Municipality of Arran-Elderslie	QMS REP:
SLD 14 Pg 1	
October 2023	DATE:

SLD14 - REVIEW & PROVISION OF INFRASTRUCTURE REV: 2023-01

Every year prior to budget approval the Water/Sewer Foreman will complete Infrastructure Review Report of each water and wastewater system. This report will be presented to the Public Works Manager, and Treasurer for review, and is available in the DWQMS binder. This document will closely reflect the Water Financial Plan required under O Reg. 588/17, and the Sewer Financial plan, an internal Arran-Elderslie document closely linked to Asset Management. This report will be reviewed with the Owner at the yearly management review process for input. The six year budget plan is a reflection of some of the prioritized points below:

The prioritization of water main replacement is determined based on:

- The frequency of water main breaks and observed condition of water main (documented in water main and service leak and repair records).
- Identified fire flow deficiencies at hydrants or undersized mains, fire flow testing (3rd party Report).
- Adequacy of adjacent infrastructure (sanitary sewer, storm sewer and roads).
- Known areas of poor water quality or pressure in distribution system.
- New service area.

Prioritization of water treatment plant infrastructure replacements currently remains minimal as the water treatment plants are relatively new and consequently, there are very few capital replacement issues at this time. However, the PSAB process will depreciate the assets accordingly. Future water treatment plant infrastructure capital planning will be planned using the PSAB database. Functions captured under this criteria could include SCADA hardware, computer, and electrical upgrades. Replacement of chemical equipment, and filter components would also be considered.

Well rehabilitation involves the rehabilitation of formation fouling and screen fouling from iron bacteria and possibly other scale. This is planned based on observed drawdown in the wells as seen in SCADA trending. The wells at Chesley occasionally need such rehabilitation, performed by a licensed well contractor, as outlined in Well Maintenance Plan.

Elevated storage maintenance works are planned based on the findings of standpipe inspections (SOP 1), which will be summarized in the Infrastructure Review Report.

Capital requirements for elevated storage shall be based on identified needs from 3rd party Inspection Reports.

The Risk Assessment process SLD-8 will also, on occasion, identify deficiencies in the system which needs to be addressed and those needs would be incorporated into the infrastructure review report.

Concluded

SLD14 – Review & Provision of Infrastructure

Date	Page	Revision #	Reason	Content
Oct 2023	1	2023-01	Staff review	Include that the Infrastructure review report is available in the DWQMS binder.

SLD14 – REVIEW & PROVISION OF INFRASTRUCTURE

Infrastructure Review Report for A&E Water and Sewer Operations for Budget Purposes: 2024 Year

Process Area	Project	Reasons	Budget Amount
A&E Operations			
A&E Operations	Maintenance to Riverside Shop	Windows/Doors/ Insulation/Lightning/Soffit and Fascia/ Interior Steel.	30,772
A&E Operations	New Truck	Replace W6 (13 years old)	\$70,000
A&E Operations	Well 2 & # Tara Shingle Roof	Shingle roof due for Replacement	\$1,000
A&E Operations	Work to drill a New Well to replace CP#1 in 2022/2023/2024	Test Well completed Approvals, Capital work needed to put into service	403,463
A&E Operations	Well 3 Tara Bypass Valve Rotourque	Original equipment, Reliabilty issues	\$15,000
A&E Operations	Replacing Antenna and Cables on Water towers	Original Equipment. Updates (possible Fibre optic upgrades)	\$30,000
Chesley Distribution	3 rd Street SW (1 st Ave S. to 4 Ave SW)	Replace undersized cast iron watermain	deferred
Total Cost			

Infrastructure Review Report for A&E Water Systems for Budget Purposes: 2024 Year

Process Areas	Project	Reasons	Budget Amount
Paisley Distribution	Church Street Watermain	Replace cast iron watermain, multiple breaks	<mark>45,000</mark>
Tara Distribution	Watermain on Francis Street from Matilda to Brook Street	Replace old infrastructure, multiple breaks and issues.	638,000
Tara Distribution			
Total Cost			

SLD14 – REVIEW & PROVISION OF INFRASTRUCTURE

Infrastructure Review Report for A&E Wastewater System for Budget Purposes: 2024 Year

Process Areas	Project	Reasons	Budget Amount
Paisley WPCP	Sludge Pump	Aged equipment, reliability issues	\$15,000
Paisley WPCP	Standby Generator	Ensure reliability of treatment system in emergency situations	\$150,000
Paisley WPCP	Rotor Gearbox and cage rotor rebuild	Maintenance issues, replace original gearbox, Spare rotor needs rebuilt to be suitable as a useable spare	\$25,000
Paisley WPCP	Air Blower	Replace original Blower	10,000
Paisley WPCP	Alum Tank	Original tank, Leaks and structural issues	50,000
Tara Wastewater	Piping work	Pumps replacement requiring piping modifications	\$24,000
Tara Wastewater	Confined Space equipment	Older equipment replacement, H&S improvements	\$5,000
Chesley Wastewater	Sewer Mains Laterals 3 rd street sw	Coordinate with Road and Water upgrades	defered
Chesley Collection System	Riverside Lift Station	Pump Rebuild, Critical infrastructure, manufacturer inspections recommended a rebuild	\$50,000
Chesley Collection System	South End Lift Station	Replace roof Shingles, repair flat section	\$14,790
Chesley Collection System	Manholes (Martha Ave)	Replace aging infrastructure	\$25,000
Paisley Collection System	Ross Street lift station Ultrasonic	Replace original system, unreliable and parts hard to get	\$10,000
Paisley Collection System	Lift station roofs	Repair Aging infrastructure	\$20,000

SLD14 – REVIEW & PROVISION OF INFRASTRUCTURE

Total Cost		