 2,564,943.74	\$ 3,244,112.22	\$ 3,975,283.51	\$ 4,760,637.40	\$ 5,602,431.71	\$ 6,539,160.90
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.01	0.64	1.29	1.81	2.36	2.94	3.54	4.17	4.83	5.72
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	6.93	15.43	17.02	18.01	19.05	20.13	21.26	22.43	23.65	118.67

WATER SYSTEM RATE SCALE DETERMINATION

Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	522662	522662	522662	522662	522662	522662	522662	522662	522662	522662
24	Number of Meters	2905	2950	2995	3040	3085	3130	3175	3220	3265	3310
25	Base Rate	\$ 14.63	\$ 15.07	\$ 15.52	\$ 15.99	\$ 16.47	\$ 16.96	\$ 17.47	\$ 17.99	\$ 18.53	\$ 19.09
26	Usage Rate per m3	\$ 1.55	\$ 1.60	\$ 1.64	\$ 1.69	\$ 1.74	\$ 1.80	\$ 1.85	\$ 1.91	\$ 1.96	\$ 2.02
27	Fixed Revenue	\$ 510,001.80	\$ 533,439.06	\$ 557,823.55	\$ 583,191.02	\$ 609,578.50	\$ 637,024.35	\$ 665,568.33	\$ 695,251.63	\$ 726,116.92	\$ 758,208.39
28	Variable Revenue	\$ 810,126.10	\$ 834,429.88	\$ 859,462.78	\$ 885,246.66	\$ 911,804.06	\$ 939,158.18	\$ 967,332.93	\$ 996,352.92	\$ 1,026,243.51	\$ 1,057,030.81
29	Total Revenue - Tier 1	\$ 1,320,127.90	\$ 1,367,868.94	\$ 1,417,286.33	\$ 1,468,437.69	\$ 1,521,382.56	\$ 1,576,182.53	\$ 1,632,901.26	\$ 1,691,604.55	\$ 1,752,360.42	\$ 1,815,239.21
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	73816	73816	73816	73816	73816	73816	73816	73816	73816	73816
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 56.28	\$ 57.97	\$ 59.71	\$ 61.50	\$ 63.34	\$ 65.24	\$ 67.20	\$ 69.22	\$ 71.29	\$ 73.43
33	Usage Rate per m3	\$ 1.41	\$ 1.45	\$ 1.50	\$ 1.54	\$ 1.59	\$ 1.63	\$ 1.68	\$ 1.73	\$ 1.79	\$ 1.84
34	Fixed Revenue	\$ 12,831.84	\$ 13,216.80	\$ 13,613.30	\$ 14,021.70	\$ 14,442.35	\$ 14,875.62	\$ 15,321.89	\$ 15,781.54	\$ 16,254.99	\$ 16,742.64
35	Variable Revenue	\$ 104,080.56	\$ 107,202.98	\$ 110,419.07	\$ 113,731.64	\$ 117,143.59	\$ 120,657.89	\$ 124,277.63	\$ 128,005.96	\$ 131,846.14	\$ 135,801.52
36	Total Revenue - Tier 2	\$ 116,912.40	\$ 120,419.77	\$ 124,032.37	\$ 127,753.34	\$ 131,585.94	\$ 135,533.51	\$ 139,599.52	\$ 143,787.51	\$ 148,101.13	\$ 152,544.16
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	222956	222956	222956	222956	222956	222956	222956	222956	222956	222956
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 225.11	\$ 231.86	\$ 238.82	\$ 245.98	\$ 253.36	\$ 260.96	\$ 268.79	\$ 276.86	\$ 285.16	\$ 293.72
40	Usage Rate per m3	\$ 1.12	\$ 1.15	\$ 1.19	\$ 1.22	\$ 1.26	\$ 1.30	\$ 1.34	\$ 1.38	\$ 1.42	\$ 1.46
41	Fixed Revenue	\$ 29,714.52	\$ 30,605.96	\$ 31,524.13	\$ 32,469.86	\$ 33,443.95	\$ 34,447.27	\$ 35,480.69	\$ 36,545.11	\$ 37,641.46	\$ 38,770.71
42	Variable Revenue	\$ 249,710.72	\$ 257,202.04	\$ 264,918.10	\$ 272,865.65	\$ 281,051.62	\$ 289,483.16	\$ 298,167.66	\$ 307,112.69	\$ 316,326.07	\$ 325,815.85
43	Total Revenue - Tier 3	\$ 279,425.24	\$ 287,808.00	\$ 296,442.24	\$ 305,335.50	\$ 314,495.57	\$ 323,930.44	\$ 333,648.35	\$ 343,657.80	\$ 353,967.53	\$ 364,586.56
44	Total Projected Revenue - Sales	\$ 1,716,465.54	\$ 1,776,096.71	\$ 1,837,760.94	\$ 1,901,526.53	\$ 1,967,464.07	\$ 2,035,646.49	\$ 2,106,149.13	\$ 2,179,049.86	\$ 2,254,429.09	\$ 2,332,369.93

WATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Initial Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,716,392.27	\$ 1,841,505.35	\$ 1,975,697.20	\$ 2,119,624.03	\$ 2,273,989.27	\$ 2,439,547.06	\$ 2,617,105.77	\$ 2,807,532.00	\$ 3,011,754.71
1a	Proposed Rate Adjustment	\$ 0.0%	\$ 6.8%	\$ 6.8%	\$ 6.8%	\$ 6.8%	\$ 6.8%	\$ 6.8%	\$ 6.8%	\$ 6.8%	\$ 6.8%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 116,714.67	\$ 125,222.36	\$ 134,347.41	\$ 144,134.43	\$ 154,631.27	\$ 165,889.20	\$ 177,963.19	\$ 190,912.18	\$ 204,799.32
1c	Proposed Service Revenue - Water Sales	\$ 1,716,465.54	\$ 1,833,106.95	\$ 1,966,727.71	\$ 2,110,044.61	\$ 2,263,758.46	\$ 2,428,620.55	\$ 2,605,436.26	\$ 2,795,068.96	\$ 2,998,444.18	\$ 3,216,554.03
2	Miscellaneous Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
3	Total Operating Revenue	\$ 1,716,465.54	\$ 1,833,106.95	\$ 1,966,727.71	\$ 2,110,044.61	\$ 2,263,758.46	\$ 2,428,620.55	\$ 2,605,436.26	\$ 2,795,068.96	\$ 2,998,444.18	\$ 3,216,554.03
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,716,465.54	\$ 1,833,106.95	\$ 1,966,727.71	\$ 2,110,044.61	\$ 2,263,758.46	\$ 2,428,620.55	\$ 2,605,436.26	\$ 2,795,068.96	\$ 2,998,444.18	\$ 3,216,554.03
9	Total O&M Expenses	\$ 1,087,297.50	\$ 1,062,251.00	\$ 1,050,514.24	\$ 1,068,475.24	\$ 1,086,420.49	\$ 1,104,645.93	\$ 1,123,082.30	\$ 1,141,734.82	\$ 1,160,605.79	\$ 1,143,541.61
10	Subtotal: Net Operating Income	\$ 629,168.04	\$ 770,855.95	\$ 916,213.47	\$ 1,041,569.36	\$ 1,177,337.97	\$ 1,323,974.62	\$ 1,482,353.96	\$ 1,653,334.14	\$ 1,837,838.39	\$ 2,073,012.42
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 90,736.50	\$ 46,160.00	\$ 46,159.00	\$ 46,159.00	\$ 46,158.00	\$ 46,158.00	\$ 46,158.00	\$ 46,159.00	\$ 46,159.00	\$ 10,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
14c	Total Financed Capital Costs	\$ 840,115.00	\$ 47,000.00	\$ 108,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00	\$ 250,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (210,946.96)	\$ 723,855.95	\$ 808,213.47	\$ 791,569.36	\$ 927,337.97	\$ 1,073,974.62	\$ 1,232,353.96	\$ 1,403,334.14	\$ 1,587,838.39	\$ 1,823,012.42
16	PLUS: Opening Cash Balance	\$ 222,438.00	\$ 11,491.04	\$ 735,346.99	\$ 1,543,560.46	\$ 2,335,129.82	\$ 3,262,467.79	\$ 4,336,442.41	\$ 5,568,796.36	\$ 6,972,130.51	\$ 8,559,968.89
17	Ending Cash Balance (Before Reserves)	\$ 11,491.04	\$ 735,346.99	\$ 1,543,560.46	\$ 2,335,129.82	\$ 3,262,467.79	\$ 4,336,442.41	\$ 5,568,796.36	\$ 6,972,130.51	\$ 8,559,968.89	\$ 10,382,981.31
RESERVES											
18	Dedicated Water System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 11,491.04	\$ 735,346.99	\$ 1,543,560.46	\$ 2,335,129.82	\$ 3,262,467.79	\$ 4,336,442.41	\$ 5,568,796.36	\$ 6,972,130.51	\$ 8,559,968.89	\$ 10,382,981.31
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.01	0.69	1.47	2.19	3.00	3.93	4.96	6.11	7.38	9.08
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	6.93	16.70	19.85	22.56	25.51	28.68	32.11	35.82	39.82	207.30

WATER SYSTEM RATE SCALE DETERMINATION

Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	522662	522662	522662	522662	522662	522662	522662	522662	522662	522662
24	Number of Meters	2905	2950	2995	3040	3085	3130	3175	3220	3265	3310
25	Base Rate	\$ 14.63	\$ 15.62	\$ 16.69	\$ 17.82	\$ 19.03	\$ 20.33	\$ 21.71	\$ 23.19	\$ 24.76	\$ 26.45
26	Usage Rate per m3	\$ 1.55	\$ 1.66	\$ 1.77	\$ 1.89	\$ 2.02	\$ 2.15	\$ 2.30	\$ 2.46	\$ 2.62	\$ 2.80
27	Fixed Revenue	\$ 510,001.80	\$ 553,119.34	\$ 599,742.61	\$ 650,149.02	\$ 704,637.50	\$ 763,530.12	\$ 827,173.89	\$ 895,942.65	\$ 970,239.12	\$ 1,050,497.06
28	Variable Revenue	\$ 810,126.10	\$ 865,214.67	\$ 924,049.27	\$ 986,884.62	\$ 1,053,992.78	\$ 1,125,664.29	\$ 1,202,209.46	\$ 1,283,959.70	\$ 1,371,268.96	\$ 1,464,515.25
29	Total Revenue - Tier 1	\$ 1,320,127.90	\$ 1,418,334.01	\$ 1,523,791.88	\$ 1,637,033.65	\$ 1,758,630.28	\$ 1,889,194.41	\$ 2,029,383.35	\$ 2,179,902.35	\$ 2,341,508.08	\$ 2,515,012.31
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	73816	73816	73816	73816	73816	73816	73816	73816	73816	73816
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 56.28	\$ 60.11	\$ 64.19	\$ 68.56	\$ 73.22	\$ 78.20	\$ 83.52	\$ 89.20	\$ 95.26	\$ 101.74
33	Usage Rate per m3	\$ 1.41	\$ 1.51	\$ 1.61	\$ 1.72	\$ 1.83	\$ 1.96	\$ 2.09	\$ 2.23	\$ 2.39	\$ 2.55
34	Fixed Revenue	\$ 12,831.84	\$ 13,704.41	\$ 14,636.30	\$ 15,631.57	\$ 16,694.52	\$ 17,829.75	\$ 19,042.17	\$ 20,337.04	\$ 21,719.96	\$ 23,196.91
35	Variable Revenue	\$ 104,080.56	\$ 111,158.04	\$ 118,716.78	\$ 126,789.53	\$ 135,411.21	\$ 144,619.18	\$ 154,453.28	\$ 164,956.10	\$ 176,173.12	\$ 188,152.89
36	Total Revenue - Tier 2	\$ 116,912.40	\$ 124,862.44	\$ 133,353.09	\$ 142,421.10	\$ 152,105.73	\$ 162,448.92	\$ 173,495.45	\$ 185,293.14	\$ 197,893.08	\$ 211,349.80
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	222956	222956	222956	222956	222956	222956	222956	222956	222956	222956
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 225.11	\$ 240.42	\$ 256.77	\$ 274.23	\$ 292.87	\$ 312.79	\$ 334.06	\$ 356.77	\$ 381.03	\$ 406.95
40	Usage Rate per m3	\$ 1.12	\$ 1.20	\$ 1.28	\$ 1.36	\$ 1.46	\$ 1.56	\$ 1.66	\$ 1.78	\$ 1.90	\$ 2.02
41	Fixed Revenue	\$ 29,714.52	\$ 31,735.11	\$ 33,893.09	\$ 36,197.83	\$ 38,659.28	\$ 41,288.11	\$ 44,095.70	\$ 47,094.21	\$ 50,296.61	\$ 53,716.78
42	Variable Revenue	\$ 249,710.72	\$ 266,691.05	\$ 284,826.04	\$ 304,194.21	\$ 324,879.42	\$ 346,971.22	\$ 370,565.26	\$ 395,763.70	\$ 422,675.63	\$ 451,417.57
43	Total Revenue - Tier 3	\$ 279,425.24	\$ 298,426.16	\$ 318,719.13	\$ 340,392.04	\$ 363,538.69	\$ 388,259.33	\$ 414,660.96	\$ 442,857.91	\$ 472,972.24	\$ 505,134.36
44	Total Projected Revenue - Sales	\$ 1,716,465.54	\$ 1,841,622.61	\$ 1,975,864.11	\$ 2,119,846.78	\$ 2,274,274.71	\$ 2,439,902.66	\$ 2,617,539.76	\$ 2,808,053.40	\$ 3,012,373.39	\$ 3,231,496.47

WASTEWATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,676,819.20	\$ 1,687,333.00	\$ 1,697,846.80	\$ 1,708,360.60	\$ 1,718,874.40	\$ 1,729,388.20	\$ 1,739,902.00	\$ 1,750,415.80	\$ 1,760,929.60
1a	Proposed Rate Adjustment	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1c	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,676,819.20	\$ 1,687,333.00	\$ 1,697,846.80	\$ 1,708,360.60	\$ 1,718,874.40	\$ 1,729,388.20	\$ 1,739,902.00	\$ 1,750,415.80	\$ 1,760,929.60
2	Miscellaneous Fees (Surcharge Program)	\$ 40,000.00	\$ 50,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00
3	Total Operating Revenue	\$ 1,706,305.40	\$ 1,726,819.20	\$ 1,727,333.00	\$ 1,737,846.80	\$ 1,748,360.60	\$ 1,758,874.40	\$ 1,769,388.20	\$ 1,779,902.00	\$ 1,790,415.80	\$ 1,800,929.60
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,706,305.40	\$ 1,726,819.20	\$ 1,727,333.00	\$ 1,737,846.80	\$ 1,748,360.60	\$ 1,758,874.40	\$ 1,769,388.20	\$ 1,779,902.00	\$ 1,790,415.80	\$ 1,800,929.60
9	Total O&M Expenses	\$ 1,470,039.00	\$ 1,499,407.00	\$ 1,410,251.68	\$ 1,307,564.01	\$ 1,330,895.53	\$ 1,354,252.20	\$ 1,877,908.39	\$ 1,901,870.10	\$ 1,926,143.43	\$ 1,920,631.62
10	Subtotal: Net Operating Income	\$ 236,266.40	\$ 227,412.20	\$ 317,081.32	\$ 430,282.79	\$ 417,465.07	\$ 404,622.20	\$ (108,520.19)	\$ (121,968.10)	\$ (135,727.63)	\$ (119,702.02)
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
14c	Total Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (288,733.60)	\$ 42,412.20	\$ 12,081.32	\$ 330,282.79	\$ 367,465.07	\$ 354,622.20	\$ (158,520.19)	\$ (171,968.10)	\$ (185,727.63)	\$ (169,702.02)
16	PLUS: Opening Cash Balance	\$ 817,630.00	\$ 528,896.40	\$ 571,308.60	\$ 583,389.92	\$ 913,672.71	\$ 1,281,137.78	\$ 1,635,759.99	\$ 1,477,239.79	\$ 1,305,271.69	\$ 1,119,544.06
17	Ending Cash Balance (Before Reserves)	\$ 528,896.40	\$ 571,308.60	\$ 583,389.92	\$ 913,672.71	\$ 1,281,137.78	\$ 1,635,759.99	\$ 1,477,239.79	\$ 1,305,271.69	\$ 1,119,544.06	\$ 949,842.04
RESERVES											
18	Wastewater System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 528,896.40	\$ 571,308.60	\$ 583,389.92	\$ 913,672.71	\$ 1,281,137.78	\$ 1,635,759.99	\$ 1,477,239.79	\$ 1,305,271.69	\$ 1,119,544.06	\$ 949,842.04
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.36	0.38	0.41	0.70	0.96	1.21	0.79	0.69	0.58	0.49
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	0.91	0.87	2.18	14.29	13.87	13.44	-0.20	-0.23	-0.26	-0.24

WASTEWATER SYSTEM RATE SCALE DETERMINATION

Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	732070	732070	732070	732070	732070	732070	732070	732070	732070	732070
24	Number of Meters	2867	2912	2957	3002	3047	3092	3137	3182	3227	3272
25	Base Rate	\$ 19.47	\$ 19.47	\$ 19.47	\$ 19.47	\$ 19.47	\$ 19.47	\$ 19.47	\$ 19.47	\$ 19.47	\$ 19.47
26	Usage Rate per m3	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30
27	Fixed Revenue	\$ 669,845.88	\$ 680,359.68	\$ 690,873.48	\$ 701,387.28	\$ 711,901.08	\$ 722,414.88	\$ 732,928.68	\$ 743,442.48	\$ 753,956.28	\$ 764,470.08
28	Variable Revenue	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00	\$ 951,691.00
29	Total Revenue - Wastewater	\$ 1,621,536.88	\$ 1,632,050.68	\$ 1,642,564.48	\$ 1,653,078.28	\$ 1,663,592.08	\$ 1,674,105.88	\$ 1,684,619.68	\$ 1,695,133.48	\$ 1,705,647.28	\$ 1,716,161.08
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 64.88	\$ 64.88	\$ 64.88	\$ 64.88	\$ 64.88	\$ 64.88	\$ 64.88	\$ 64.88	\$ 64.88	\$ 64.88
33	Usage Rate per m3	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30
34	Fixed Revenue	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64
35	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36	Total Revenue - Tier 2	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64	\$ 14,792.64
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 227.09	\$ 227.09	\$ 227.09	\$ 227.09	\$ 227.09	\$ 227.09	\$ 227.09	\$ 227.09	\$ 227.09	\$ 227.09
40	Usage Rate per m3	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30	\$ 1.30
41	Fixed Revenue	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88
42	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Total Revenue - Tier 3	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88	\$ 29,975.88
44	Total Projected Revenue - Sales	\$ 1,666,305.40	\$ 1,676,819.20	\$ 1,687,333.00	\$ 1,697,846.80	\$ 1,708,360.60	\$ 1,718,874.40	\$ 1,729,388.20	\$ 1,739,902.00	\$ 1,750,415.80	\$ 1,760,929.60

WASTEWATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,676,148.47	\$ 1,720,391.23	\$ 1,765,733.23	\$ 1,812,200.77	\$ 1,859,820.70	\$ 1,908,620.56	\$ 1,958,628.48	\$ 2,009,873.27	\$ 2,062,384.40
1a	Proposed Rate Adjustment	0%	2%	2%	2%	2%	2%	2%	2%	2%	2%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 33,522.97	\$ 34,407.82	\$ 35,314.66	\$ 36,244.02	\$ 37,196.41	\$ 38,172.41	\$ 39,172.57	\$ 40,197.47	\$ 41,247.69
1c	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,709,671.44	\$ 1,754,799.05	\$ 1,801,047.90	\$ 1,848,444.78	\$ 1,897,017.12	\$ 1,946,792.97	\$ 1,997,801.05	\$ 2,050,070.74	\$ 2,103,632.09
2	Miscellaneous Fees (Surcharge Program)	\$ 40,000.00	\$ 50,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00
3	Total Operating Revenue	\$ 1,706,305.40	\$ 1,759,671.44	\$ 1,794,799.05	\$ 1,841,047.90	\$ 1,888,444.78	\$ 1,937,017.12	\$ 1,986,792.97	\$ 2,037,801.05	\$ 2,090,070.74	\$ 2,143,632.09
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,706,305.40	\$ 1,759,671.44	\$ 1,794,799.05	\$ 1,841,047.90	\$ 1,888,444.78	\$ 1,937,017.12	\$ 1,986,792.97	\$ 2,037,801.05	\$ 2,090,070.74	\$ 2,143,632.09
9	Total O&M Expenses	\$ 1,470,039.00	\$ 1,499,407.00	\$ 1,410,251.68	\$ 1,307,564.01	\$ 1,330,895.53	\$ 1,354,252.20	\$ 1,877,908.39	\$ 1,901,870.10	\$ 1,926,143.43	\$ 1,920,631.62
10	Subtotal: Net Operating Income	\$ 236,266.40	\$ 260,264.44	\$ 384,547.37	\$ 533,483.89	\$ 557,549.25	\$ 582,764.92	\$ 108,884.58	\$ 135,930.95	\$ 163,927.30	\$ 223,000.47
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
14c	Total Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (288,733.60)	\$ 75,264.44	\$ 79,547.37	\$ 433,483.89	\$ 507,549.25	\$ 532,764.92	\$ 58,884.58	\$ 85,930.95	\$ 113,927.30	\$ 173,000.47
16	PLUS: Opening Cash Balance	\$ 817,630.00	\$ 528,896.40	\$ 604,160.84	\$ 683,708.21	\$ 1,117,192.11	\$ 1,624,741.36	\$ 2,157,506.28	\$ 2,216,390.86	\$ 2,302,321.81	\$ 2,416,249.11
17	Ending Cash Balance (Before Reserves)	\$ 528,896.40	\$ 604,160.84	\$ 683,708.21	\$ 1,117,192.11	\$ 1,624,741.36	\$ 2,157,506.28	\$ 2,216,390.86	\$ 2,302,321.81	\$ 2,416,249.11	\$ 2,589,249.58
RESERVES											
18	Wastewater System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 528,896.40	\$ 604,160.84	\$ 683,708.21	\$ 1,117,192.11	\$ 1,624,741.36	\$ 2,157,506.28	\$ 2,216,390.86	\$ 2,302,321.81	\$ 2,416,249.11	\$ 2,589,249.58
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.36	0.40	0.48	0.85	1.22	1.59	1.18	1.21	1.25	1.35
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	0.91	1.00	2.65	17.72	18.52	19.36	0.21	0.26	0.31	0.45
WASTEWATER SYSTEM RATE SCALE DETERMINATION											
Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	732070	732070	732070	732070	732070	732070	732070	732070	732070	732070
24	Number of Meters	2867	2912	2957	3002	3047	3092	3137	3182	3227	3272
25	Base Rate	\$ 19.47	\$ 19.86	\$ 20.26	\$ 20.66	\$ 21.07	\$ 21.50	\$ 21.93	\$ 22.36	\$ 22.81	\$ 23.27
26	Usage Rate per m3	\$ 1.30	\$ 1.33	\$ 1.35	\$ 1.38	\$ 1.41	\$ 1.44	\$ 1.46	\$ 1.49	\$ 1.52	\$ 1.55
27	Fixed Revenue	\$ 669,845.88	\$ 693,966.87	\$ 718,784.77	\$ 744,317.79	\$ 770,584.62	\$ 797,604.40	\$ 825,396.74	\$ 853,981.72	\$ 883,379.95	\$ 913,612.51
28	Variable Revenue	\$ 951,691.00	\$ 970,724.82	\$ 990,139.32	\$ 1,009,942.10	\$ 1,030,140.94	\$ 1,050,743.76	\$ 1,071,758.64	\$ 1,093,193.81	\$ 1,115,057.69	\$ 1,137,358.84
29	Total Revenue - Wastewater	\$ 1,621,536.88	\$ 1,664,691.69	\$ 1,708,924.08	\$ 1,754,259.90	\$ 1,800,725.57	\$ 1,848,348.16	\$ 1,897,155.37	\$ 1,947,175.53	\$ 1,998,437.64	\$ 2,050,971.35
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 64.88	\$ 66.18	\$ 67.50	\$ 68.85	\$ 70.23	\$ 71.63	\$ 73.07	\$ 74.53	\$ 76.02	\$ 77.54
33	Usage Rate per m3	\$ 1.30	\$ 1.33	\$ 1.35	\$ 1.38	\$ 1.41	\$ 1.44	\$ 1.46	\$ 1.49	\$ 1.52	\$ 1.55
34	Fixed Revenue	\$ 14,792.64	\$ 15,088.49	\$ 15,390.26	\$ 15,698.07	\$ 16,012.03	\$ 16,332.27	\$ 16,658.92	\$ 16,992.09	\$ 17,331.94	\$ 17,678.57
35	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36	Total Revenue - Tier 2	\$ 14,792.64	\$ 15,088.49	\$ 15,390.26	\$ 15,698.07	\$ 16,012.03	\$ 16,332.27	\$ 16,658.92	\$ 16,992.09	\$ 17,331.94	\$ 17,678.57
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 227.09	\$ 231.63	\$ 236.26	\$ 240.99	\$ 245.81	\$ 250.73	\$ 255.74	\$ 260.86	\$ 266.07	\$ 271.39
40	Usage Rate per m3	\$ 1.30	\$ 1.33	\$ 1.35	\$ 1.38	\$ 1.41	\$ 1.44	\$ 1.46	\$ 1.49	\$ 1.52	\$ 1.55
41	Fixed Revenue	\$ 29,975.88	\$ 30,575.40	\$ 31,186.91	\$ 31,810.64	\$ 32,446.86	\$ 33,095.79	\$ 33,757.71	\$ 34,432.86	\$ 35,121.52	\$ 35,823.95
42	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Total Revenue - Tier 3	\$ 29,975.88	\$ 30,575.40	\$ 31,186.91	\$ 31,810.64	\$ 32,446.86	\$ 33,095.79	\$ 33,757.71	\$ 34,432.86	\$ 35,121.52	\$ 35,823.95
44	Total Projected Revenue - Sales	\$ 1,666,305.40	\$ 1,710,355.58	\$ 1,755,501.25	\$ 1,801,768.61	\$ 1,849,184.45	\$ 1,897,776.23	\$ 1,947,572.00	\$ 1,998,600.49	\$ 2,050,891.09	\$ 2,104,473.88

WASTEWATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,675,853.35	\$ 1,726,833.76	\$ 1,779,295.94	\$ 1,833,281.65	\$ 1,888,833.79	\$ 1,945,996.47	\$ 2,004,814.99	\$ 2,065,335.91	\$ 2,127,607.05
1a	Proposed Rate Adjustment	0%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%	2.4%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 40,220.48	\$ 41,444.01	\$ 42,703.10	\$ 43,998.76	\$ 45,332.01	\$ 46,703.92	\$ 48,115.56	\$ 49,568.06	\$ 51,062.57
1c	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,716,073.83	\$ 1,768,277.77	\$ 1,821,999.04	\$ 1,877,280.41	\$ 1,934,165.81	\$ 1,992,700.39	\$ 2,052,930.55	\$ 2,114,903.97	\$ 2,178,669.62
2	Miscellaneous Fees (Surcharge Program)	\$ 40,000.00	\$ 50,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00
3	Total Operating Revenue	\$ 1,706,305.40	\$ 1,766,073.83	\$ 1,808,277.77	\$ 1,861,999.04	\$ 1,917,280.41	\$ 1,974,165.81	\$ 2,032,700.39	\$ 2,092,930.55	\$ 2,154,903.97	\$ 2,218,669.62
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,706,305.40	\$ 1,766,073.83	\$ 1,808,277.77	\$ 1,861,999.04	\$ 1,917,280.41	\$ 1,974,165.81	\$ 2,032,700.39	\$ 2,092,930.55	\$ 2,154,903.97	\$ 2,218,669.62
9	Total O&M Expenses	\$ 1,470,039.00	\$ 1,499,407.00	\$ 1,410,251.68	\$ 1,307,564.01	\$ 1,330,895.53	\$ 1,354,252.20	\$ 1,877,908.39	\$ 1,901,870.10	\$ 1,926,143.43	\$ 1,920,631.62
10	Subtotal: Net Operating Income	\$ 236,266.40	\$ 266,666.83	\$ 398,026.09	\$ 554,435.04	\$ 586,384.88	\$ 619,913.61	\$ 154,792.00	\$ 191,060.45	\$ 228,760.54	\$ 298,038.00
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
14c	Total Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (288,733.60)	\$ 81,666.83	\$ 93,026.09	\$ 454,435.04	\$ 536,384.88	\$ 569,913.61	\$ 104,792.00	\$ 141,060.45	\$ 178,760.54	\$ 248,038.00
16	PLUS: Opening Cash Balance	\$ 817,630.00	\$ 528,896.40	\$ 610,563.23	\$ 703,589.33	\$ 1,158,024.36	\$ 1,694,409.24	\$ 2,264,322.85	\$ 2,369,114.84	\$ 2,510,175.30	\$ 2,688,935.83
17	Ending Cash Balance (Before Reserves)	\$ 528,896.40	\$ 610,563.23	\$ 703,589.33	\$ 1,158,024.36	\$ 1,694,409.24	\$ 2,264,322.85	\$ 2,369,114.84	\$ 2,510,175.30	\$ 2,688,935.83	\$ 2,936,973.83
RESERVES											
18	Wastewater System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 528,896.40	\$ 610,563.23	\$ 703,589.33	\$ 1,158,024.36	\$ 1,694,409.24	\$ 2,264,322.85	\$ 2,369,114.84	\$ 2,510,175.30	\$ 2,688,935.83	\$ 2,936,973.83
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.36	0.41	0.50	0.89	1.27	1.67	1.26	1.32	1.40	1.53
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	0.91	1.02	2.74	18.42	19.48	20.59	0.29	0.36	0.43	0.60
WASTEWATER SYSTEM RATE SCALE DETERMINATION											
Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	732070	732070	732070	732070	732070	732070	732070	732070	732070	732070
24	Number of Meters	2867	2912	2957	3002	3047	3092	3137	3182	3227	3272
25	Base Rate	\$ 19.47	\$ 19.94	\$ 20.42	\$ 20.91	\$ 21.41	\$ 21.92	\$ 22.45	\$ 22.99	\$ 23.54	\$ 24.10
26	Usage Rate per m3	\$ 1.30	\$ 1.33	\$ 1.36	\$ 1.40	\$ 1.43	\$ 1.46	\$ 1.50	\$ 1.53	\$ 1.57	\$ 1.61
27	Fixed Revenue	\$ 669,845.88	\$ 696,688.31	\$ 724,433.35	\$ 753,108.86	\$ 782,743.52	\$ 813,366.85	\$ 845,009.24	\$ 877,701.96	\$ 911,477.21	\$ 946,368.12
28	Variable Revenue	\$ 951,691.00	\$ 974,531.58	\$ 997,920.34	\$ 1,021,870.43	\$ 1,046,395.32	\$ 1,071,508.81	\$ 1,097,225.02	\$ 1,123,558.42	\$ 1,150,523.82	\$ 1,178,136.39
29	Total Revenue - Wastewater	\$ 1,621,536.88	\$ 1,671,219.90	\$ 1,722,353.69	\$ 1,774,979.29	\$ 1,829,138.84	\$ 1,884,875.65	\$ 1,942,234.26	\$ 2,001,260.38	\$ 2,062,001.04	\$ 2,124,504.51
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 64.88	\$ 66.44	\$ 68.03	\$ 69.66	\$ 71.34	\$ 73.05	\$ 74.80	\$ 76.60	\$ 78.44	\$ 80.32
33	Usage Rate per m3	\$ 1.30	\$ 1.33	\$ 1.36	\$ 1.40	\$ 1.43	\$ 1.46	\$ 1.50	\$ 1.53	\$ 1.57	\$ 1.61
34	Fixed Revenue	\$ 14,792.64	\$ 15,147.66	\$ 15,511.21	\$ 15,883.48	\$ 16,264.68	\$ 16,655.03	\$ 17,054.75	\$ 17,464.07	\$ 17,883.20	\$ 18,312.40
35	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36	Total Revenue - Tier 2	\$ 14,792.64	\$ 15,147.66	\$ 15,511.21	\$ 15,883.48	\$ 16,264.68	\$ 16,655.03	\$ 17,054.75	\$ 17,464.07	\$ 17,883.20	\$ 18,312.40
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 227.09	\$ 232.54	\$ 238.12	\$ 243.84	\$ 249.69	\$ 255.68	\$ 261.82	\$ 268.10	\$ 274.53	\$ 281.12
40	Usage Rate per m3	\$ 1.30	\$ 1.33	\$ 1.36	\$ 1.40	\$ 1.43	\$ 1.46	\$ 1.50	\$ 1.53	\$ 1.57	\$ 1.61
41	Fixed Revenue	\$ 29,975.88	\$ 30,695.30	\$ 31,431.99	\$ 32,186.36	\$ 32,958.83	\$ 33,749.84	\$ 34,559.84	\$ 35,389.27	\$ 36,238.62	\$ 37,108.34
42	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Total Revenue - Tier 3	\$ 29,975.88	\$ 30,695.30	\$ 31,431.99	\$ 32,186.36	\$ 32,958.83	\$ 33,749.84	\$ 34,559.84	\$ 35,389.27	\$ 36,238.62	\$ 37,108.34
44	Total Projected Revenue - Sales	\$ 1,666,305.40	\$ 1,717,062.86	\$ 1,769,296.89	\$ 1,823,049.12	\$ 1,878,362.34	\$ 1,935,280.53	\$ 1,993,848.85	\$ 2,054,113.72	\$ 2,116,122.86	\$ 2,179,925.26

WASTEWATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,675,310.06	\$ 1,736,388.83	\$ 1,799,624.55	\$ 1,865,091.66	\$ 1,932,867.13	\$ 2,003,030.55	\$ 2,075,664.20	\$ 2,150,853.13	\$ 2,228,685.31
1a	Proposed Rate Adjustment	0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 50,259.30	\$ 52,091.66	\$ 53,988.74	\$ 55,952.75	\$ 57,986.01	\$ 60,090.92	\$ 62,269.93	\$ 64,525.59	\$ 66,860.56
1c	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,725,569.36	\$ 1,788,480.50	\$ 1,853,613.29	\$ 1,921,044.41	\$ 1,990,853.15	\$ 2,063,121.47	\$ 2,137,934.12	\$ 2,215,378.73	\$ 2,295,545.87
2	Miscellaneous Fees (Surcharge Program)	\$ 40,000.00	\$ 50,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00
3	Total Operating Revenue	\$ 1,706,305.40	\$ 1,775,569.36	\$ 1,828,480.50	\$ 1,893,613.29	\$ 1,961,044.41	\$ 2,030,853.15	\$ 2,103,121.47	\$ 2,177,934.12	\$ 2,255,378.73	\$ 2,335,545.87
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,706,305.40	\$ 1,775,569.36	\$ 1,828,480.50	\$ 1,893,613.29	\$ 1,961,044.41	\$ 2,030,853.15	\$ 2,103,121.47	\$ 2,177,934.12	\$ 2,255,378.73	\$ 2,335,545.87
9	Total O&M Expenses	\$ 1,470,039.00	\$ 1,499,407.00	\$ 1,410,251.68	\$ 1,307,564.01	\$ 1,330,895.53	\$ 1,354,252.20	\$ 1,877,908.39	\$ 1,901,870.10	\$ 1,926,143.43	\$ 1,920,631.62
10	Subtotal: Net Operating Income	\$ 236,266.40	\$ 276,162.36	\$ 418,228.82	\$ 586,049.28	\$ 630,148.88	\$ 676,600.95	\$ 225,213.08	\$ 276,064.02	\$ 329,235.30	\$ 414,914.25
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
14c	Total Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (288,733.60)	\$ 91,162.36	\$ 113,228.82	\$ 486,049.28	\$ 580,148.88	\$ 626,600.95	\$ 175,213.08	\$ 226,064.02	\$ 279,235.30	\$ 364,914.25
16	PLUS: Opening Cash Balance	\$ 817,630.00	\$ 528,896.40	\$ 620,058.76	\$ 733,287.58	\$ 1,219,336.86	\$ 1,799,485.74	\$ 2,426,086.69	\$ 2,601,299.77	\$ 2,827,363.79	\$ 3,106,599.09
17	Ending Cash Balance (Before Reserves)	\$ 528,896.40	\$ 620,058.76	\$ 733,287.58	\$ 1,219,336.86	\$ 1,799,485.74	\$ 2,426,086.69	\$ 2,601,299.77	\$ 2,827,363.79	\$ 3,106,599.09	\$ 3,471,513.33
RESERVES											
18	Wastewater System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 528,896.40	\$ 620,058.76	\$ 733,287.58	\$ 1,219,336.86	\$ 1,799,485.74	\$ 2,426,086.69	\$ 2,601,299.77	\$ 2,827,363.79	\$ 3,106,599.09	\$ 3,471,513.33
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.36	0.41	0.52	0.93	1.35	1.79	1.39	1.49	1.61	1.81
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	0.91	1.06	2.88	19.47	20.93	22.48	0.42	0.52	0.62	0.83

WASTEWATER SYSTEM RATE SCALE DETERMINATION

Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	732070	732070	732070	732070	732070	732070	732070	732070	732070	732070
24	Number of Meters	2867	2912	2957	3002	3047	3092	3137	3182	3227	3272
25	Base Rate	\$ 19.47	\$ 20.05	\$ 20.66	\$ 21.28	\$ 21.91	\$ 22.57	\$ 23.25	\$ 23.95	\$ 24.66	\$ 25.40
26	Usage Rate per m3	\$ 1.30	\$ 1.34	\$ 1.38	\$ 1.42	\$ 1.46	\$ 1.51	\$ 1.55	\$ 1.60	\$ 1.65	\$ 1.70
27	Fixed Revenue	\$ 669,845.88	\$ 700,770.47	\$ 732,947.67	\$ 766,424.82	\$ 801,250.94	\$ 837,476.84	\$ 875,155.17	\$ 914,340.48	\$ 955,089.26	\$ 997,460.06
28	Variable Revenue	\$ 951,691.00	\$ 980,241.73	\$ 1,009,648.98	\$ 1,039,938.45	\$ 1,071,136.60	\$ 1,103,270.70	\$ 1,136,368.82	\$ 1,170,459.89	\$ 1,205,573.69	\$ 1,241,740.90
29	Total Revenue - Wastewater	\$ 1,621,536.88	\$ 1,681,012.20	\$ 1,742,596.66	\$ 1,806,363.27	\$ 1,872,387.54	\$ 1,940,747.54	\$ 2,011,524.00	\$ 2,084,800.37	\$ 2,160,662.94	\$ 2,239,200.96
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 64.88	\$ 66.83	\$ 68.83	\$ 70.90	\$ 73.02	\$ 75.21	\$ 77.47	\$ 79.79	\$ 82.19	\$ 84.65
33	Usage Rate per m3	\$ 1.30	\$ 1.34	\$ 1.38	\$ 1.42	\$ 1.46	\$ 1.51	\$ 1.55	\$ 1.60	\$ 1.65	\$ 1.70
34	Fixed Revenue	\$ 14,792.64	\$ 15,236.42	\$ 15,693.51	\$ 16,164.32	\$ 16,649.25	\$ 17,148.72	\$ 17,663.19	\$ 18,193.08	\$ 18,738.87	\$ 19,301.04
35	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36	Total Revenue - Tier 2	\$ 14,792.64	\$ 15,236.42	\$ 15,693.51	\$ 16,164.32	\$ 16,649.25	\$ 17,148.72	\$ 17,663.19	\$ 18,193.08	\$ 18,738.87	\$ 19,301.04
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 227.09	\$ 233.90	\$ 240.92	\$ 248.15	\$ 255.59	\$ 263.26	\$ 271.16	\$ 279.29	\$ 287.67	\$ 296.30
40	Usage Rate per m3	\$ 1.30	\$ 1.34	\$ 1.38	\$ 1.42	\$ 1.46	\$ 1.51	\$ 1.55	\$ 1.60	\$ 1.65	\$ 1.70
41	Fixed Revenue	\$ 29,975.88	\$ 30,875.16	\$ 31,801.41	\$ 32,755.45	\$ 33,738.12	\$ 34,750.26	\$ 35,792.77	\$ 36,866.55	\$ 37,972.55	\$ 39,111.72
42	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Total Revenue - Tier 3	\$ 29,975.88	\$ 30,875.16	\$ 31,801.41	\$ 32,755.45	\$ 33,738.12	\$ 34,750.26	\$ 35,792.77	\$ 36,866.55	\$ 37,972.55	\$ 39,111.72
44	Total Projected Revenue - Sales	\$ 1,666,305.40	\$ 1,727,123.78	\$ 1,790,091.58	\$ 1,855,283.04	\$ 1,922,774.91	\$ 1,992,646.53	\$ 2,064,979.95	\$ 2,139,860.00	\$ 2,217,374.37	\$ 2,297,613.72

WASTEWATER BUDGET PROJECTIONS - 2019 REVIEW

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

Line No.	Details	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
REVENUE											
<u>Operating Revenues</u>											
1	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,669,065.59	\$ 1,793,738.86	\$ 1,927,649.95	\$ 2,071,478.69	\$ 2,225,954.69	\$ 2,391,860.90	\$ 2,570,037.55	\$ 2,761,386.25	\$ 2,966,874.53
1a	Proposed Rate Adjustment	0%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%	6.8%
1b	Additional Revenue from Rate Adjustment	\$ -	\$ 113,496.46	\$ 121,974.24	\$ 131,080.20	\$ 140,860.55	\$ 151,364.92	\$ 162,646.54	\$ 174,762.55	\$ 187,774.27	\$ 201,747.47
1c	Service Revenue - Water Sales	\$ 1,666,305.40	\$ 1,782,562.05	\$ 1,915,713.11	\$ 2,058,730.14	\$ 2,212,339.24	\$ 2,377,319.61	\$ 2,554,507.44	\$ 2,744,800.10	\$ 2,949,160.52	\$ 3,168,622.00
2	Miscellaneous Fees (Surcharge Program)	\$ 40,000.00	\$ 50,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00	\$ 40,000.00
3	Total Operating Revenue	\$ 1,706,305.40	\$ 1,832,562.05	\$ 1,955,713.11	\$ 2,098,730.14	\$ 2,252,339.24	\$ 2,417,319.61	\$ 2,594,507.44	\$ 2,784,800.10	\$ 2,989,160.52	\$ 3,208,622.00
<u>Non-Operating Revenue</u>											
4	Tap / Connection Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
5	Interest Income	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	Other Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	Total Revenues	\$ 1,706,305.40	\$ 1,832,562.05	\$ 1,955,713.11	\$ 2,098,730.14	\$ 2,252,339.24	\$ 2,417,319.61	\$ 2,594,507.44	\$ 2,784,800.10	\$ 2,989,160.52	\$ 3,208,622.00
9	Total O&M Expenses	\$ 1,470,039.00	\$ 1,499,407.00	\$ 1,410,251.68	\$ 1,307,564.01	\$ 1,330,895.53	\$ 1,354,252.20	\$ 1,877,908.39	\$ 1,901,870.10	\$ 1,926,143.43	\$ 1,920,631.62
10	Subtotal: Net Operating Income	\$ 236,266.40	\$ 333,155.05	\$ 545,461.43	\$ 791,166.14	\$ 921,443.71	\$ 1,063,067.41	\$ 716,599.05	\$ 882,930.00	\$ 1,063,017.09	\$ 1,287,990.38
<u>Debt Service</u>											
11	Debt Service - Existing	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
12	Debt Service - New	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
13	Total Debt Service	\$ 260,373.00	\$ 260,373.00	\$ 145,237.00	\$ 30,103.00	\$ 30,103.00	\$ 30,103.00	\$ 530,103.00	\$ 530,103.00	\$ 530,103.00	\$ 500,000.00
14a	Asset Replacement Costs										
14b	Rate Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
14c	Total Financed Capital Costs	\$ 525,000.00	\$ 185,000.00	\$ 305,000.00	\$ 100,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00	\$ 50,000.00
15	NET INCOME (LOSS) FROM OPERATIONS	\$ (288,733.60)	\$ 148,155.05	\$ 240,461.43	\$ 691,166.14	\$ 871,443.71	\$ 1,013,067.41	\$ 666,599.05	\$ 832,930.00	\$ 1,013,017.09	\$ 1,237,990.38
16	PLUS: Opening Cash Balance	\$ 817,630.00	\$ 528,896.40	\$ 677,051.45	\$ 917,512.88	\$ 1,608,679.01	\$ 2,480,122.72	\$ 3,493,190.13	\$ 4,159,789.18	\$ 4,992,719.19	\$ 6,005,736.27
17	Ending Cash Balance (Before Reserves)	\$ 528,896.40	\$ 677,051.45	\$ 917,512.88	\$ 1,608,679.01	\$ 2,480,122.72	\$ 3,493,190.13	\$ 4,159,789.18	\$ 4,992,719.19	\$ 6,005,736.27	\$ 7,243,726.65
RESERVES											
18	Wastewater System Reserve	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	ENDING CASH BALANCE AFTER RESERVES	\$ 528,896.40	\$ 677,051.45	\$ 917,512.88	\$ 1,608,679.01	\$ 2,480,122.72	\$ 3,493,190.13	\$ 4,159,789.18	\$ 4,992,719.19	\$ 6,005,736.27	\$ 7,243,726.65
21	CUMULATIVE REVENUE & RESERVE DEFICIENCY (Line 19 divided by line 9)	0.36	0.45	0.65	1.23	1.86	2.58	2.22	2.63	3.12	3.77
22	DEBT SERVICE COVERAGE (Line 10 divided by Line 13)	0.91	1.28	3.76	26.28	30.61	35.31	1.35	1.67	2.01	2.58
WASTEWATER SYSTEM RATE SCALE DETERMINATION											
Tier 1: 0-250 cubic metres											
23	Estimated Consumption (m3)	732070	732070	732070	732070	732070	732070	732070	732070	732070	732070
24	Number of Meters	2867	2912	2957	3002	3047	3092	3137	3182	3227	3272
25	Base Rate	\$ 19.47	\$ 20.79	\$ 22.21	\$ 23.72	\$ 25.33	\$ 27.05	\$ 28.89	\$ 30.86	\$ 32.96	\$ 35.20
26	Usage Rate per m3	\$ 1.30	\$ 1.39	\$ 1.48	\$ 1.58	\$ 1.69	\$ 1.81	\$ 1.93	\$ 2.06	\$ 2.20	\$ 2.35
27	Fixed Revenue	\$ 669,845.88	\$ 726,624.14	\$ 788,026.87	\$ 854,420.47	\$ 926,199.76	\$ 1,003,790.19	\$ 1,087,650.17	\$ 1,178,273.59	\$ 1,276,192.49	\$ 1,381,980.03
28	Variable Revenue	\$ 951,691.00	\$ 1,016,405.99	\$ 1,085,521.60	\$ 1,159,337.06	\$ 1,238,171.98	\$ 1,322,367.68	\$ 1,412,288.68	\$ 1,508,324.31	\$ 1,610,890.36	\$ 1,720,430.91
29	Total Revenue - Wastewater	\$ 1,621,536.88	\$ 1,743,030.13	\$ 1,873,548.47	\$ 2,013,757.53	\$ 2,164,371.74	\$ 2,326,157.87	\$ 2,499,938.85	\$ 2,686,597.90	\$ 2,887,082.85	\$ 3,102,410.94
Tier 2: 251-750 cubic metres											
30	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
31	Number of Meters	19	19	19	19	19	19	19	19	19	19
32	Base Rate	\$ 64.88	\$ 69.29	\$ 74.00	\$ 79.04	\$ 84.41	\$ 90.15	\$ 96.28	\$ 102.83	\$ 109.82	\$ 117.29
33	Usage Rate per m3	\$ 1.30	\$ 1.39	\$ 1.48	\$ 1.58	\$ 1.69	\$ 1.81	\$ 1.93	\$ 2.06	\$ 2.20	\$ 2.35
34	Fixed Revenue	\$ 14,792.64	\$ 15,798.54	\$ 16,872.84	\$ 18,020.19	\$ 19,245.57	\$ 20,554.27	\$ 21,951.96	\$ 23,444.69	\$ 25,038.93	\$ 26,741.57
35	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
36	Total Revenue - Tier 2	\$ 14,792.64	\$ 15,798.54	\$ 16,872.84	\$ 18,020.19	\$ 19,245.57	\$ 20,554.27	\$ 21,951.96	\$ 23,444.69	\$ 25,038.93	\$ 26,741.57
Tier 3: 750 Cubic Metres +											
37	Estimated Consumption (m3)	0	0	0	0	0	0	0	0	0	0
38	Number of Meters	11	11	11	11	11	11	11	11	11	11
39	Base Rate	\$ 227.09	\$ 242.53	\$ 259.02	\$ 276.64	\$ 295.45	\$ 315.54	\$ 337.00	\$ 359.91	\$ 384.39	\$ 410.52
40	Usage Rate per m3	\$ 1.30	\$ 1.39	\$ 1.48	\$ 1.58	\$ 1.69	\$ 1.81	\$ 1.93	\$ 2.06	\$ 2.20	\$ 2.35
41	Fixed Revenue	\$ 29,975.88	\$ 32,014.24	\$ 34,191.21	\$ 36,516.21	\$ 38,999.31	\$ 41,651.27	\$ 44,483.55	\$ 47,508.43	\$ 50,739.01	\$ 54,189.26
42	Variable Revenue	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
43	Total Revenue - Tier 3	\$ 29,975.88	\$ 32,014.24	\$ 34,191.21	\$ 36,516.21	\$ 38,999.31	\$ 41,651.27	\$ 44,483.55	\$ 47,508.43	\$ 50,739.01	\$ 54,189.26
44	Total Projected Revenue - Sales	\$ 1,666,305.40	\$ 1,790,842.91	\$ 1,924,612.52	\$ 2,068,293.94	\$ 2,222,616.62	\$ 2,388,363.40	\$ 2,566,374.36	\$ 2,757,551.02	\$ 2,962,860.79	\$ 3,183,341.77

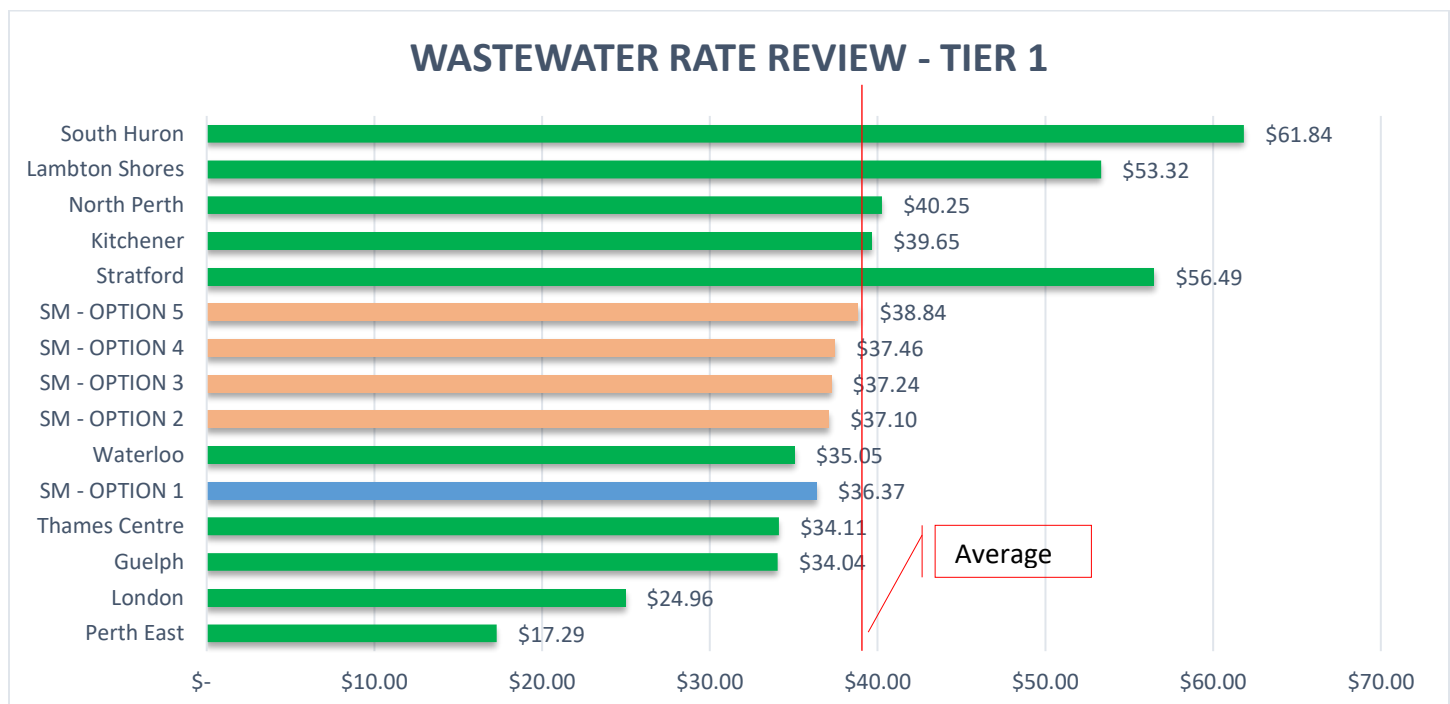
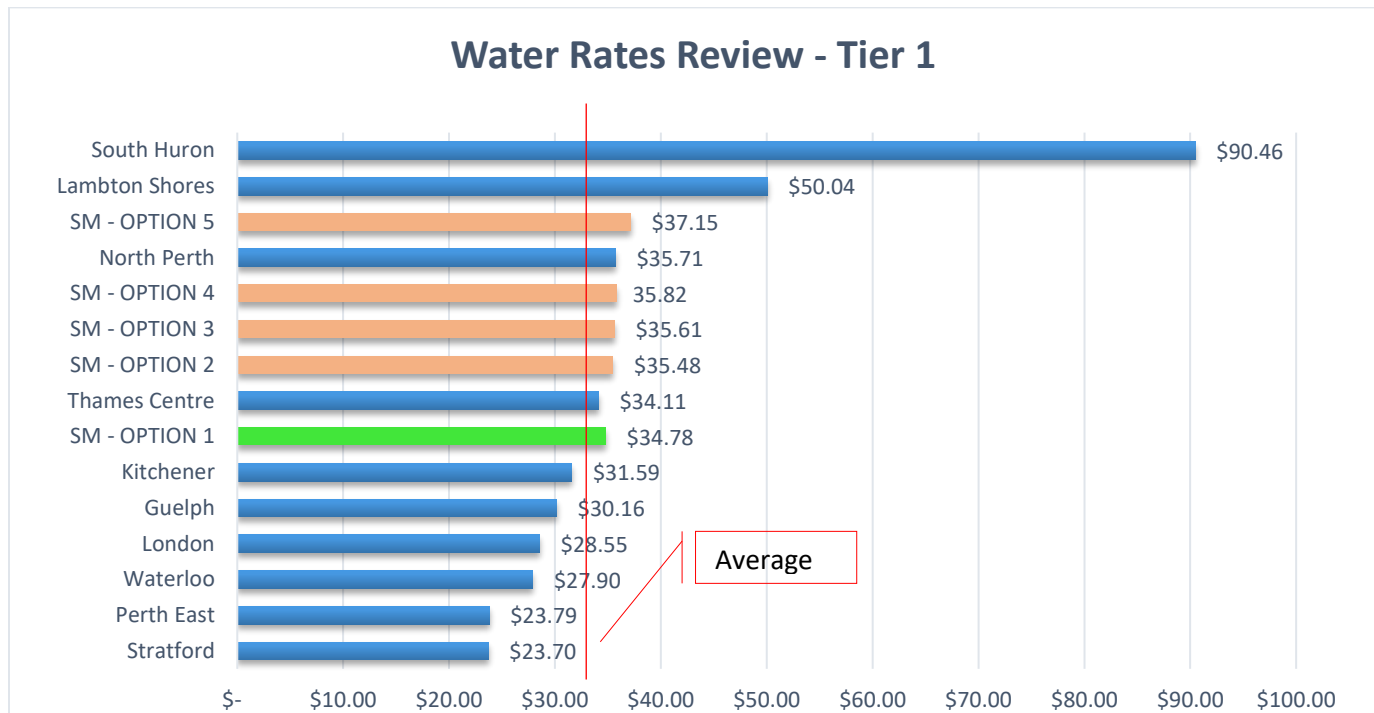
IMPACTS TO USERS - WATER AND WASTEWATER RATE EVALUATION

THE CORPORATION OF THE TOWN OF ST. MARYS - PUBLIC WORKS DEPARTMENT, ENVIRONMENTAL SERVICES

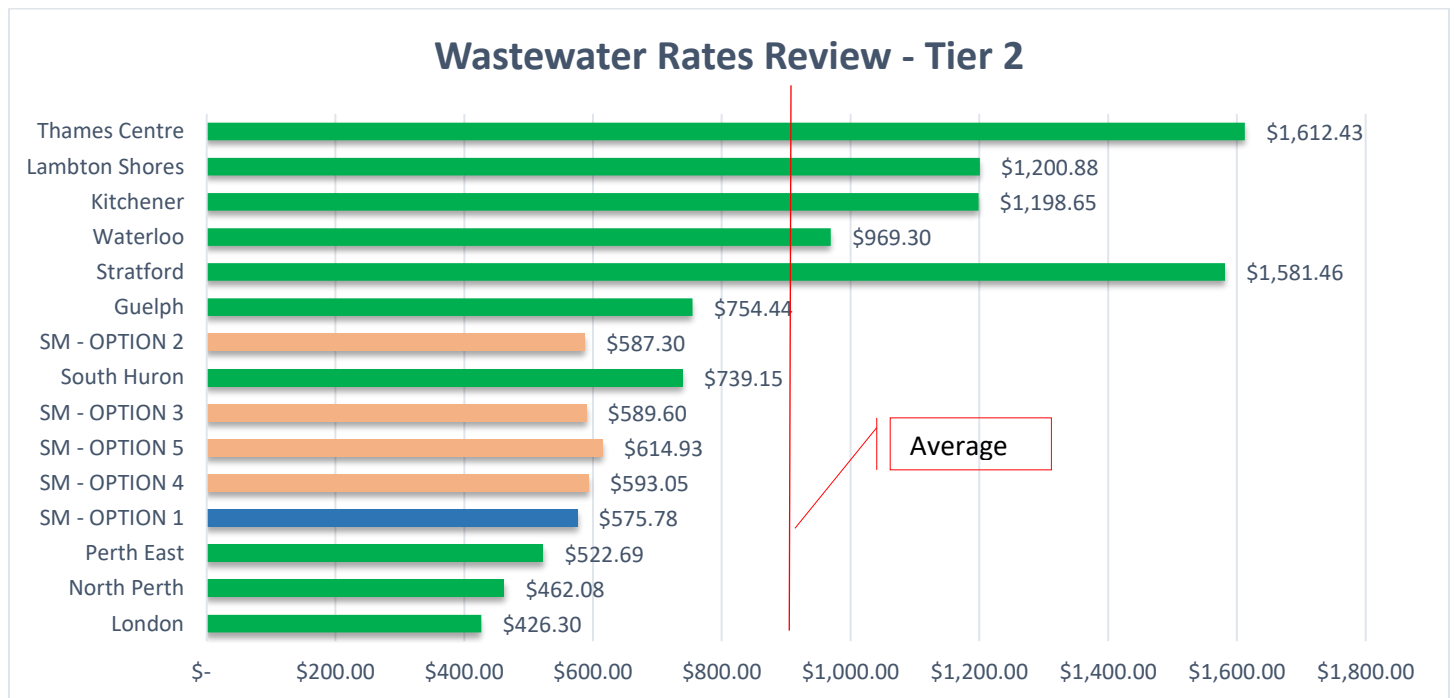
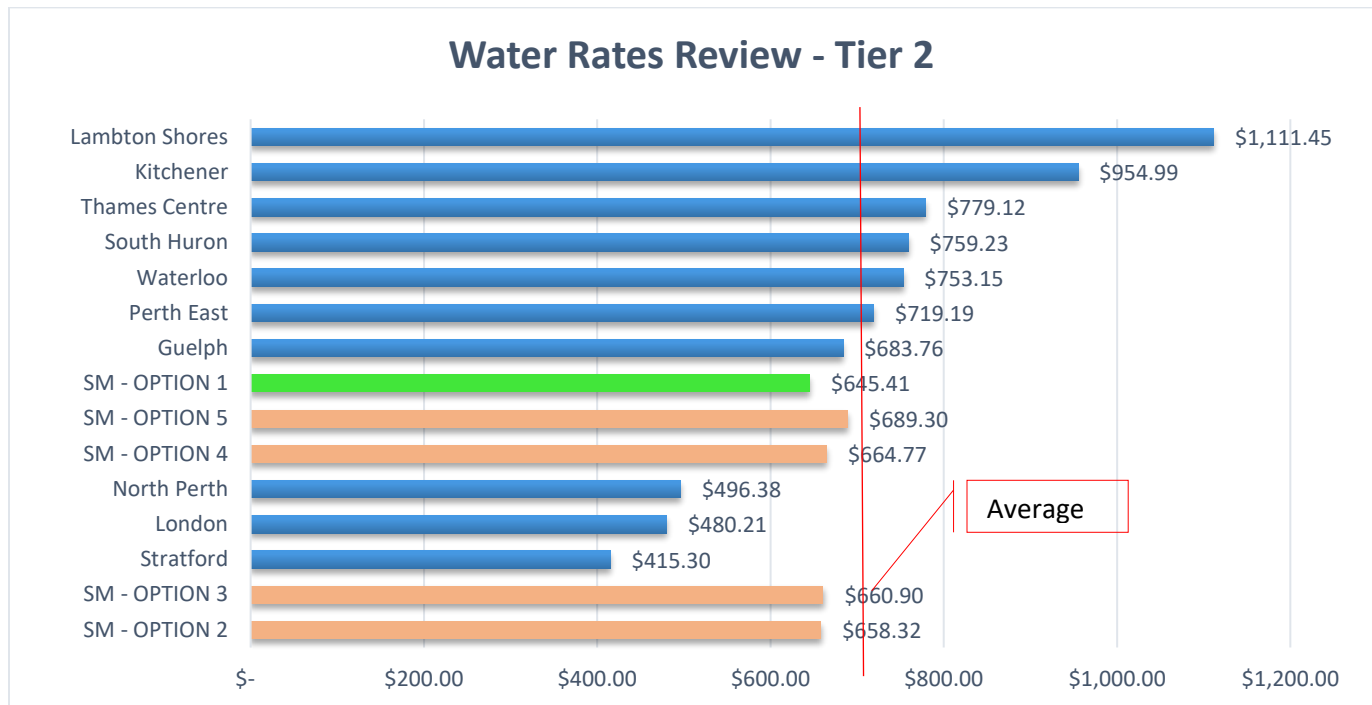
			Water System Options Based on Tiers															
			Tier 1					Tier 2					Tier 3					
			0.0%	2.0%	2.4%	3.0%	6.8%	0.0%	2.0%	2.4%	3.0%	6.8%	0.0%	2.0%	2.4%	3.0%	6.8%	
Wastewater System Options Based on Tiers	Tier 1	0.0%	\$ -	\$ -	\$ 0.70	\$ 0.83	\$ 1.04	\$ 2.37	\$ -	\$ 12.91	\$ 15.49	\$ 19.36	\$ 43.89	\$ -	\$ 41.41	\$ 49.69	\$ 62.11	\$ 140.78
		2.0%	\$ 0.73	\$ 0.73	\$ 1.43	\$ 1.56	\$ 1.77	\$ 3.10										
		2.4%	\$ 0.87	\$ 0.87	\$ 1.57	\$ 1.70	\$ 1.91	\$ 3.24										
		3.0%	\$ 1.09	\$ 1.09	\$ 1.79	\$ 1.92	\$ 2.13	\$ 3.46										
		6.8%	\$ 2.47	\$ 2.47	\$ 3.17	\$ 3.30	\$ 3.51	\$ 4.84										
		0.0%	\$ -						\$ -	\$ 12.91	\$ 15.49	\$ 19.36	\$ 43.89					
	Tier 2	2.0%	\$ 11.52						\$ 11.52	\$ 24.43	\$ 27.01	\$ 30.88	\$ 55.41					
		2.4%	\$ 13.82						\$ 13.82	\$ 26.73	\$ 29.31	\$ 33.18	\$ 57.71					
		3.0%	\$ 17.27						\$ 17.27	\$ 30.18	\$ 32.76	\$ 36.63	\$ 61.16					
		6.8%	\$ 39.15						\$ 39.15	\$ 52.06	\$ 54.64	\$ 58.51	\$ 83.04					
		0.0%	\$ -											\$ -	\$ 41.41	\$ 49.69	\$ 62.11	\$ 140.78
	Tier 3	2.0%	\$ 48.85											\$ 48.85	\$ 90.26	\$ 98.54	\$ 110.96	\$ 189.63
		2.4%	\$ 58.61											\$ 58.61	\$ 100.02	\$ 108.30	\$ 120.72	\$ 199.39
		3.0%	\$ 73.27											\$ 73.27	\$ 114.68	\$ 122.96	\$ 135.38	\$ 214.05
		6.8%	\$ 166.08											\$ 166.08	\$ 207.49	\$ 215.77	\$ 228.19	\$ 306.86

Notes:

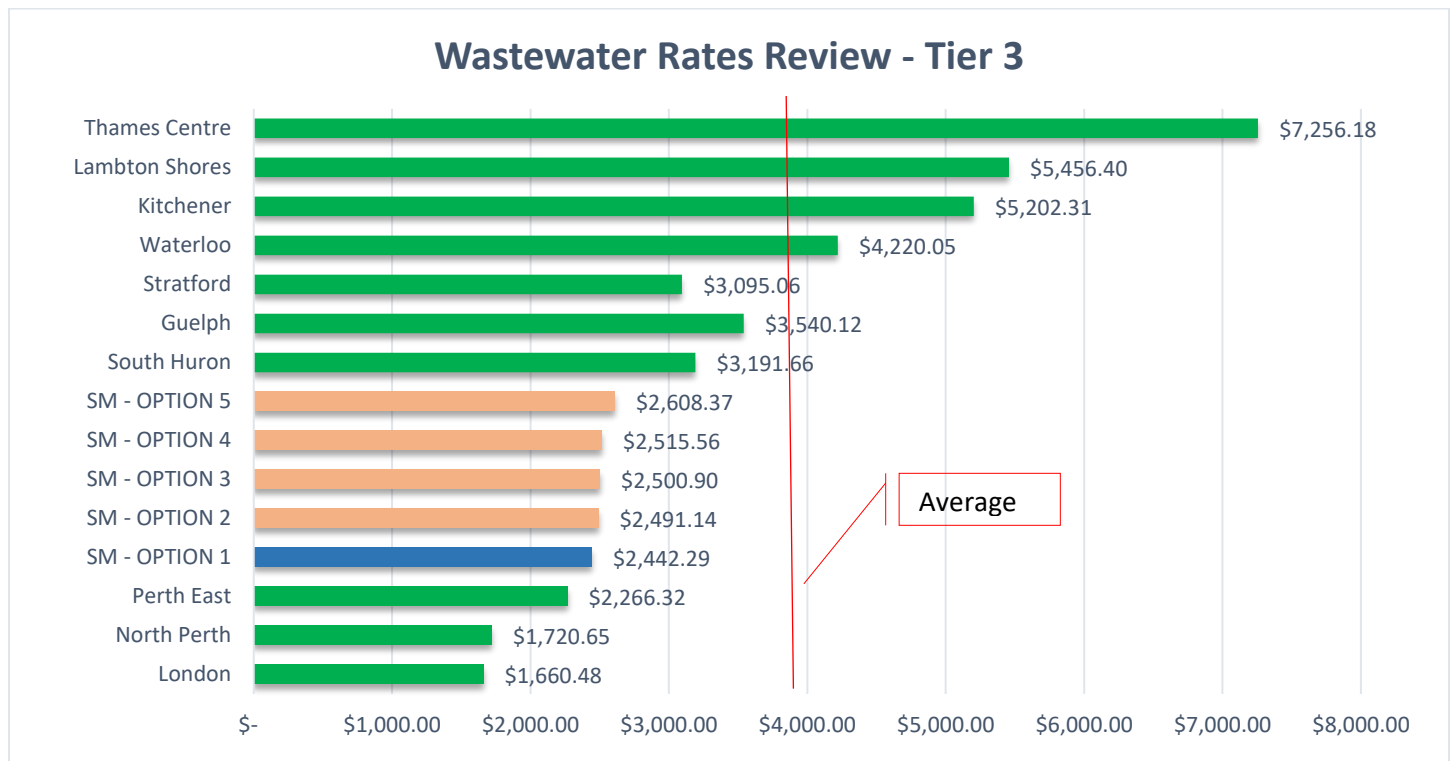
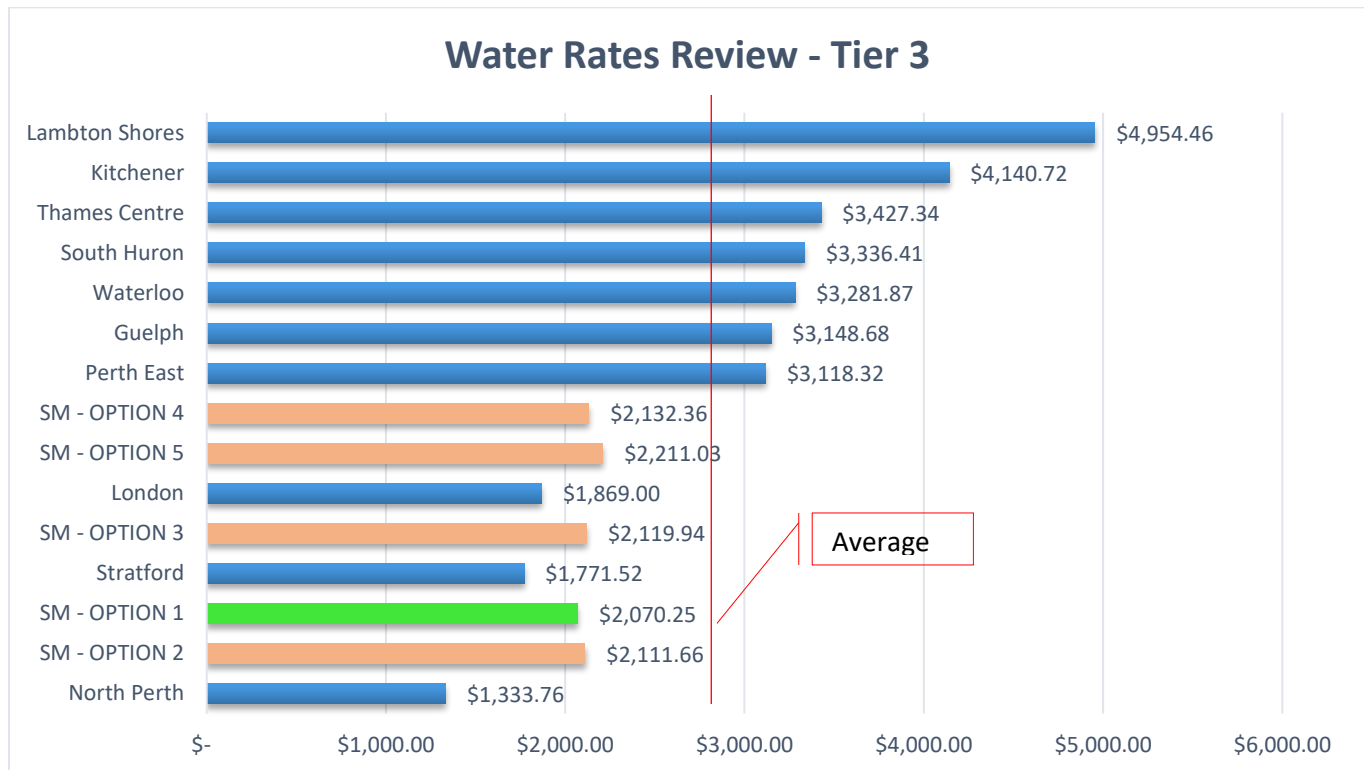
- 1 Financial impacts to users details herein represents the per system and overall cost which would be incurred by an average user in each tier per month



Tier 1 comparisons based on monthly usage of 13 cubic metres per month.



Tier II comparisons based on monthly usage of 393 cubic metres per month.



Tier III comparisons based on monthly usage of 1704 cubic metres per month.



FORMAL REPORT

To:	Chair Stratthdee and Members of Strategic Priorities Committee
Prepared by:	Dave Blake, Environmental Services Supervisor
Date of Meeting:	17 September 2019
Subject:	PW 56-2019 Water and Sewer Policies

PURPOSE

This Report presents the Strategic Priorities Committee with information related to proposed Water and Sewer policies for discussion. The Committee is asked to consider the policies as presented for discussion and provide direction to staff to advance the policy development.

RECOMMENDATION

THAT Report PW 56-2019, Water and Sewer Policies be received for discussion; and

THAT the Strategic Priorities Committee recommends to Council:

THAT Council adopt the amended Water and Sewer policies regarding “Frozen Water Service”, “Sewer Blockage” and “Water Repair and Restoration”.

BACKGROUND

In October 2014, Council approved By-Law 46-2014 which governs water, wastewater and stormwater within the Town of St. Marys. The by-law was a comprehensive review of all systems and significantly enhanced the direction, guidance and requirements moving forward in the Town.

Over the years since the by-law was enacted, persistent issues or concerns have been identified where policy direction is recommended to better provide staff and the general public with information on processes, practices, etc.

This report provides the Committee with three (3) draft policies for review and discussion.

REPORT

Over the last several years, several ongoing issues or concerns have been identified by Staff where policy guidance would be preferred.

Frozen Water Service Policy:

Originally adopted several years ago, several years of cold weather through the winter months have identified a need to enhance the existing Frozen Water Service Policy. The policy as presented provides some enhanced guidance to staff with regards to dealing with frozen water services, payment for service restoration and dealing with difficult locations.

Attachment No. 1 presents the draft Frozen Water Service Policy for discussion.

Sewer Blockage Policy:

The St. Marys sewer system is relatively young. With the majority of the system having been installed in the early 1970's, many sewer issues have not been encountered. However, as the system ages,

build-ups can accumulate and increased number of issues can be expected. The draft policy is built off of the current best practices administered by the Town but would also help provide guidance to staff and the general public on matters related to maintenance of services, invoice payments, etc.

Attachment No. 2 presents the draft Sewer Blockage Policy for discussion.

Water Repair and Restoration Policy:

Every year, the Town of St. Marys will repair between 10 and 15 utility services where property damage can be encountered. Emergency repairs can result in damage completed to driveways, landscaping, etc. The majority of times, Staff are able to provide an acceptable solution to property owners to repair any damage created. However sometimes, expectations or efforts are not deemed sufficient, and unpleasant confrontations can be encountered by Staff. This policy has been drafted to provide Staff and the general public a clear understanding of the expectations and requirements around utility repairs and restorations.

Attachment No. 3 presents the draft Water Repair and Restoration Policy for discussion.

FINANCIAL IMPLICATIONS

None at this time.

The policies presented are currently best practice followed by Town Staff. Their subsequent approval and implementation would provide Staff with clear policy direction to better navigate applicable situations in the future.

SUMMARY

The purpose of this report has been to present draft policies to the Strategic Priorities Committee to review and discuss regarding water and wastewater services and repairs.

To move this file forward, Staff requires the Committee to consider the draft policies presented within this report and provide direction on policy adoption, if any.

Staff recommends that the Committee make recommendations to answer the following questions:

1. Is the Frozen Water Service Policy acceptable as presented.
 - a. If no, what modifications or changes would the Committee recommend
2. Is the Sewer Blockage Policy acceptable as presented.
 - a. If no, what modifications or changes would the Committee recommend
3. Is the Water Repair and Restoration Policy acceptable as presented
 - a. If no, what modifications or changes would the Committee recommend

Based on the information presented herein, and the attached draft policies, Staff recommend that the policies be recommended for approval to provide not only Staff, but the general public with clarity and direction related to these matters moving forward.

STRATEGIC PLAN

☒ Not applicable to this report.

OTHERS CONSULTED

Jed Kelly, Director of Public Works – Town of St. Marys

Renee Hornick, Senior Operations Manager – Ontario Clean Water Agency

ATTACHMENTS

Attachment No. 1 – Frozen Water Services Policy (DRAFT)

Attachment No. 2 – Sewer Blockage Policy (DRAFT)

Attachment No. 3 – Water Repair and Restoration Policy (DRAFT)

REVIEWED BY

Recommended by the Department

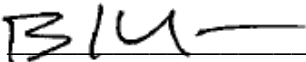


Dave Blake, C.E.T.
Environmental Services Supervisor



Jed Kelly
Director of Public Works

Recommended by the CAO



Brent Kittmer
CAO / Clerk

Sewer Blockage Policy

[ENVIRONMENTAL SERVICES, A DIVISION OF PUBLIC WORKS]

Policy Statement

The Town of St. Marys is committed to providing safe and reliable sewer services to its customers and is responsible for the operation, maintenance and repair of the sewer collection system(s) under its operating authority, which includes all municipally owned sanitary and stormwater service piping.

The Town of St. Marys shall take reasonable steps as detailed within this policy to restore service and property as a result of necessary utility repairs.

The property owner shall be responsible for the maintenance and repair of the sewer service(s) and property located on their private property including any external clean out.

The external clean out, generally located on private property is in place primarily for the benefit of the property.

Scope

This policy applies to properties within the Town of St. Marys in the event that a utility sewer blockage was experienced, and / or a sewer service repair was necessary.

Purpose

The purpose of this policy is to identify the responsibilities for the distribution of costs and repairs between the Town of St. Marys and property owners when a sewer utility service blockage is experienced, and / or a repair was required.

Definition and Description

A sewer service (sanitary or storm) is defined as the piping connecting a property or building to a municipal sewer main. A typical sewer service consists of municipally owned piping and privately owned piping. The pipe from the sewer main to the property line is owned by the Town of St. Marys. All piping located on private property is owned by the property owner. For further clarity, any external sewer clean out which is typically located just on private property is considered part of the private plumbing system.

Responsibilities

If a sewer blockage has occurred, a licensed plumber shall be retained by the property owner to investigate the matter, and restore services to the property. The Town of St. Marys or their designate shall assess responsibility for the costs. This determination shall be by completing a camera inspection of the service to confirm where the blockage was experienced, and if there are any underlying issues that may have caused the blockage. During the camera inspection, once the blockage or defect has been identified, if any, the location of the blockage/defect shall be located by the camera operator to determine responsibility in relation to public or private property.

Should a blockage be determined to be the responsibility of the property owner, the property owner shall be fully responsible for retaining the services of a licensed plumber to facilitate the repairs, as required. The property owner shall also be fully responsible for restoration related to the repair (i.e. driveways, landscaping, etc.). Furthermore, the property owner shall be responsible for the cost of the camera inspection, to be invoiced by the Town.

Should the blockage be determined to be the responsibility of the Town, the Town or their designate shall be responsible for completing the repairs as required. For clarity, the Town shall also be responsible for restoration of property damaged as a result of the repair.

Restoration shall be completed to return the property to its pre-repair condition. The Town shall replace damaged portions only and property owners shall not be entitled to full surface feature replacements such as driveways or landscaping. For further clarity regarding restoration, refer to the Water Repair and Restoration Policy.

Furthermore, should the blockage be determined to be the Town's responsibility, the Town shall retain the cost of the camera inspection. In the event that the issue is determined to be in close proximity to the public / private divide, and an accurate determination cannot be made regarding responsibility, a cost sharing agreement shall be entered into between the Town and the property owner whereas each party shall be responsible for their respective share, as determined by the Town.

If the sewer service is suspected or determined to be blocked by roots, the source of the roots shall be investigated by the Town.

If it is established that the roots are most likely from a town owned tree (i.e. boulevard tree), the Town will pay the plumber's most recent invoice for root cutting in the service up to a maximum of \$250.00. Furthermore, the Town will assume responsibility for the root cutting in the sewer service on an ongoing basis moving forward.

If the service plugs from roots twice (2 times) in any 12 month period, the boulevard tree shall be removed at the Town's expense.

If the roots are established to be from a tree other than a boulevard tree, the property owner shall be fully responsible for the clearing of the service.

If the roots could be from either a town owned tree or a private tree, but a determination cannot be established, the Town will take responsibility for the service and;

- a) Pay 50% of the plumber's most recent invoice for root cutting, up to a maximum of \$125.00.
- b) Assume responsibility for the root cutting in the sewer service moving forward and shall invoice the property owner 50% of the cost;
- c) If the service plugs from roots twice (2 times) in any 12 month period following the initial issue, the boulevard tree shall be removed at the Town's expense;
- d) After removal of the boulevard tree, the property owner shall be fully responsible for the cleaning of the service.

Notwithstanding all of the above, should the Town decide, at its sole discretion, that it wishes to retain the boulevard tree, the Town can set up a frequent root cutting program to make sure that the service remains open.

In the event that a structural issue is identified during a camera inspection (i.e. offset pipe, pipe back fall, etc.) and the defect spans the public / private divide, a cost sharing Agreement shall be entered between the Town and the property owner for each party's representative share of the repairs and / or restoration. Notwithstanding the above, should the Town decide, at its sole discretion, that it wishes to defer repairs, the Town can set up a frequent maintenance program to ensure that the service remains open.

Communication

To lessen the impact of service disruptions during utility emergencies, it is important that customers have access to timely and reliable information that describes how they can protect their properties. The Town of St. Marys will develop and maintain a proactive communications plan that will include a public education component. Communications will include personal approaches and be integrated across multiple online and offline channels.

References

1. Town of St. Marys Water Supply By-Law, 46 of 2014

Approval

This Policy was approved on.

Water Repair and Restoration Policy

[ENVIRONMENTAL SERVICES, A DIVISION OF PUBLIC WORKS]

Policy Statement

The Town of St. Marys is committed to providing safe and reliable drinking water to its customers and is responsible for the operation, maintenance and repair of the drinking water system under its operating authority, which includes all municipally owned water service piping and shut off valves.

The Town of St. Marys shall take reasonable steps as detailed within this policy to restore service and property as a result of necessary utility repairs.

The property owner shall be responsible for the maintenance and repair of the drinking water services and property located on private property including the water shut off inside the home or building.

The curb stop generally located at the property line is in place primarily for the benefit of the property.

Scope

This policy applies to properties within the Town of St. Marys in the event that a necessary utility service repair was required.

Purpose

The purpose of this policy is to identify the responsibilities for the distribution of costs and repairs between the Town of St. Marys and property owners when a necessary utility service repair was required.

Definition and Description

A water service is defined as the piping connecting a property or building to a municipal water main. A typical water service consists of a municipally owned piping and privately owned piping. The pipe from the watermain connection to the property line is owned by the Town of St. Marys. The service shut off valve (curb stop) which is typically located at the property line is considered part of the municipally owned piping. All piping located on private property, excepting the municipally owned water meter, is owned by the property owner.

Responsibilities

If a utility repair has been determined to be necessary (i.e. due to a water leak), the Town of St. Marys or their designate shall assess responsibility for the leak. This determination shall be completed by operating the curb stop (property line valve). If the flow of water stops, it shall be assumed that the leak is located on the private side of the connection and shall be the property owner's responsibility. If the leak continues, it shall be assumed that the leak is located on public property, and shall be the responsibility of the Town.

Should a leak be determined to be the responsibility of the property owner, the property owner shall be fully responsible for retaining the services of a licensed plumber to facilitate the repairs, as required.

The property owner shall also be fully responsible for restoration related to the repair (i.e. driveways, landscaping, etc.)

Should the leak be determined to be the responsibility of the Town, the Town or their designate shall be responsible for completing the repairs as required. For clarity, the Town shall also be responsible for restoration of property damaged as a result of the repair.

Restoration shall be completed to return the property to its pre-repair condition. The Town shall replace damaged portions only and property owners shall not be entitled to full surface feature replacements such as driveways or landscaping. For further clarity regarding restoration, please refer to Table 1:

Table 1:

Feature for Restoration	Required Restoration
Gravel Driveway	Replace gravel removed with new gravel, pack and level
Asphalt Driveway	Saw cut asphalt driveway to square up restoration location Install asphalt driveway patch
Concrete Driveway	Saw cut along existing expansion joints in driveway. Remove and replace any damaged panels. Minor spalling of concrete shall not be considered damaged for means of replacement. Finish to match existing.
Stamped Concrete Driveway Or coloured driveway	Saw cut along existing expansion joints in driveway. Remove and replace any damaged panels. Minor spalling of concrete shall not be considered damaged for means of replacement. Town shall make efforts to match finished driveway, but shall not be required to replace more than damaged sections.
Landscaping (i.e. grass, gardens, etc.)	Replacement activities to be coordinated with property owner on level of restoration required. As a minimum, topsoil shall be replaced, leveled, graded and grass seed applied.

Communication

To lessen the impact of service disruptions during utility emergencies, it is important that customers have access to timely and reliable information that describes how they can protect their properties. The Town of St. Marys will develop and maintain a proactive communications plan that will include a public education component. Communications will include personal approaches and be integrated across multiple online and offline channels.

References

1. Town of St. Marys Water Supply By-Law, 46 of 2014

Approval

This Policy was approved on September 24, 2019.

DRAFT

Frozen Water Service Policy

[ENVIRONMENTAL SERVICES, A DIVISION OF PUBLIC WORKS]

Policy Statement

The Town of St. Marys is committed to providing safe and reliable drinking water to its customers and is responsible for the operation, maintenance and repair of the drinking water system under its operating authority, which includes all municipally owned water service piping and shut off valves within the municipal right-of-way under normal and frozen service conditions.

The Town of St. Marys shall take reasonable steps as detailed within this policy to restore the supply of water interrupted as a result of freezing as quickly as possible.

The property owner shall be responsible for the maintenance and repair of the drinking water services located on their property including the water shut off inside the home or building under both normal and abnormal conditions, including frozen water service conditions.

The service shut off valve (curb stop) is generally installed at property line for the sole benefit of the property.

Scope

This policy applies to properties within the Town of St. Marys in the event of a frozen water service.

Purpose

The purpose of this policy is to describe the general processes and responsibilities for the restoration of drinking water supply to properties where that supply has been interrupted as a result of the water service pipe freezing and to prevent future occurrences at properties previously affected.

This policy also describes the responsibilities of the Town of St. Marys, Drinking Water system Operating Authority, and property owners under normal conditions and under abnormal conditions such as frozen water services.

Definition and Description

A water service is defined as the piping connecting a property or building to a municipal water main. A typical water service consists of a municipally owned piping and privately owned piping (*Section 3.3.1 and 3.3.2 of By-Law 46 of 2014*). The pipe from the watermain connection to the property line is owned by the Town of St. Marys. The service shut off valve (curb stop) which is typically located at the property line is considered part of the municipally owned piping. All piping located on private property, excepting the municipally owned water meter, is owned by the property owner.

Responsibilities

When water services are determined to have frozen on private property, the property owner will be responsible for all costs associated with the thawing or temporary connection. When water services are determined to have frozen on municipal property, the Town will be responsible for the costs

associated with thawing the municipal service line. The Town will not be responsible for any costs incurred by the homeowner to investigate a frozen service line on the private side of the connection.

In order for a property owner to have services provided by the Town, such as thawing services, or temporary connections, the property owner must notify the Town or Operating Authority regarding a potential frozen service. The Operating Authority shall investigate and determine course of action.

The Town of St. Marys maintains a list of all property addresses that have a history of water lines freezing in previous years (since 2013). The Town, or their designate will send a notice to each of these property owners, when the possibility of frozen services is anticipated. The notice will advise the property owner to run a constant stream of cold water from a single tap in the building. The stream of water is to be approximately the size of a pencil (0.5 cm in diameter). It is the property owner's responsibility to ensure that the running water is done in accordance with the guidelines set out in the notice. The Town of St. Marys assumes no responsibility for damages caused as a result of the running water.

All residents who will be leaving their properties vacant for the winter months are advised to have their water services temporarily shut off by the Operating Authority and pay the applicable fees as detailed in By-Law 46 of 2014, Schedule A. Any resident who will be leaving their properties vacant for an extended period of time during the winter months are advised to have someone check in on the house daily during cold weather in case of frozen water services.

When property owners are advised through a notice from the Town, or their designate, to run their cold water tap to avoid freezing, they will be billed based on an estimate (base rate plus estimated consumption) based on prior consumption history for the property. If the property owner does not receive a letter from the Manager of Water and Wastewater, or their designate, but decides on their own to let the water run to prevent freezing, they will be responsible for all consumption during that time period. The Town will adjust consumption usage during this time up to a maximum of 200 cubic meters over a billing cycle (one month). Usage over and above 200 cubic metres will be the responsibility of the property owner.

If the Operating Authority, or the Town has advised a property owner to let their water run and the property owner chooses not to do so, the property owner will be responsible for covering all costs incurred should the water service freeze, even if the frozen section occurs in pipes that are on municipal property (as defined herein). See Table 1 for cost allocations.

If deemed practical by the Operating Authority, or the Town, attempts may be made to thaw the frozen pipes as quickly as possible. Thawing attempts will be done in the order which the calls were received, however priority will be given to schools, daycares, health care facilities, residents that have special needs and properties that cannot be hooked to a temporary connection.

Residents whom attempt to thaw frozen pipes on their own or hire a licensed plumber to attempt to thaw frozen pipes, and who do not notify or wait for the Town to attempt to thaw frozen pipes or provide a solution, will be responsible for all associated costs even if the frozen pipe is found on municipal property.

The Town is not responsible for any damages resulting from pipe thawing attempts by individuals or their contractors. The Town is also not responsible for returning property (which needed to be disturbed for thawing practices) back to normal, or any damages suffered due to delays in thawing water pipes when that work is completed by an individual or their contractor.

If the Operating Authority and / or a licensed plumber retained by the Town are unable to thaw the frozen water pipes, or if thawing attempts are deemed impractical, the Town shall arrange for the installation of a temporary connection from the neighbouring property.

In the event that a neighbouring property is unwilling to allow a temporary connection to supply water to a property experiencing a frozen water service, the Town or their designate shall investigate alternative sources for temporary supply. If an assessment of alternative sources is unable to produce another viable option as determined by the Town, the Town reserves the right to connect to any neighbouring property to restore water to a property affected by a frozen water service.

When a temporary connection is installed to continue to provide water during a frozen water service event, both parties (property with frozen service and neighbouring supply property) will be billed based on an estimate of water usage based on prior historical consumption for each property. Property owners will see an adjustment on the actual bill.

All temporary connections must continually run to prevent freezing. If services were provided by the Town to temporarily restore water supply and that temporary connection freezes, the property owner will be responsible for all costs incurred to restore a temporary service to the property. See Table 1 for cost allocations.

The Operating Authority will take a water meter reading from both parties before installing a temporary connection and when uninstalling a temporary connection in order to ensure a more accurate estimate and adjustment.

When water pipes are frozen, sanitary sewer charges shall be calculated in accordance to by-law 46 of 2014. The cubic metre rate shall be based on the adjusted amount to be billed for water consumption.

Property owners whom receive notification from the Town, or their designate to run a constant stream of water will also be notified when they should stop running their water once the risk of frozen water services is no longer anticipated.

The Town may in certain circumstances recommend all residents on the municipal water system to run their tap according to this policy and every attempt will be made to contact the residents through social media, Town website, etc. Similar notice would be given once residents could discontinue running their taps.

Communication

To lessen the impact of service disruptions during utility emergencies, it is important that customers have access to timely and reliable information that describes how they can protect their properties.

The Town of St. Marys will develop and maintain a proactive communications plan that will include a public education component. Communications will include personal approaches and be integrated across multiple online and offline channels.

References

1. Town of St. Marys Water Supply By-Law, 46 of 2014

Approval

This Policy was approved on **September 24, 2019**.

Table 1 – Cost Allocations

First Occurrence / Not on Frozen Service List	Responsibility / Payment
Plumber thaws internal / private piping / service	Property Owner
Plumber thaws public service	Town of St. Marys
Plumber changes internal plumbing to facilitate thaw attempt	Property Owner
Town thaws external service	Town of St. Marys
Excavation at curb-stop to thaw service outside of building: Curb stop to Building	Property Owner – 50% Town of St. Marys – 50%
Temporary Connection – Sub Feeding from neighbouring source	Town of St. Marys No Charge to recipient No Charge to Supplier, credit applied to bill for usage
Frozen water meter	Property Owner
Second Occurrence / Received Run Water Notice	Responsibility / Payment
Plumber thaws internal piping / service	Property Owner
Plumber thaws external service	Property Owner
Plumber changes internal plumbing to facilitate thaw attempt	Property Owner
Town thaws external service	Property Owner
Excavation at curb-stop to thaw service outside of building: Curb stop to Building	Property Owner
Temporary Connection – Sub Feeding from neighbouring source	Property Owner No Charge to Supplier, credit applied to bill for usage
Frozen water meter	Property Owner
Temporary Service Connection Freezes	Responsibility / Payment
Plumber disconnects and thaws temporary supply piping	Property Owner



FORMAL REPORT

To: Chair Stratthdee and Members of Strategic Priorities Committee

Prepared by: Dave Blake, Environmental Services Supervisor

Date of Meeting: 17 September 2019

Subject: **PW 52-2019 Waste Management Services and Fees By-law Review**

PURPOSE

This report presents information to the Strategic Priorities Committee for review and discussion in regards to Solid Waste Management services and fees. The Committee is asked to consider the service options presented for discussion as well as direct staff on preferred funding options.

RECOMMENDATION

THAT Report PW 52-2019, Waste Management Services and Fees By-law Review be received for discussion; and

THAT the Committee recommends to Council:

THAT a Mattress and Box Spring program be incorporated into the by-law update with the program to be self-funded through per unit charges; and,

THAT At Home Diversion Initiatives be supported by Council with inclusion of an annual budget allotment of \$5,000.00; and,

THAT Waste dumping restrictions at the Site within 30-minutes of site closure and on Saturdays be incorporated into the proposed waste management by-law; and,

THAT Waste Diversion Initiatives such as Recycling, Leaf and Yard Waste and At Home Diversion initiatives be incorporated into a self-funded Waste Management System to be funded through Wheelie Bin fees and landfill site operations.

BACKGROUND

The Town of St. Marys has a long history of providing waste management services through a variety of programs aimed at giving residents and businesses options for various waste materials.

In the late 1990's and early 2000's, the Towns waste management services evolved to begin to incorporate numerous waste diversion programs into normal operation as a way to divert material from final disposal at the landfill, ultimately extending the life of the landfill. Currently, the Town administers the following programs related to waste reduction and diversion:

- Automated curbside collection
- Municipal Hazardous and Special Waste Depot
- Leaf and Yard Waste Collection and Depot
- Scrap Metal Recycling
- Blue box recycling
- Electronic Waste
- Concrete and Asphalt Recycling
- Wood and Brush grinding

In 2018, Town staff completed a “Waste Reduction and Diversion Assessment” related to the town’s waste management services. The Assessment not only looked at existing programs offered by the Town, but also potential programs which could be offered by the Town. Throughout 2019, Town staff have been discussing waste reduction initiatives with the “Green Committee” as a way to assess the merit of some of the potential programs identified in the assessment as well as a review and revision to the Towns Waste Management By-law. In order to update the by-law, and assess waste management fees, staff is looking for direction on the following initiatives and funding options

Refer to Attachment No. 1 for complete summaries on the above programs.

REPORT

The following programs and funding options are presented to the Committee for discussion:

Mattresses and Box Springs:

On June 19, 2019, Staff presented the Green Committee with a report for consideration in regards to mattresses and box springs and a potential diversion program. This program was identified in the Waste Reduction and Diversion Assessment presented to Council on September 11, 2018. Material tracking in early 2019 identified that an average of 2.62 units per day are received at the St. Marys Landfill Site and that a mattress and box spring diversion program has merit at the site. Through initial discussions on a potential program, it was identified that to administer a mattress and box spring diversion program it could cost up to \$15,000.00 annually, for incorporating storage, transportation and processing of the material. Through this, the Green Committee recommended that a program be further investigated, with consideration to the program being a free service to residents.

Based on the above, Staff requests the Strategic Priorities Committee discuss and provide direction in regards to a potential mattress and box spring diversion program for inclusion in the proposed by-law, as well as direction in regards to potential program funding. Staff have presented the following options for discussion:

1. Should a Mattress and Box Spring Program be incorporated into the updated By-law for implementation at the Landfill?
2. If yes, how should the program be funded?
 - a. Free – No charge to residents to drop off mattress or box springs. Program fees to be incorporated into either the landfill site operations, or into wheelie bin fees.
 - b. Partial user pay system - a fee per unit is charged to residents to drop off material at the landfill site under the program but does not cover entire program costs. Remaining balance would be funded through either landfill site operations or wheelie bin fees. (fee estimated to be \$10-15 per item).
 - c. Full user pay system – a fee per unit is charged to residents to drop off material at the landfill site under the program. Cost per unit would cover annual program operations. (fee estimated to be \$20-25 per item).

Staff recommends that any potential mattress and box spring diversion program at the St. Marys landfill site should be a self-funded program (full user pay system). Annual operating costs for such a program are significant and would also require initial start-up costs. Unit fees of \$20-25 per item would also be consistent with many area diversion locations, and align with average costing across the province for this type of service. Currently, this type of material is disposed within the landfill where the minimum site charge of \$10.00 would apply.

See below “Waste Management Fees and Funding Options” for additional funding details.

At Home Diversion Incentives:

Backyard composting is a cost-effective tool for waste diversion, but typically results in a smaller percentage of overall diversion. This is attributed to difficulty in getting public involvement and portions of the organics stream which cannot be composted in such a manner for instance, dairy, meats, fish, etc.

According to Ontario Regulation 101/94, a local municipality that has a population of at least 5, 000 shall establish, operate and maintain a leaf and yard waste system. That system must include:

- a) The provision of home composters to residents by the municipality at cost or less;
- b) The provision of information to residents;
 - Publicizing the availability of home composters;
 - Explaining the proper installation and use of home composters and the use of compost; and,
 - Encouraging home composting.

In circa 2008, the Town in association with BRA, distributed backyard digesters to residents. This partnership turned out to be largely successful, so much so that the original 100 composters were sold out within 30 minutes. The Town funded approximately 50% of the cost of the digester.

The Green Cone is an at-home composting system which offers an alternative means of disposing of organic kitchen waste to Anaerobic Digestion (AD) and In-Vessel Composting (IVC). The advantage to the Green Cone over traditional techniques is that it takes all types of food waste (meat, dairy, bones, vegetables and even animal feces). Essentially, it allows residents to take everything from the kitchen table and dump it directly in. Advantages to this system are that it does not need to be turned or emptied more than once every few years. In addition, as an enclosed system, it does not attract vermin or other animals.

An example of a diversion initiative could be the sourcing, funding and delivery of green cone digesters as a way to promote at home diversion programs.

For example, the following budget allotments depict digester units which could be distributed to residents on an annual basis:

Annual Budget Allotment:	\$2,500.00	\$5,000.00	\$7,500.00
Units per year:	18	37	55

Staff is seeking direction from the Committee on the following in regards to at home diversion initiatives:

1. Should the by-law, and to a further extent the fees identify, source and fund diversion initiative in the Town such as backyard digesters?
2. If yes, how should the program be funded
 - a. Program allotment incorporated into the landfill operating budget
 - b. Program allotment incorporated into general tax levy
 - c. Program allotment incorporated into wheelie bin fees (see below for more details)

See below “Waste Management Fees and Funding Options” for additional funding details.

Staff recommends that an annual allotment for at home diversion initiatives be considered in the amount of \$5,000.00 annually to be funded through wheelie bin fees.

Dumping Restrictions in By-law:

One routine concern that has continually been identified over the last several years is late dumping of material in the cell at the landfill. In order to maintain the site in accordance with the Environmental Compliance Approval (ECA), the active filling area of the site must be closed and maintained by the end of each operational day. Challenges arise when either large haulers or contractors arrive at the site right before the site closes to dispose of material. Often times, this occurs after the on-site operator has closed the active area for the day. This results in additional fuel, labour and volume utilization loss due to cover applications at the site.

Staff would ask that the Committee discuss and provide direction on whether the revised by-law should restrict dumping at the site within 30 minutes of closing and on Saturdays when activity in the filling area is generally not undertaken.

For discussion purposes, the following have been drafted for by-law consideration:

“...Small loads of waste carried by light trucks, cars and trailers will be accepted during the posted operational hours at the Site.

Loads of waste entering the Site which are carried by packers, luggers, cube vans, dump trucks or trailers or roll off trucks shall not be accepted within 30 minutes of the Sites closure. Furthermore, loads entering the Site by these means shall not be accepted at the Site on Saturdays without the prior approval of the Site’s Supervisor...”

Staff recommends that the above restrictions be incorporated into the revised Waste Management By-law to enhance Site operations and efficiencies.

Waste Management Fees and Program Funding:

The landfill site has historically been subsidized by the municipal tax base. It wasn’t until more recently that the landfill operation was thought of more as a self-funded program where revenue generation could be used to fully support and maintain operations and capital investments at the site. The installation of the scale in 2012 allowed the site to improve its material tracking and revenue generation. This was further enhanced in 2017 when the most recent rate increase on tipping fees was administered to ensure a self-funded program. However, the wheelie bin fees for waste collection services, which were adopted in 2012 have remained unchanged in the years since the Town converted to the automated collection system with Bluewater Recycling Association.

Currently, waste management services administered by the Town are split between funding sources:

- Curbside waste collection and landfill site operations are self-funded through user fees; and
- Curbside collection and processing of recycling material and the collection of leaf and yard waste material are funded through tax

Assumptions

When developing financial assessments, Town staff made several assumptions related to the waste revenue sources to provide a consistent basis for revenue generation and financial position. The following assumptions were used:

- Waste volume received at the landfill varies significantly from year to year and can be largely influenced by various factors such as flooding, storms, etc. which can cause large increases in materials being received. In an effort to stabilize the tonnage value utilized, a three (3) year average was assumed to determine the projected tonnage received for revenue generation. This same assumption was also applied to collection volumes.

- Due to the significant fluctuations which can be encountered in weight receipt at the landfill, tonnage received at the site does not increase or decrease as part of this assessment, but remains constant from year to year.
- The amount of wheelie bins would be increased annually based on historical housing starts to account for new builds and customers. For the purpose of this assessment, 45 additional units per year were used. Should the Town grow at a greater or slower rate (i.e. 1.5% annual growth), future financial review for waste management would account for those changes.
- The landfill reserve would self-fund the completion of the Environmental Assessment and *Environmental Protection Act* and *Ontario Water Resources Act* approvals and future cell development.
- The landfill expansion initial capital works to develop the site to accommodate the expansion (Costing to be determined) would be a one-time tax funded development due to the economic benefits that a landfill facility provides to the Town.
- Tipping Fees per tonne have been rounded to the nearest \$0.25 based on percentage increases.

The following options have been presented for discussion:

Option 1 – No Additional Diversion initiatives (Do Nothing):

This option is presented as the Do-Nothing approach. In this option, site programs and operations, funding sources and fees would remain unchanged from the current structure. Waste collection and landfill operations would continue to be user pay, fully self-funded departments with recycling and leaf and yard waste programs continuing to be funded by the municipal tax levy. No additional diversion initiatives would be administered.

The wheelie bin program would continue to generate a surplus of approximately \$60,000.00 annually, which is currently used to assist in funding other tax funded Town programs and the landfill site and operations would continue to be a self-funded department.

Taxes would continue to fund approximately \$220,000.00 annually for recycling and yard waste programs.

Based on current programs and site operations as well as fees, Staff recommend that Option 1 not be supported at this time.

Option 2 – Incorporate New Diversion Initiatives to be funded through Tax

In this option, any new diversion initiatives (i.e. Mattress and box spring recycling or at home diversion initiatives) would be funded through tax. No increase to current waste management fees would be applied.

The Mattress and Box Spring program is estimated to increase annual funding requirements by up to \$15,000.00 and the at home diversion initiative would increase funding requirements based on the annual allotment, if any (i.e. \$5,00.00).

Given the current uncertainty regarding larger town funding sources and the unknown implications associated with potential provincial funding cuts, if any, Staff recommends that any new diversion initiatives not be tax funded at this time, and that alternative funding options be considered.

Option 3 – Incorporate New Diversion Initiatives to be funded through Landfill Site Operations

In this option, any new diversion initiatives (i.e. Mattress and box spring recycling or at home diversion initiatives) would be funded through landfill site operations. Increases to existing landfill rates (i.e. tipping fees) would be required to cover ongoing program costs.

The Mattress and Box Spring program is estimated to increase annual funding requirements by up to \$15,000.00 and the at home diversion initiative would increase funding requirements based on the annual allotment, if any (i.e. \$5,000.00).

The majority of revenue from the landfill site is generated from large haulers depositing Industrial, Commercial and Institutional waste, whereas those locations are not eligible for many of the diversion programs offered through the Town. As such, staff recommends that any new diversion program(s) not be incorporated into ongoing landfill site operations and that alternative funding options be considered.

Option 4: New Diversion Initiatives to be funded through User Fees

In this option, any new diversion initiatives (i.e. Mattress and box spring recycling or at home diversion initiatives) would be funded through user fees or rates. Specific rates would be applied for each initiative to fund the program implementation and administration.

The Mattress and Box Spring program is estimated to increase annual funding requirements by up to \$15,000.00 and the at home diversion initiative would increase funding requirements based on the annual allotment, if any (i.e. \$5,000.00).

During the first 4 months of 2019, the landfill site was open a total of 69 days and received a total of 181 units (mattresses and box springs). This equates to an average of 2.62 units per day of operation. Additionally, in discussions with leaders in the mattress recycling industry, it was noted that a communities annual generation rate is its population divided by 12. Based on unit counts from the landfill, and equation for estimation, the St. Marys landfill could expect up to 600 units per year for diversion. As such, a fully funded user fee program would be approximately \$20-\$25 per item (i.e. \$20-\$25 per mattress and \$20-\$25 per box spring).

Any budget allotment for at home diversion initiatives would be applied to the existing wheelie bin program with bin fees adjusted accordingly. See Option No. 5 below for additional information.

Across the Town, many properties have the ability to generate mattresses or box springs such as residential buildings, large apartment buildings, hospitals, nursing homes, etc. however may not be part of the Town's wheelie bin program. This could be the result of properties using container services from large haulers, etc. For this reason, it is Staff's recommendation that if a mattress and box spring diversion program be implemented, that the program be fully funded through user fees for material drop off at the landfill.

Option 5 – Creation of a Collection and Diversion Self-Funded program

In this option, staff have assessed the option of moving existing waste management services off of the tax base and into a self-funded program similar to the way in which the water and sewer systems are administered for the Town.

Currently, curbside waste collection and landfill operations operate as self-funded programs with recycling and leaf and yard waste collection continuing to be tax funded. This option looks at rebranding the current wheelie bin fee as a "Waste Collection and Diversion" charge and increasing the existing fee per bin size to self-fund the programs as well as new diversion initiatives that may be adopted.

With this option, approximately \$220,000.00 in annual operating costs for recycling and leaf and yard waste would be removed from being tax funded. The existing surplus from the current wheelie bin fees would be applied strictly to waste management services, and the increase to the current user fee would be applied to cover the additional diversion (recycling, and leaf and yard waste) costs as well as any new diversion initiatives which may be adopted. With all waste management services being funded under one department and funding stream, landfill revenue can also be utilized as a revenue source to fund some of the diversion initiatives as a means of cost control on user fees.

Based on an initial assessment the following changes could be proposed to the “Wheelie Bin” fee:

Program	Annual Operating Cost (\$)	Wheelie Bin Fee Impact (\$)		
Waste Collection	\$228,078.00	\$84	\$132	\$198
Recycling	\$182,303.00	+\$62.66		
Leaf & Yard Waste	\$43,637.00	+\$15.00		
At Home Diversion ¹	\$5,000.00	+\$1.72		
Mattress & Box Spring Diversion ¹	\$15,000.00	+\$5.15		
Wheelie Bin Surplus:	\$58,326.00	-\$20.00		
Sub-Total:		\$149	\$197	\$263
Landfill Reserve Contribution ² :		-\$31.00		
Wheelie Bin Fees (Proposed):		\$115	\$165	\$229

Note:

1. Programs under consideration
2. Landfill Reserve contribution based on maintaining suitable reserve funds

Any program balances would help to establish a waste management reserve for future programs, initiatives and capital requirements.

Please refer to Attachment No. 2 which shows an area comparison of “wheelie bin” fees.

Based on the above, Staff recommends that existing diversion programs be incorporated into a self-funded model where wheelie bin fees would cover the curbside collection of waste, recycling and leaf and yard waste as well as other Town administered waste diversion initiatives moving forward. Tipping fees at the landfill site would continue to fund site operations with any balance helping to establish a waste management reserve fund.

FINANCIAL IMPLICATIONS

There are financial implications related to any new diversion initiative to administer and operate the program. Additionally, any new funding structure(s) can also impact residents of the Town. Depending on which option(s) is recommended for adoption, will have an impact on both the operations of the Towns Waste Management Services as well as customers whom utilize those services.

Based on Staff recommendations, the following financial implications would be incurred:

1. Cost of \$20-\$25 per unit for mattress and box spring for customers depositing such material at the landfill
2. Increase of approximately \$31 per year (\$2.58/month) per waste bin in wheelie bin fees as a result of a self-funded Collection and Diversion program.

SUMMARY

The purpose of this report has been to present information for the Strategic Priority Committee to review and discuss regarding waste reduction and diversion initiatives, and potential funding options. Several options have been presented to facilitate discussion for the Committee.

To move this file forward, Staff recommends that the Committee make recommendations to Council to answer the following questions:

1. Does a mattress and box spring diversion program have merit at the St. Marys Landfill Site?

2. If yes, should the program be free, partial user pay or full user pay and how should that funding be recovered?
3. Should At Home Diversion initiatives be incorporated into the by-law update?
4. If yes, what funding commitment should be applied to the program on an annual basis and how should that funding be recovered?
5. Should dumping restrictions be put in place at the St. Marys landfill site to improve site operations and compliance?
6. Does the Committee agree with the Staff recommendation to the creation of a Collection and Diversion Self-Funded program (Option 5)?
7. If yes, what programs or initiatives should be included in the self-funded program

STRATEGIC PLAN

This initiative is supported by the following priorities, outcomes, and tactics in the Plan.

- Pillar #1 – Infrastructure, Waste Management Plan:
 - Outcome: With anticipated proactive measures for growth (residential, commercial, and industrial), there will be a need for active consideration of optimizing landfill services, but with a view on controlled costs and forward thinking environmental initiatives.
 - Tactic(s): Decide on what approaches best meet long-term community ability to meet provincial standards. Build a program and identify a budget to accommodate.
- Pillar #5 – Economic Development, Industrial Strategy:
 - Outcome: Industry has played, and continues to play a key role in the life of the Town in providing employment and economic stability. Seeking new opportunities to attract small, medium and large industry is in the Town's best interest as part of its growth strategy.
 - Tactic(s): Build a retention plan, identify elements needed to ensure business stay and grow in the community.

OTHERS CONSULTED

Jed Kelly, Director of Public Works – Town of St. Marys

André Morin, Director of Finance – Town of St. Marys

Morgan Dykstra, Public Works Coordinator – Town of St. Marys

ATTACHMENTS

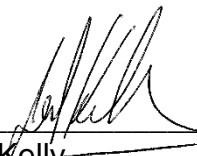
Attachment No. 1 – Waste Reduction and Diversion Assessment, 2018

Attachment No. 2 – Wheelie Bin Fee Comparison

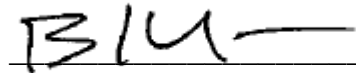
REVIEWED BY

Recommended by the Department


 Dave Blake, C.E.T.
 Environmental Services Supervisor


 Jed Kelly
 Director of Public Works

Recommended by the CAO

A handwritten signature in black ink, appearing to read "BK" followed by a horizontal line.

Brent Kittmer
CAO / Clerk

THE CORPORATION OF THE TOWN OF ST. MARYS WASTE REDUCTION & DIVERSION ASSESSMENT

AUGUST 2018



The Corporation of the Town of St. Marys
Public Works Department

August 2018



Disclaimer

This Waste Reduction and Diversion Assessment for the Town of St. Marys has been prepared by the Environmental Services Supervisor and has been reviewed and approved by the Director of Public Works. This document provides an overview of the current waste streams within the Town of St. Marys and identifies potential initiatives for advanced diversion and the impacts additional programs may have on the Town. Information presented within this report is understood to be factual and correct and Town staff shall not be held liable for inaccurate or improper data relied upon herein.

This report has been prepared in support of the Environmental Assessment for Future Solid Waste Management Needs within the Town of St. Marys as per the Terms of Reference Approval from the Ministry of Environment and Climate Change.

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Tables

Table 1 – Annual Volumetric Fill Rates for the St. Marys Landfill Site

Table 2 – Historical Waste Reduction and Diversion Rates

Appendices

Appendix A – Existing Waste Reduction and Diversion Programs

Appendix A1 – Residential Curbside Collection Program

Appendix A2 – Blue Box Recycling Program

Appendix A3 – Municipal Hazardous & Special Waste Collection

Appendix A4 – Electronic Waste

Appendix A5 – Leaf and Yard Waste Collection

Appendix A6 – Concrete and Asphalt Crushing

Appendix A7 – Scrap Metal Recycling

Appendix A8 – Wood and Brush Grinding

Appendix B – Potential Waste Reduction and Diversion programs

Appendix B1 – Food and Organics Collection

Appendix B2 – Cigarette Waste Recycling

Appendix B3 – Asphalt Shingles Recycling Program

Appendix B4 – Mattress and Box Spring Diversion

Appendix B5 – Landfill Optimization

Appendix B6 – Backyard Composting Initiatives

Appendix B7 – Textile Recycling

Appendix B8 – Industrial, Commercial & Institutional Diversion

1.0 Introduction

In most Canadian municipalities, the number one challenge is how to do more with less. Departments and Agencies must contend with increasingly tight budgets, yet still strive to deliver frontline programs and services to growing populations (The Corporation of the Town of St. Marys, 2011).

The following assessment was completed with the Resource Recovery and Circular Economy Act, 2016 in mind, which establishes the outcomes-based producer responsibility regime. In establishing waste reduction and diversion initiatives based on the Resource Recovery and Circular Economy Act, 2016, the Town will be better positioned to consider end-of-life materials as resources rather than waste, resulting in fewer raw materials being used and working to maximize the life expectancy of the landfill site. In addition to the Resource Recovery and Circular Economy Act, 2016 is the Waste Diversion Transition Act, 2016, which will facilitate a seamless transition from the current waste diversion programs to the new producer responsibility framework.

Certain steps are encouraged in order to achieve and maintain a zero-waste economy. By the year 2020, it is anticipated to begin transition of existing programs such as the e-waste recycling and Blue Box program. Development as well as implementation of the Food and Organic Waste Action Plan and 3Rs Regulations are also projected to commence during this time period. By 2050, the Circular Economy targets an 80% diversion rate while building towards a zero-waste economy. This coincides with the Town's current plans and strategy for Future Solid Waste Disposal Needs with the anticipated expansion of the existing landfill site into the 2050's.

As the Town positions itself for a long term waste disposal solution, the ability to divert and reduce the volume of waste destined for final disposal will be vital. This assessment looks at the current waste reduction and diversion programs administered by the Town, as well as investigating programs which may be considered to improve waste reduction and diversion as strategies administered from the Provincial Government come to fruition.

2.0 Background

The St. Marys Landfill Site opened in December 1984 and was designed to be constructed and filled in three phases, referred to as Phases I, II and III. Each phase of the original design was to be separated by an earth berm, and each disposal area was anticipated in 1982 to provide approximately 15 to 20 years of landfilling capacity for the Town of St. Marys, depending on population growth rates (Design and Operation Report, Phase II/III, St. Marys Landfill Site, St. Marys, Ontario, Ref. No. 0645(9) prepared by Conestoga Rovers & Associates dated November 1992).

Phase I was designed for a maximum volumetric capacity of 104,000 cubic metres, including daily cover. Phase II/III required the design to be re-assessed and upgraded due to new environmental standards at the time and resulted in a total combined volumetric capacity of 276,000 cubic metres with 140,000 cubic metres for Phase II and 136,000 cubic metres for Phase III. Phase II/III was designed to be developed in eight (8) stages, with each stage supplying approximately 1.5 to 3 years of landfilling capacity. This estimation was based on utilizing a fill rate seen in Phase I of 15,000 cubic metres per year. The design of Phase II/III had an estimated life projection of only 18.5 years.

Phase I of the Site filled up significantly quicker than originally projected, and was full by late 1992, which represented a fill life cycle half that which was originally projected. As a result of the fill rates observed in Phase I, as well as the requirement to re-assess and upgrade the design of Phase II/III, Phase II/III was given a fill life cycle of 18.5 years in 1992 and was projected to close in circa 2011.

As the environmental movement took effect in the late 1990's and early 2000's, the Town of St. Marys evolved its waste management system to begin to incorporate numerous waste diversion programs into normal operation as a way to divert material from final disposal at the landfill, thus extending the life of the landfill site. Currently, the Town administers the following programs related to waste reduction and diversion:

- Automated Curbside Collection
- Municipal Hazardous and Special Waste Depot
- Leaf and Yard Waste Collection
- Scrap Metal Recycling
- Blue Box Recycling
- Electronic Waste
- Concrete and Asphalt Recycling
- Wood and Brush Grinding

Please refer to Appendices A1-A8 for specific details regarding each of the above noted Reduction or Diversion Program, as well as near, mid and long term initiatives for improving waste diversion.

3.0 Waste Disposal Rates

As stated in Section 2.0, the St. Marys landfill site opened in the winter of 1984. Initial estimates were that each Phase of the site would provide approximately 15-20 years' worth of disposal capacity. Unfortunately, Phase I of the Site filled up much more quickly than originally estimated. The average fill rate experienced for Phase I was 16,000 cubic metres per year and this portion of the Site was closed in late 1992.

Environmental requirements changed between the time that Phase I opened and Phase II/III were to open, and as stated in Section 2.0, the design was required to be reassessed. It was at this time that the design for Phase II/III was set for an annual volumetric fill rate of 15,000 cubic metres per year with a site life projection of 18.5 years. Through the time that Phase II/III was in operation, the Town made significant strides in waste reduction and diversion programs aimed at extending the life of the remaining approved landfill. Between 1992 and 2017, the Town has averaged approximately 12,000 cubic metres per year in disposal for Phase II/III, or approximately 3,000 cubic metres less than the original design estimates for the Site.

In 2017, the Town utilized approximately 13,161 cubic metres of approved landfill space for final disposal of material. Although this is slightly above the average fill rate over the life of these Phases, the Town's population has increased approximately 1,300 individuals, excluding IC&I additions to the waste stream, than that which was originally projected when the Site was designed.

Table 1 details the historical disposal rates experienced at the landfill site for the Town of St. Marys from 1984 through 2017.

4.0 Waste Reduction & Diversion

Waste Reduction and Diversion programs can be found all across the Town of St. Marys, to not only maximize the useful life of existing infrastructure, but while also being mindful of the environment and delivering programs that meet or exceed residential expectations.

Current Waste Reduction and Diversion Programs:

At the current time, the Town administers approximately eight (8) waste reduction and diversion programs consisting of, but not limited to: the Blue Box Program, Leaf and Yard Waste, Municipal Hazardous and Special Waste, etc.

For a complete list of current waste reduction and diversion programs, along with a general program summary, please refer to **Appendix A**.

Over the last three years (2015-2017), the various diversion programs administered by the Town, excluding Concrete and Asphalt recycling, have successfully diverted approximately 5,500 metric tonnes of waste from the landfill site. This equates to a residential diversion rate of approximately 44%.

Please refer to **Table 2** – Historical Waste Reduction & Diversion Rates for a complete summary of program diversion values, and the Towns annual residential diversion rate.

However, there is always the potential to improve existing program, enhance material collection and diversion in an effort to capture as much of the material as possible to reduce the volume that is placed in the landfill for final disposal.

For each program noted in Appendix A, near-term, mid-term and long-term initiatives have been proposed as part of this assessment in an effort to improve existing programs, and maximize waste reduction and diversion.

The following table depicts initiatives which may be found within Appendix A for existing programs and may be found at the bottom of each individual reduction and diversion program summary:

Example - Opportunities for Improved Waste Reduction & Diversion:

<i>Initiatives (Near Term)</i>	<i>Initiatives (Mid Term)</i>	<i>Initiatives (Long Term)</i>
<i>Incentive Programs should be considered to promote at home diversion initiatives such as backyard composters and digesters.</i>	<i>Consideration should be given to standardizing on a single 35 gallon container size for curbside collection. Such a standardization would promote diversion and reduction by limiting the volume of waste which can be disposed through the program.</i>	<i>Consideration should be given to an effective implementation of a Food & Organics Collection Program.</i>
<i>Education and Outreach programs should be developed and implemented to ensure residents are aware of reduction and diversion programs for enhanced utilization.</i>		

It is the intent of this Assessment to propose initiatives which can be considered now, to enhance existing programs, while also being mindful of the future by proposing longer-term initiatives that may be considered as the Town grows, demographics change, new technology emerges or regulatory requirements amended.

Potential Waste Reduction and Diversion Programs:

While the Town has positioned itself well based on the implementation of historical waste reduction and diversion programs, new waste streams, and aftermarket uses continue to be developed, which opens up additional diversion programs for consideration.

As part of this Assessment, an additional Eight (8) waste reduction or diversion programs have been identified for consideration by the Town. Programs for consideration include, but are not limited to: Food and Organics Collection, Asphalt Shingles Recycling, textile recycling and landfill optimization.

For a complete list of potential waste reduction and diversion programs, along with a general program summary, please refer to **Appendix B**.

Similar to Appendix A, for each program noted in Appendix B, near-term, mid-term and long-term initiatives have been proposed as part of this assessment in an effort to facilitate discussions surrounding additional waste reduction and diversion programs, considerations for the Town and aligning initiatives with provincial government goals and strategies, as necessary.

As the Town positions itself for a long-term waste disposal facility via the Environmental Assessment for Future Solid Waste Disposal Needs, it will be the opportune time to consider new, modified or expanded waste diversion programs to position the Town to maximize infrastructure now and into the future. The inclusion of diversion programs into the detailed design of the landfill site will be vital to the success of the programs.

5.0 Implementation

Throughout this assessment, various near-term, mid-term and long-term initiatives were documented as a means for consideration in potentially enhancing diversion programs within the Town of St. Marys. Initiatives should be reviewed and investigated prior to any implementation based on the changing landscape of the Town as well as the implementation of strategies, frameworks and goals from the Provincial Government.

Implementation of any waste reduction and / or diversion program should be duly considered by the Town in collaboration with its Strategic Plan and the six (6) key pillars to ensure the overall outcome of positive net effects that benefit the community as a whole.

Due to the recent transition at a Provincial Level to move towards a waste free Ontario and a circular economy in the waste management sector, the long term fate of diversion programs, as well as potentially new initiatives are largely unknown and limit the ability to predict how initiatives will impact waste management practices within the Town. Initiatives detailed herein should be monitored along with broader provincial initiatives to evaluate the effectiveness of any waste reduction or diversion program. However, with the town currently undertaking an Environmental Assessment for Future Solid Waste Disposal Needs, and the identification of the preferred alternative of Landfill expansion, the Town

will be well positioned to incorporate enhanced diversion programs into the long term planning and design of the St. Marys Landfill Site, pending provincial approval.

6.0 References

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TABLES

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TABLES

Table No.	Description
Table 1	Historical Waste Disposal Rates
Table 2	Waste Diversion Numbers

Table 1

HISTORICAL FINAL WASTE DISPOSAL RATES FOR THE ST. MARYS LANDFILL SITE

Waste Management System - 1984 Through 2017

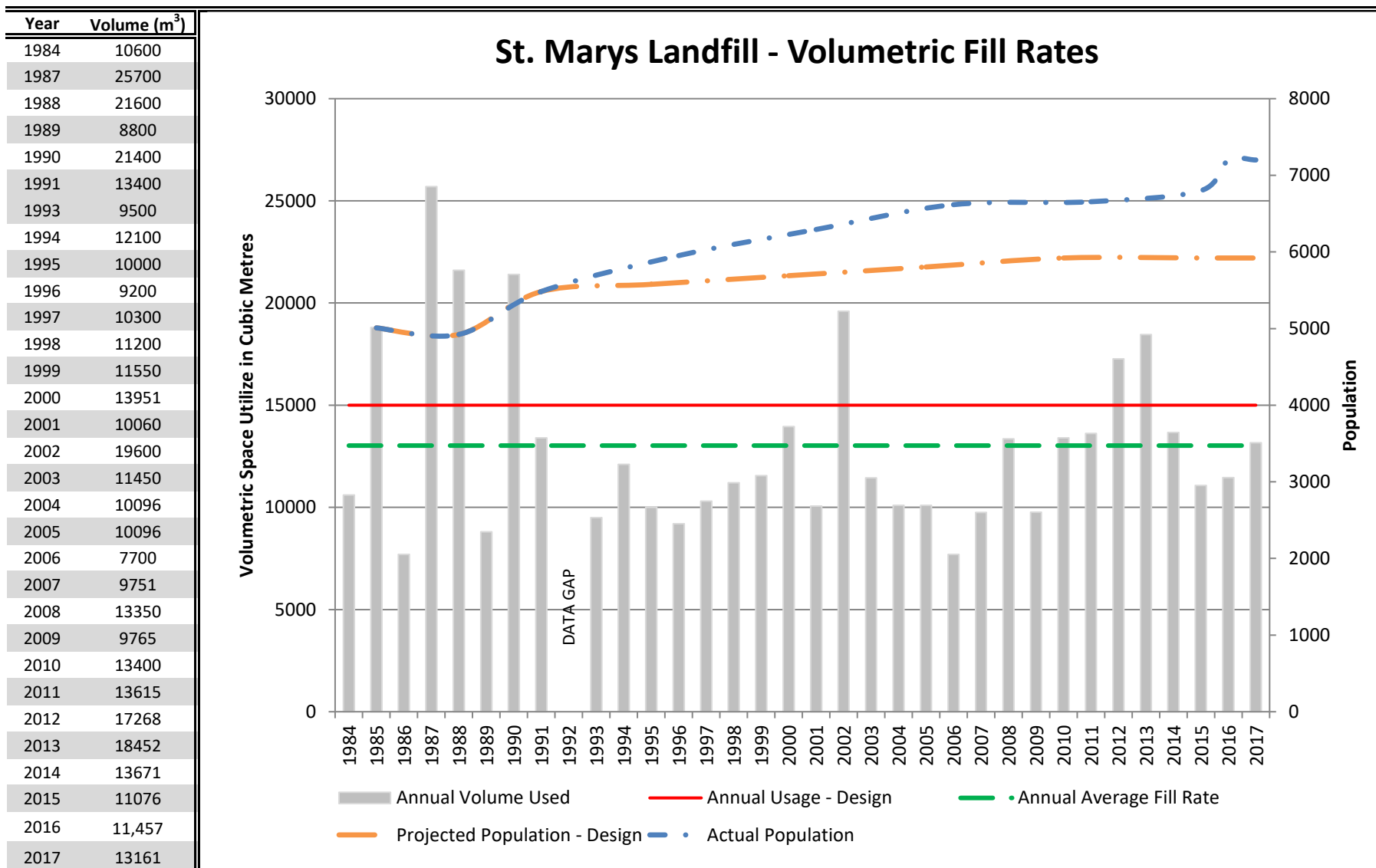


Table 2

HISTORICAL WASTE REDUCTION & DIVERSION RATES

Waste Management System - 2010 through 2017

Page 1 of 1

Material Category	Annual Weight							
	2010 (Tonnes)	2011 (Tonnes)	2012 (Tonnes)	2013 (Tonnes)	2014 (Tonnes)	2015 (Tonnes)	2016 (Tonnes)	2017 (Tonnes)
Curbside Collection - Landfill Disposal	1260	1268	1273	1475	1589.15	1374.8	1290.1	1309.41
Mars Environmental Curbside Collection	NA	NA	NA	212.58	287.55	339.51	421.35	441.7
Public Drop-off - Landfill Disposal	358	360	365	375	388.68	409	376.32	400
Curbside Collection - Blue Box Recycling	884	995.41	1095	1074	1078	1070	1049	1063
Brush Material	380	178	178	178	86.45	196	370.86	69.94
Wood Waste	NA	NA	NA	NA	79.31	85	188.61	114.51
Scrap Metals	NA	NA	NA	NA	6.63	4.29	4.53	1.95
Leaf & Yard Waste	611	419	294.7	229	374.71	444	390.08	400.55
MHSW Materials	12	4	4	2.04	2.47	6.05	9.21	3.71
Batteries	NA	0.5	0.5	0.512	0.407	N/A	N/A	N/A
Electronic Waste	24	20.49	14.16	9.2	9.8	38.54*	5.17	21.65
Total Residential Waste	3529	3245.4	3224.36	3555.332	3903.157	3928.65	4105.23	3826.42
Curbside Collection - Landfill Disposal (exclu. Public Drop-off)	1260	1268	1273	1687.58	1876.7	1714.31	1711.45	1751.11
Total Diverted Waste	1911	1617.4	1586.36	1492.752	1637.777	1805.34	2017.46	1675.31
Diversion Rate	54%	50%	49%	42%	42%	46%	49%	44%

Notes:

NA Not Applicable

Data estimated due to lack of reliable weights

Diverted waste reported above represented residential waste diversion only. IC&I excluded

* 7.88 Tonnes collected at landfill site, 30.66 tonnes collected at PRC site.

APPENDIX **A**

Existing Waste Reduction and Diversion Program

Appendix No.	Waste Reduction & Diversion Program
Appendix A1	Residential Curbside Collection Program
Appendix A2	Blue Box Recycling Program
Appendix A3	Municipal Hazardous & Special Waste Collection
Appendix A4	Electronic Waste
Appendix A5	Leaf and Yard Waste Collection
Appendix A6	Concrete and Asphalt Crushing
Appendix A7	Scrap Metal Recycling
Appendix A8	Wood and Brush Grinding

APPENDIX **A-1**

Residential Curbside Collection Program

The Town of St. Marys provides all single family residential homes with weekly curbside collection of refuse (garbage). Refuse is subject to non-collectable waste provisions set out in the Town's By-Law No. 71-2012 which includes various items which are not permitted within the curbside collection program such as but not limited to auto parts, white goods, tires and household hazardous waste.

The curbside collection program within the Town is administered by the Bluewater Recycling Association whom utilizes an automated collection system for waste placement and collection. Through the Association, qualifying properties can select from three (3) container sizes to suit their needs. The three sizes for selection are 35, 65 and 95 gallon containers. An annual fee is paid by the resident based on the size of container selected.

As part of the waste collection program, the Town imposes mandatory recycling, and will not accept refuse for curbside pick-up, or at the landfill which contained more than 5% recyclable material, which is defined as any material which the Town accepts in the curbside recycling program.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
<p>Incentive Programs should be considered to promote at home diversion initiatives such as backyard composters and digesters.</p> <p>Education and Outreach programs should be developed and implemented to ensure residents are aware of reduction and diversion programs for enhanced utilization.</p>	<p>Consideration should be given to standardizing on a single container size for curbside collection. Such a standardization could promote diversion and reduction by limiting the volume of waste which can be disposed through the program.</p>	<p>Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario as well as consideration to "Ontario's Food and Organic Waste Framework".</p> <p>Consideration should be given to a Food and Organics Collection program through municipal partnerships or as local third party facilities materialize.</p>

APPENDIX A-2

Blue Box Recycling Program

Prior to October of 2008, the Town of St. Marys recycling program consisted of a dual stream system in which residents were required to sort recyclables in a single blue box. Recycling was collected weekly by Bluewater Recycling Association (BRA).

In 2008, the Town in conjunction with BRA implemented an automated, single stream collection program for recyclables. Curbside collection now occurs on a bi-weekly basis, year-round, for a total of 26 recycling collection days. Residents typically use a 95 gallon container / wheelie-bin to set out their recycling. Residents are not allowed to place overflowing carts at the curbside. Material that will not fit into the carts can be taken to a recycling depot or held onto until the next collection day.

Industrial, Commercial and Institutional (IC&I), as well as multi-residential units are provided with large overhead bins placed in central locations. BRA is also tasked, in some instances with the collection of these containers.

In 2016, the Province of Ontario enacted the Resource Recovery and Circular Economy Act which aims to moves recycling responsibility to producers. As various targets and milestones are achieved and / or implemented through the phase in of this Act, it will be important for the Town and our service provider to meet any new requirements which may be adopted.

For additional information related to the automated program from BRA, please visit the following website:

<http://www.bra.org/recycling/>

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
<p>Follow the “Strategy for a Waste Free Ontario” developed by the Province of Ontario which may include goals such as but not limited to:</p> <p>Standardize promotional and educational materials</p> <p><i>[Initiative to be developed and driven by the Ontario Government]</i></p>	<p>Follow the “Strategy for a Waste Free Ontario” developed by the Province of Ontario which may include goals such as but not limited to:</p> <p>Begin designating new materials under producer responsibility regulations.</p> <p><i>[Initiative to be developed and driven by the Ontario Government]</i></p>	<p>Follow the “Strategy for a Waste Free Ontario” developed by the Province of Ontario which may include goals such as but not limited to:</p> <p>Complete transition of Blue Box program to producer responsibility.</p> <p>Continue to designate additional materials under producer responsibility regulations.</p> <p><i>[Initiative to be developed and driven by the Ontario Government]</i></p>

Municipal Hazardous and Special Waste Collection

Household hazardous materials can be dangerous to people as well as the environment. It is because of this, that the Town of St. Marys administers a Municipal Hazardous and Special Waste Depot for residents of the Town of St. Marys as well as the Municipality of Perth South whereas unwanted or unused household products can be safely diverted from landfill and properly disposed and / or recycled.

The depot is operated at the St. Marys Landfill Site during normal operating hours where residents can dispose of this material at no charge. Material, once inspected and received by landfill staff, is then properly sorted into containers for transportation to a suitable recycling, reuse or disposal facility.

Materials accepted under this program are as follows:

Acids	Bleach	Garden Chemicals	Pool Chemicals
Aerosol Cans	Light Bulbs	Household Cleaners	Propane Tanks
Antifreeze	Fertilizers	Motor Oil	Solvents
Bases	Paints / Stains	Pesticides	Batteries

The depot administered by the Town is currently for residential use only and is not designed or permitted for Industrial, Commercial or Institutional (IC&I) utilization. IC&I properties, whom produce specific waste on regular intervals are required to contract and dispose of their waste properly through third party suppliers.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Develop Education and outreach material to better inform residents of the diversion program, which materials are included, which are not and the requirements for acceptance of material, such as containers, labels, etc.	Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario. Program / materials should be reviewed and updated as materials are transitioned or designated to producer responsibility.	Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario. Consideration should be given to implementing disposal bans on materials under existing waste diversion programs.

Electronic Waste

In circa 2005, the Town of St. Marys banned the disposal of electronic equipment (E-waste) from the landfill site. The Town currently has an Agreement with Greentec, located in Stratford, Ontario to provide a collection container, and receive e-waste collected at the landfill.

The E-waste depot is located at the landfill site for residents of the Town of St. Marys where qualifying old, unused or damaged electronic equipment can be safely and properly disposed. The depot is open during normal site operations at no charge to residents.

The program accepts a large variety of materials such as, but not limited to:

Computers, printers, pagers, DVD players, radios, etc. For a complete list of materials accepted under the program, please visit the Towns official website at: <http://www.townofstmarys.com/en/living-here/E-waste.aspx>.

The Town receives revenue from the program based on the value of material collected. This revenue is utilized by the Town to assist in funding waste management initiatives and operations.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Develop Education and outreach material to better inform residents of the diversion program, which materials are included and which are not.	Consideration should be given to expanding access to the E-waste depot to ensure a more convenient experience for program users while being mindful of theft and scavenging which can occur at less secure locations.	Follow the "Strategy for a Waste Free Ontario," developed by the Province of Ontario. Modify program as required based on provincial initiatives.

APPENDIX A-5

Leaf and Yard Waste Collection

In 2001, the Town of St. Marys introduced the yard waste collection program, which provided curbside collection of yard waste from April until November of each year. Residents were required to place collectibles in compostable paper bags, cardboard boxes, reusable containers or bundled stacks. Acceptable items include organic materials such as: yard plants, weeds, hedge and shrub trimmings, tree limbs (10 cm diameter maximum), lawn cuttings, etc.

Food wastes are not currently accepted.

Additionally, leaf and yard waste could be dropped off at the landfill free of charge. Weekly or twice weekly curbside collection was completed by the Town, depending on weekly needs.

In circa 2013, the Town reduced the leaf and yard waste program, limiting the curbside collection to 5 weeks in the spring and 5 weeks in the fall. Residents could still bring material to the landfill site free of charge. In 2014, the Town again made modifications to this program due to strong public opinion on changes implemented the prior year. The program administered in 2014 included 11 collection days, consisting of weekly collection in the spring and fall, and once per month throughout the summer. In addition to this change, the Town also opened a new convenience depot for Leaf and Yard waste material located at the Municipal Operations Centre, located at 408 James Street South where residents could drop-off acceptable material at their convenience.

In 2017, the Town made additional enhancements to the leaf and yard waste program which consisted of bi-weekly collection from May through November. Yard waste is delivered to the landfill and composted in open windrows.

Compost material derived from the materials collected is stockpiled at the Site to assist in site alterations, soil additives for final cover, etc. Material generated from this program is not transported off-site.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Develop Education and outreach material to better inform residents of the diversion program, which materials are included and which are not. Enhance awareness of collection days to improve program utilization.	Consideration should be given to modifying the program on a year-by-year basis to enable curbside collection of materials based on weather. For instance, an early spring means residents are required to dispose of material on their own, or hold onto material until collection starts later in May. Similarly, an early winter means no material for collection days.	Look for partnerships and economies of scale to enable the addition of materials to the program.

Concrete and Asphalt Crushing

In circa 1993, the Town of St. Marys started separating concrete and asphalt materials. The material is crushed, screened and stockpiled to be re-used as gravel for many different municipal projects. In 2009, an estimated 12,000 tonnes of concrete and asphalt was crushed and stockpiled, which represented approximately 8 years' worth of material. In 2014, the Town replenished the stockpile of this material and crushed, screened and separated years' worth of material again.

This program diverts material from household renovations, construction projects and private demolition and allows the Town to secure an economical source of aggregates. There is no cost for residents or contractors to utilize this program.

Materials which are accepted under this program consist of, but not limited to:

Asphalt (rubble, grindings, millings), bricks and paving stones, concrete, gravel, etc.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Develop Education and outreach material to better inform residents and contractors of the diversion program, which materials are included and which are not.	--	--

Scrap Metal Recycling

The Town of St. Marys has a couple of different scrap metal diversion programs within the Town. Scrap metal can be dropped off at the landfill site, free of charge where it is taken to a recycling facility. Since 2014, the Town has diverted approximately 17.5 tonnes of scrap metal from the landfill through this drop-off depot.

In addition to this program, the volunteer fire department for the Town has undertaken a “spring clean-up” which allows residents to place refuse to the curb for collection. All scrap metal is collected separately by the volunteers and recycled accordingly. In 2010, it is estimated that approximately 13 tonnes of scrap metal was collected and diverted through this program (The Corporation of the Town of St. Marys, 2011).

The Scrap metal drop off depot, as well as the volunteer firefighters collection events allows the Town to properly separate and dispose of scrap metal which is easily diverted from landfill.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Develop Education and outreach material to better inform residents and contractors of the diversion program, which materials are included and which are not.	Consideration should be given to collaborations with local scrap metal recovery centres to promote material separation and drop off.	--

Wood and Brush Grinding

The Town of St. Marys currently administered a scrap wood and brush program aimed at reducing the impact that this material has on landfill capacity. Currently, scrap wood and brush are diverted from landfill operations and stockpiled at the landfill site (or Municipal Operations Centre for Brush). Once stockpiled materials warrant, typically once per year, the material is ground into chips and stockpiled at the St. Marys Landfill Site for use as alternative daily cover during winter operations.

The heat emitted by the chipped material prevents freezing throughout the winter, and allows for the mixing with soil to improve the effective daily covering of waste at the landfill site. The application of wood chips as an alternative daily cover is typically administered from November 15th to April 1st of each year, or as weather conditions warrant.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Develop Education and outreach material to better inform residents and contractors of the diversion program, which materials are included and which are not.	Consideration should be given to relocate the brush pile at the MOC. During landfill site designs consideration to allow for expanded access to wood and brush drop-off to consolidate drop-off areas and limit redundancy.	Consideration should be given to alternative cover solutions instead of wood-chips for winter operations to permanently divert material from landfill / landfill operations.

APPENDIX **B**

Potential Waste Reduction and Diversion Programs

Appendix No.	Waste Reduction & Diversion Program
Appendix B1	Food and Organics Collection
Appendix B2	Cigarette Waste Recycling Program
Appendix B3	Asphalt Shingles Recycling Program
Appendix B4	Mattress & Box Spring Program
Appendix B5	Landfill Optimization
Appendix B6	Backyard Composting Initiatives
Appendix B7	Textile Recycling
Appendix B8	IC&I Diversion

APPENDIX B-1

Food and Organic Waste Diversion Program

The Town of St. Marys has many programs aimed at diverting or reducing the volume of waste received at the landfill site for final disposal. However, one program which is not yet implemented, that would have a significant impact on volume utilization and diversion is the use of a Food and Organic Waste diversion program.

Not only does managing resources efficiently benefit the people of our community, it also aids our environment and economy. Ontario's Food and Organic Waste Framework Action Plan relates back on growing a circular economy, outlining commitments constructed by the province in regards to food and organic waste. The Framework states that food and organic waste must be considered a resource rather than a waste.

The Provincial Framework strives towards the achievement of the following objectives; reduce food waste, recover resources from food and organic waste, support resource recovery infrastructure and promote beneficial uses.

The first and most crucial objective is to prevent and scale down the amount of food that becomes waste. The environment, economy and society of the province will benefit greatly from this step, ensuring that edible food does not end up as waste. Education is one key way in cutting down food and organic waste. Other ways to improve the reduction of food and organic waste is by using web-based platforms (such as social media), incorporating waste reduction within schools and supporting research that aims to reduce organic food waste.

Increasing resource recovery of organic food waste will help towards reaching the goals of zero waste and zero greenhouse gas emissions from the waste sector, more specifically from the Industrial, Commercial and Institutional (IC&I) sector. Amending the 3Rs Regulations will help decrease the amount of wastage created by the IC&I sector, which presents some of the best opportunities to increase resource recovery and build a circular economy. Banning food and organic waste from ending up in disposal sites would also improve the recovery of food and organic waste. Management practises are recommended to support effective use of public waste receptacles, going hand-in-hand with the resource recovery of food and organic waste. This would beneficially impact the landfill, treatment sites and transfer stations.

Another way to recognize the economic profits of a circular economy is by turning food and organic wastes into valuable end-products. It is essential for Ontario to possess a sufficient infrastructure with modernized technology to process food and organic waste into valuable resources. Reviewing present resource recovery systems and updating them will help with this. Training for new or refined technology may be required.

Being able to endorse end-products of food and organic waste is just as critical to possessing a sufficient infrastructure with technology. Soil health, crop growth, renewable natural gas, and carbon storage are some of the examples of end-products to promote. The province is to review regulatory approaches to soil amendments as well as encourage the on and off-farm end-use of soil amendments made from recovered organic resources (ex. Compost, Digestate and Biosolids).

APPENDIX B-1

Benefits and Losses

There are multiple benefits towards Ontario's Food and Organic Waste Framework, especially for causes that are long-term. One of the more evident benefits being that the Framework will improve greenhouse gas emissions. In 2015, greenhouse gas emissions which originated from the waste sector accounted for 8.6Mt of carbon dioxide. By carrying out the Framework, greenhouse gas emissions will decrease substantially over the long-term. The Framework will save both consumers and businesses money, while improving access to healthy and fresh food for the province. Food and Organic Waste can be turned into compost or Digestate, which helps better the health of the soil, reduce erosions as well as improve water quality.

Although there are a large number of benefits relating to Ontario's Food and Organic Waste Framework, there are some losses that may arise during the execution phase. Many larger municipalities have implemented Source Separated Organics (SSO) programs as a way to divert food and organic waste from final disposal in landfills. Recycling food waste for compost results in upstream benefits related to the creation of nutrient rich soil supplements, thus reducing the total volume required for final disposal. Unfortunately, SSO programs are extremely costly to administer in smaller communities, however, could have a significant impact on diversion initiatives within the Town. The implementation of an SSO program is not something that could be implemented and administered quickly, however is a program which should be considered in the future for the Town as technologies, general acceptance, and local third party facilities come online.

According to the Food and Organic Waste Policy Statement, municipalities that have a population of over 50,000 and greater than or equal to 300 persons per square kilometre are required to provide a food and organic waste collection. Based on this information, the Town of St. Marys is not required to provide a food and organic waste collection, but does have the option of doing so in the future.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Incentive Programs should be considered to promote at home diversion initiatives such as backyard composters and digesters.	Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario as well as consideration to "Ontario's Food and Organic Waste Framework".	Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario as well as consideration to "Ontario's Food and Organic Waste Framework".
Education and Outreach programs should be developed and implemented to ensure residents are aware of reduction and diversion programs for enhanced utilization.	Assess Town needs and requirements along with regulatory requirements for potential enhancements to the Leaf and Yard Waste Program.	Consideration should be given to a Food and Organics Collection program through municipal partnerships or as local third party facilities materialize.

Cigarette Waste Recycling Program

The Town of St. Marys has been approached about investigating and implementing a Cigarette Waste Recycling program via TerraCycle.

TerraCycle's cigarette program allows participants to administer the recycling of cigarette waste. Excluding the cardboard packaging of the box, the program accepts every portion of the cigarette. This includes the filter, outer plastic, cigar stubs, inner foil, rolling paper and ash.

After collecting the cigarette waste in canisters', it must then be shipped out for recycling. The waste is sent in a sturdy plastic container that should be completely dry. Once collected, cigarettes and packaging are separated by composition. The waste is then melted into hard plastic that can be remodeled to create industrial products such as plastic pallets. Ash and tobacco are separated out and composted in a specialized process.

Through the TerraCycle program, points can also be accumulated and redeemed for a variety of charitable gifts or a payment of \$0.01 per point to a non-profit organization or school. Any shipments over 3lbs will receive \$1.00 per pound of waste while anything lower will amount to \$0.00.

Currently, the Town as well as various merchants have grey pedestals which collect cigarette butts located around Town buildings as well as outside various stores. There is no cost to participate in TerraCycle's cigarette program; however, there is a cost for the receptacles which amounts to \$100.00. In addition, it may prove to be difficult to find locations that are optimal to dispose cigarette waste. Public areas such as municipal buildings, playgrounds, etc. have strict no-smoking policies in place which limit the distance smoking is permitted around areas, or entrances. The placement of a canister near these areas to maximize use may give the impression that smoking is permitted in these locations. In addition to the above, the placement of a canister in an inopportune location would limit the effectiveness of the program, and program utilization.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Consideration should be given to investigating the potential adoption of the Terracycle program. A thorough review of the program as well as review of case studies where the program has been adopted elsewhere should be completed and presented to Council for consideration.	Mid-term and Long-term initiatives to be determined based on completion of program review and recommendation.	Mid-term and Long-term initiatives to be determined based on completion of program review and recommendation.

APPENDIX B-3

Asphalt Shingles Recycling Program

An asphalt shingles recycling program should be considered by the Town of St. Marys as a means to divert material from the landfill and maximize current and future volume within the landfill site. The Town has historically consulted with various other local municipalities whom currently administered an asphalt shingle recycling program as well as industry leaders in shingles recycling to gain a full and complete understanding of how a program may be implemented and administered within the Town of St. Marys.

Unfortunately, shingles have never been tracked separately at the landfill as to provide accurate annual tonnages, but instead were lumped in with Construction & Demolition waste. As a result, accurate material weights / volumes are not currently known for this material stream.

Additionally, the current design and set-up at the St. Marys Landfill Site is not equipped for a shingles diversion program. Based on discussions with area municipalities and industry leaders, there are two types of transfer stations which could be constructed to accommodate such a program. One being an elevated platform, roll-off bin transfer facility and the other being a bunker style transfer facility which would be similar to the current leaf and yard waste transfer facility located at the Municipal Operations Centre. Both transfer station options would require a significant capital investment.

It is also important to note that the current Environmental Compliance Approval (ECA) for the landfill site does not include provisions for an asphalt shingle recycling program to be administered. Currently, the Transfer facility at the landfill site is limited to: electrical and electronic equipment, cardboard, scrap metal and blue box recycling material and is based on the design and operation of the facility as presented within an ECA application circa 2008. For a shingles program to be administered within the Town of St. Marys, an application would need to be made and subsequently, approved by the Ministry of Environment, Conservation and Parks (MECP), and would require updates to the design and operations material previously submitted.

An Asphalt Shingles recycling program should be considered by the Town as a means to increase diversion from the St. Marys landfill site. With the pending completion of the Environmental Assessment for Future Solid Waste Management Needs, and the identified preferred alternative of Landfill Expansion, the Town will be ideally situated to incorporate such a program, and the capital infrastructure requirements into the future design, and operations of the landfill site. Council for the Town of St. Marys will need to determine if the expenses of implementing and operating such a program are worthwhile for the Town, Businesses and Residents.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
<p>Modify waste tracking system to identify asphalt shingles to assist in diversion program cost estimates.</p> <p>Stakeholder consultation with residents, contractors, etc. on the merits of such a program, and its potential development.</p>	<p>Develop an economically viable and sustainable asphalt shingles recycling program, and incorporate its implementation into any future site design and alterations.</p>	<p>Follow the “Strategy for a Waste Free Ontario” developed by the Province of Ontario.</p> <p>Consideration should be given to banning shingles from the Landfill Site should a sustainable diversion program be established.</p>

APPENDIX B-4

Mattress and Box Spring Recycling

The Town of St. Marys currently accepts mattresses and box spring for final disposal at the Landfill Site, and represents another potential waste stream for diversion. Mattresses and Box Springs are a low density high volume product that are known to cause significant operational difficulties in their waste placement, compaction and covering processes, while also causing significant maintenance and / or damage to compaction equipment due to the metal springs found within the material which can become entangled on equipment.

Diversion programs are available for these materials which could fully redirect them from the landfill site. Various neighbouring municipalities currently offer mattress and box spring recycling programs that redirect the material to third party processors.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Consideration should be given to investigating the merit of a Mattress and Box Spring recycling program for the Town, and how such a program could be delivered.	Develop a cost effective and sustainable Mattress and Box Spring recycling program. Consideration should be given to potential municipal partnerships, or Public Private Partnerships for a cost effective program delivery.	Follow the “Strategy for a Waste Free Ontario” developed by the Province of Ontario. Consideration should be given to future banning of Mattresses and Box Springs from the St. Marys Landfill.

Landfill Optimization

How a landfill is managed on a daily basis can have a significant impact on the long term utilization of the Site. Optimization activities could be implemented at the St. Marys Landfill Site which would benefit the current Site, as well as any future approved filling capacity.

Along with daily cover material, the Landfill Site is currently operated with compaction equipment utilized to position and place refuse (garbage). In 2013, the Town, in partnership with the Sites Engineering Consultant completed mandatory landfill operator training for all personnel within the Public Works Department. This provided all staff with renewed knowledge of landfill operations, compaction techniques, etc. Over the last several years, in-situ density at the landfill site has ranged from a low of 343 Kg/m³ to as high as 519 Kg/m³, for an average in-situ density over the last three (3) years of 425 Kg/m³. Although this can be seen as a positive increase over historical operations, the in-situ density is still less than that which would be anticipated with the use of compaction equipment.

While improvements have been made, additional work can be completed to further improve Site operations. The in-situ densities referenced above are still less than what would be expected for a landfill that utilizes compaction equipment. Part of this may be related to various IC&I material that does not compact well within the Site. Town staff has been working with local industry on potentially diverting specific waste from the landfill site to assist with in-situ densities. However compaction techniques and filling practices will allow for the most significant optimization at the Site.

Another optimization at the Site would be additional earth moving equipment. Currently all operations are completed by utilizing compaction equipment which includes the placement of daily cover. Compaction equipment is not intended to move earth on and off of material and as such creates operational challenges in both placing cover material, and removing at the start of each working day. Significant volume utilization savings could be realized with the consideration of the purchase or utilization of appropriate earth moving equipment going forward.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Continue to provide refresher training for operators on landfill operations and compaction techniques.	Pending approval for landfill expansion, systematically plan placement of refuse to maximize infrastructure and in-situ density. Consideration should be given to purchase GPS system and software to maximize operations.	Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario related to IC&I diversion initiatives.
Provide front line staff with enhanced direction, guidance and training to maximize operational techniques and waste densities through waste placement strategies and filling plans.	Consideration should be given to the purchase of a suitable earth moving equipment for daily cover operations.	Investigate the use of alternative cover systems such as tarps to reduce and limit the volume of earth material used at the Site.

APPENDIX B-6

Backyard Composting Initiatives

Backyard composting is a cost-effective tool for waste diversion, but typically results in a smaller percentage of overall diversion. This is attributed to difficulty in getting public involvement and portions of the organics stream which cannot be composted in such a manner for instance, dairy, meats, fish, etc. According to Ontario Regulation 101/94, a local municipality that has a population of at least 5, 000 shall establish, operate and maintain a leaf and yard waste system. That system must include:

- a) The provision of home composters to residents by the municipality at cost or less;
- b) The provision of information to residents;
 - Publicizing the availability of home composters;
 - Explaining the proper installation and use of home composters and the use of compost; and,
 - Encouraging home composting.

In circa 2008, the Town in association with BRA, distributed backyard digesters to residents. This partnership turned out to be largely successful, so much so that the original 100 composters were sold out within 30 minutes. The Town funded approximately 50% of the cost of the digester.

The Green Cone is an at-home composting system which offers an alternative means of disposing of organic kitchen waste to Anaerobic Digestion (AD) and In-Vessel Composting (IVC). The advantage to the Green Cone over traditional techniques is that it takes all types of food waste (meat, dairy, bones, vegetables and even animal feces). Essentially, it allows residents to take everything from the kitchen table and dump it directly in. Advantages to this system are that it does not need to be turned or emptied more than once every few years. In addition, as an enclosed system, it does not attract vermin or other animals.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Continue to publicize and encourage at home diversion via composting and digestion. Develop educational material to promote such programs.	Consideration should be given to developing a long term, sustainable incentive program for composters and/ or digesters. Seek assistance in funding for at home programs such as grants, sponsors and or donations.	Follow the “Strategy for a Waste Free Ontario” developed by the Province of Ontario as well as consideration to “Ontario’s Food and Organic Waste Framework”. Consideration should be given to a Food and Organics Collection program through municipal partnerships or as local third party facilities materialize.

Textile Recycling

According to Value Village, approximately 85% of textiles are disposed into the landfill. Most of these textiles that are disposed of could avoid the landfill entirely by being recycled or reused by industries and consumers.

There are already multiple locations within the Town of St. Marys where one can donate their clothing for reuse. Places include the downtown Thrift Store in association with the Salvation Army as well as red bins which are provided by the Canadian Diabetes Association. In addition, the Canadian Diabetes Association periodically contacts the residents of the Town to ask for any unwanted or used clothing. Donating clothing is at no cost to residents and textiles will be picked up at their doorstep within a few days.

Through these donation programs, various textiles, such as but not limited to the following can be donated:

Accessories and bags, clothing, curtains, blankets, towels, sheets, shoes, sleeping bags, etc.

However, donating material is only addressing one stream of textile waste, and the question becomes what to do with material that is not in a condition to be donated. A recently launched program in the neighbouring City of Stratford aims to tackle the textile material that is not in a condition for donation. The Town should consider such a program for its own waste management programs for increased diversion.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Education and Outreach programs should be developed and implemented to ensure residents are aware of reduction and diversion programs for enhanced utilization.	<p>Consideration should be given to developing a textile diversion program to collect and divert material that is not suitable for donation.</p> <p>The Town should seek municipal partnerships and or Public Private Partnerships for an economically sustainable program delivery.</p>	<p>Consideration should be given to banning the disposal of textiles at the landfill.</p> <p>Look for and implement more programs to recycle textiles.</p>

Increase Industrial, Commercial & Institutional (IC&I) Diversion

In order to strive for a zero-waste economy, the industrial, commercial and institutional (IC&I) sector must increase its diversion rates. According to the Ontario's Food and Organic Waste Framework Action Plan, the IC&I sector is accounted for approximately 45% of all food and organic waste in Ontario, which opens a large potential for improvement. Additionally, only 25% of the food and organic waste created by the IC&I sector is diverted.

Based on the Provincial goal of establishing a circular economy, the IC&I sector will be required to focus on the following procedures to drive higher resource productivity, innovation and economic growth;

1. **Fewer Materials** - Using fewer raw materials in the beginning will decrease the amount of extra wastage.
2. **Design** - Products and packaging should be designed to be more durable which will make it last longer. They should also be able to be recycled once its lifecycle terminates. New materials should be designated to ensure that the producers are entirely responsible for recovering more materials from products and packaging.
3. **Produce** - Businesses should collaborate and coordinate across sectors to reduce greenhouse gas production and fossil fuel use.
4. **Reuse, Repair and Recycle** - Implement programs for the collection of products in order to reuse repair or recycle them.

The above targets for developing a circular economy, and a zero waste footprint in Ontario will be largely driven by regulations and requirements from the Provincial Government, which will in turn have beneficial impacts on the waste reduction and diversion efforts of the Town. In addition to provincial goals and objectives, the Town can also work with local industrial partners at reducing or redirecting waste from the landfill site by sourcing alternative disposal or recovery options.

Opportunities for Improved Waste Reduction & Diversion:

Initiatives (Near Term)	Initiatives (Mid Term)	Initiatives (Long Term)
Consideration should be given to working with the local IC&I section to reducing or diverting low weight, high volume material which may have alternative uses, or recovery options.	Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario as well as consideration to "Ontario's Food and Organic Waste Framework".	Follow the "Strategy for a Waste Free Ontario" developed by the Province of Ontario as well as consideration to "Ontario's Food and Organic Waste Framework".
Develop Education and Outreach material to promote IC&I diversion initiatives.	Assess Town needs and requirements along with regulatory requirements for potential enhancements to IC&I waste diversion.	

ENVIRONMENTALLY SUSTAINABLE SOLUTIONS FOR WASTE REDUCTION & DIVERSION FOR TODAY, TOMORROW AND FUTURE GENERATIONS

AUGUST 2018



The Corporation of the Town of St. Marys
Public Works Department

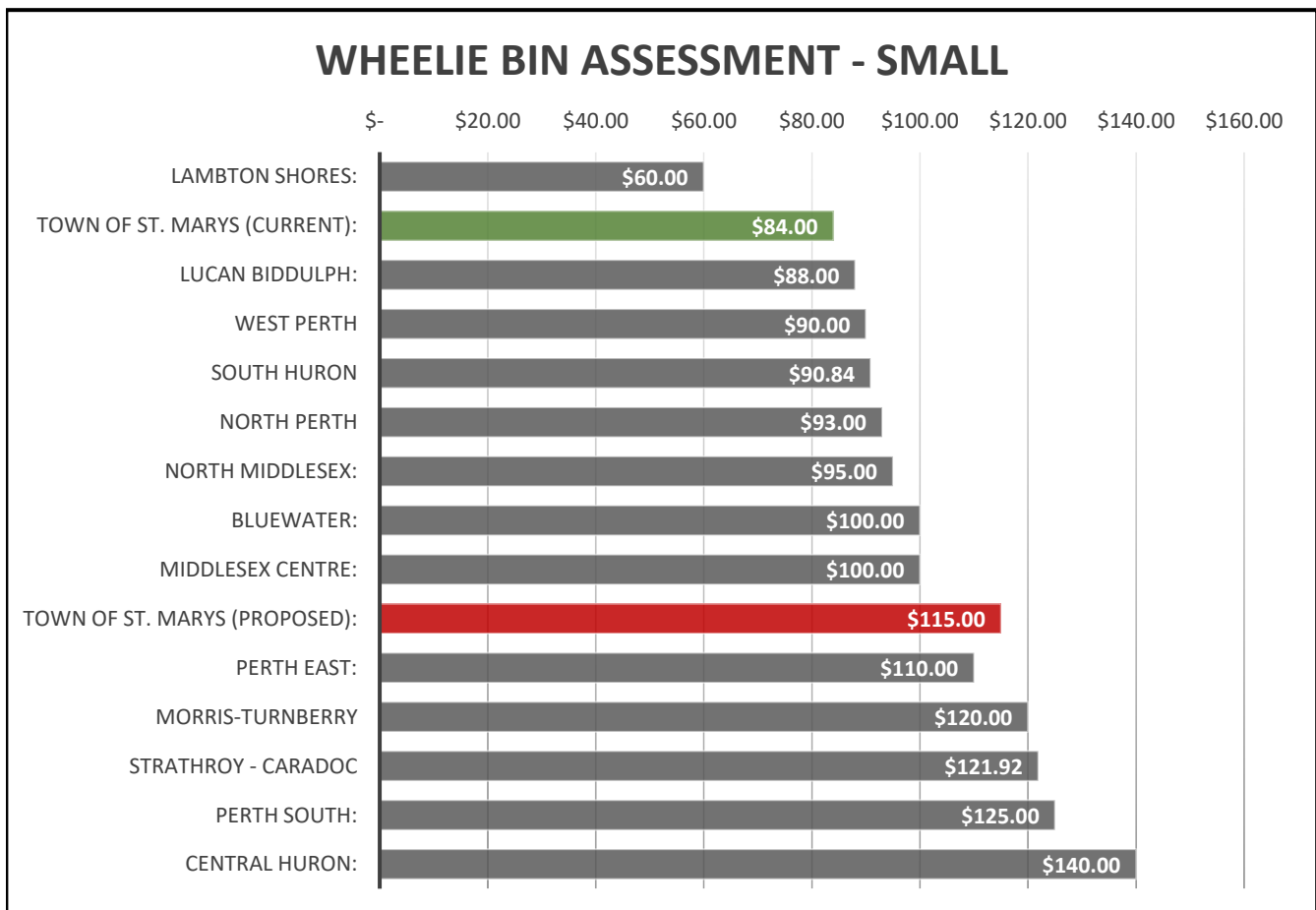
August 2018



ATTACHMENT NO. 2 - WHEELIE BIN FEE ASSESSMENT

REVIEW OF AREA MUNICIPALITIES - SMALL BIN

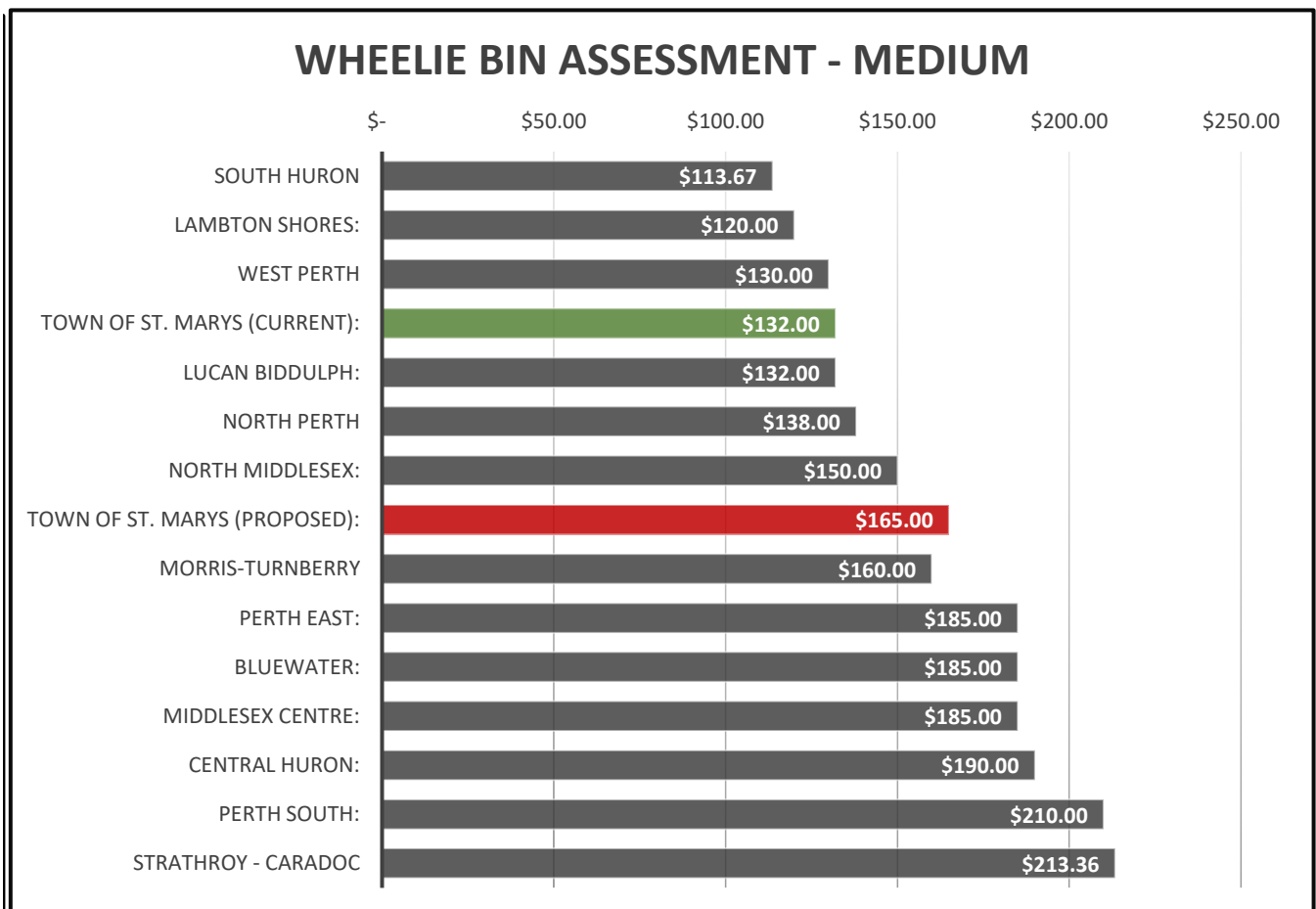
LOCATION	SMALL BIN
Lambton Shores:	\$ 60.00
Town of St. Marys (Current):	\$ 84.00
Lucan Biddulph:	\$ 88.00
West Perth	\$ 90.00
South Huron	\$ 90.84
North Perth	\$ 93.00
North Middlesex:	\$ 95.00
Bluewater:	\$ 100.00
Middlesex Centre:	\$ 100.00
Town of St. Marys (Proposed):	\$ 115.00
Perth East:	\$ 110.00
Morris-Turnberry	\$ 120.00
Strathroy - Caradoc	\$ 121.92
Perth South:	\$ 125.00
Central Huron:	\$ 140.00



ATTACHMENT NO. 2 - WHEELIE BIN FEE ASSESSMENT

REVIEW OF AREA MUNICIPALITIES - MEDIUM BIN

LOCATION	MEDIUM BIN
South Huron	\$ 113.67
Lambton Shores:	\$ 120.00
West Perth	\$ 130.00
Town of St. Marys (Current):	\$ 132.00
Lucan Biddulph:	\$ 132.00
North Perth	\$ 138.00
North Middlesex:	\$ 150.00
Town of St. Marys (Proposed):	\$ 165.00
Morris-Turnberry	\$ 160.00
Perth East:	\$ 185.00
Bluewater:	\$ 185.00
Middlesex Centre:	\$ 185.00
Central Huron:	\$ 190.00
Perth South:	\$ 210.00
Strathroy - Caradoc	\$ 213.36



ATTACHMENT NO. 2 - WHEELIE BIN FEE ASSESSMENT

REVIEW OF AREA MUNICIPALITIES - LARGE BIN

LOCATION	LARGE BIN
South Huron	\$ 147.79
West Perth	\$ 170.00
Lambton Shores:	\$ 180.00
Town of St. Marys (Current):	\$ 198.00
North Perth	\$ 198.00
Lucan Biddulph:	\$ 198.00
North Middlesex:	\$ 210.00
Morris-Turnberry	\$ 240.00
Town of St. Marys (Proposed):	\$ 229.00
Central Huron:	\$ 260.00
Perth East:	\$ 270.00
Bluewater:	\$ 270.00
Middlesex Centre:	\$ 270.00
Strathroy - Caradoc	\$ 294.64
Perth South:	\$ 295.00

