

THE CORPORATION OF THE TOWN OF AMHERSTBURG

OFFICE OF ENGINEERING & INFRASTRUCTURE SERVICES

Mission Statement: As stewards of the Town of Amherstburg, we strive to improve the quality of life of all residents through the delivery of effective, efficient, and affordable services.

Author's Name: Todd Hewitt	Report Date: January 8, 2025
Author's Phone: 519 736-3664 ext. 2313	Date to Council: January 27, 2025
Author's E-mail: thewitt@amherstburg.ca	Resolution #:

To: Mayor and Members of Town Council

Subject: Amherstburg Water Treatment Plant Reservoir Upgrade and

Redundancy Protection Project – Tender Results

1. RECOMMENDATION:

It is recommended that:

- A total project budget of \$16,405,964, inclusive of non-recoverable HST, BE APPROVED for the Amherstburg Water Treatment Plant Reservoir Upgrade and Redundancy Protection Project (AWTP) (#722007) and;
- 2. Funding of \$2,242,700 in the Urban Road Rehabilitation Program (RDS-002-23), approved in principle for 2026, **BE RESCINDED** and the \$942,700 in General Reserve (0400) funding for this project to being reallocated as follows;
 - 1. ENV-003-23 in 2026 for \$500,000 and
 - 2. RDS-004-23 in 2026 for \$400,000 and
 - 3. Remaining \$42,700 remain in the General Reserve (0400)
- 3. The funding shortfall for the AWTP project (#722007) of \$5,773,464 **BE APPROVED** as follows:
 - 1. 2025 Development Charge Water Reserve (0126) in the amount of \$1,900,000;
 - 2. 2026 Development Charge Highway Reserve (0123) in the amount of \$1,630,764;
 - 3. 2026 OCIF (0625) funding previously identified for the Urban Road Rehabilitation (RDS-002-23) in the amount of \$1,300,000;
 - 4. 2026 OCIF (0625) funding previously identified for Mill and Pave Program (RDS-004-23) in the amount of \$400,000;

- 2026 OCIF (0625) funding previously identified for the Sanitary Sewer Upgrades and Replacements (ENV-003-23) project in the amount of \$500,000 and
- 6. 2025 OCIF (0625) funding current in the reserve in the amount of \$42,700
- 4. Administration BE DIRECTED to set up a repayment schedule for the use of \$1,630,764 from the DC Highway (0123) reserve for the ATWP project with said repayment to be in accordance with the Development Charges Act, and the funding source for the repayment to be from Water DC's collected in future years, ensuring such repayment does not aversely impact planned capital projects and;
- 5. Council AUTHORIZE the Chief Administrative Officer and Clerk to execute an agreement with Amico Design Build Inc., to complete the Amherstburg Water Treatment Plant Reservoir Upgrade and Redundancy Protection Project (#722007) as outlined in the tender documents in the amount of \$15,181,875.00 plus HST, subject to approval of content by the Director of Infrastructure Services and to financial content by the Director of Corporate Services/Chief Financial Officer.

2. BACKGROUND:

The Investing in Canada Infrastructure Program (ICIP) is a Federal program designed to create long-term economic growth, build inclusive, sustainable and resilient communities and support a low-carbon economy. The Town of Amherstburg submitted an ICIP – Green Stream grant application in August 2021 for funding of the construction of a new reservoir and rehabilitation of the existing reservoir at the Amherstburg Water Treatment Plant (AWTP).

On June 27th 2022 Council approved a transfer payment agreement with Provincial and Federal Governments for \$3,662,833.50 total of Provincial and Federal Funding (based on the original grant application amount of \$4,995,000) towards the Reservoir at AWTP. It should be noted that the maximum total eligible cost per project for a single application to the ICIP Green Stream was \$5 million.

On December 12, 2022 Council awarded the engineering services to Stantec Consulting Ltd (SCL) CR20221212-003 at a total cost of \$956,785.

3. DISCUSSION:

The construction and rehabilitation of the Reservoir at Amherstburg Water Treatment Plant is a priority project that best fit within the scope of this grant application. Water storage reservoirs are required to ensure that adequate supply of water is maintained to meet peak water demands or emergencies such as fires, water main breaks, power outages and pump failures. The Amherstburg Water Treatment Plant currently has only one in-ground water storage reservoir. The existing reservoir is over 50 years old and showing deterioration. The Town has had to perform emergency reservoir repairs in the past due to excessive leaking of treated water from the reservoir. Having only 1 reservoir

cell creates operational issues when these repairs are completed as it requires the Town to drain the reservoir completely and although this work is scheduled during low water usage periods it still creates a risk to the community and requires notification and approval from the Ministry of Environment, Conservation and Parks as the Town must deviate from our drinking water licence requirements.

The construction and rehabilitation of the reservoirs would occur in two phases. Phase 1 would involve the construction of a new 7,400m3 reservoir. Phase 2 of the project will involve the rehabilitation of the existing 14,800m3 reservoir including dividing it into two 7,400m3 cells built within the existing reservoir footprint. The Town is currently completing an Environmental Assessment for the expansion of the AWTP and the addition of storage capacity would be a requirement when expansion occurs. The completion of this work now puts the Town ahead with respect to anticipated future costs related to the expansion

The Town advertised a Request for Tender (RFT) for the AWTP Reservoir Construction on November 8th, 2024 online via Bids and Tenders and on the Town's website. The RFT includes all work required to construct the new reservoir and rehabilitate the existing reservoir including all associated yard piping and tie-ins.

Tenders closed for this project at 11:00 a.m. on December 10, 2024. The Town received 3 tender submissions that were processed electronically via the Bids and Tenders system.

The tenders were reviewed electronically to ensure there were no mathematical errors or omissions. The tender results are:

	Bidder	Tender Amount (excluding HST)
1.	Amico Design Build Inc.	\$ 15,181,875.90
2.	Kingdom Construction Limited	\$ 15,887,536.80
3.	Jones Group Ltd.	\$ 15,985,563,99

The consulting engineer has completed the review of the submissions and has recommended that the tender be awarded to the lowest bidder, Amico Design Build Inc. Administration concurs with this recommendation.

4. RISK ANALYSIS:

Municipal Councillors are generally protected from personal liability for any decisions they make in good faith in the course of their duties, however this is not the case with respect to drinking water. Section 19 of the Safe Drinking Water Act imposes a personal duty on "every person who, on behalf of the municipality, oversees the accredited operating authority of the [drinking water] system or exercises decision-making authority over the system." Personal risk will be mitigated by improving the Town's current operations.

If this project is not approved the existing reservoir will age further without the maintenance and crack repairs included in the tender and additional failures and repairs are anticipated. Although the timing of these repairs is generally planned during low water usage time, a significant failure could result in the work being required immediately and reducing / eliminating any adequate water storage we have. Each time a deviation from our drinking water licence is required, approval from the MECP is needed.

With the additional reservoir chamber, the division of the existing reservoir into 2 separate chambers and associated new inter-connections being created within the system the plant will be able to isolate any reservoir cell individually for repairs and maintenance while still meeting the required storage capacity. When all three cells are in operation the Town will have additional water in the event of a large fire or significant watermain break.

The addition of baffle walls within the new reservoir chamber and newly created chambers in the existing reservoir will provide improved contact time for chlorine infusion and eliminates the 'short circuiting' of water within the reservoir where the water that travels from the reservoir inlet directly to the outlet and leaves large areas of water remaining stagnant within the reservoir. The baffle system is superior for this process, is recommended for all new reservoirs and can reduce chlorine usage by increasing contact time before entering the system.

There is significant financial risk that the municipality may have to fund the reservoir construction and rehabilitation fully from water rates in the future should Council forego senior government funding contributions. Programs, such as the Investing in Canada Infrastructure Program, are effective tools used by municipalities to address key infrastructure challenges due to financial constraints. The Investing in Canada Infrastructure Program is a key program offered by the Provincial and Federal government that will assist the Town in its long-term financial plan.

5. FINANCIAL MATTERS:

Council has approved the following funding for the Amherstburg Water Treatment Plant Reservoir Upgrade and Redundancy Protection Project # 722007:

 Reserve 0126 (DC-Water)
 \$2,323,995

 Reserve 0630 (Grants – Other)
 \$3,662,833

 Debt Recovery
 \$3,731,910

 Water Reserve 0200
 \$913,762

 Total
 \$10,632,500

Based on the recommended tender and contract for design engineering/project management services, the financial impact for the project is estimated as follows:

Stantec Engineering \$956,785 (inclusive of non-recoverable HST)

Construction Tender Pricing \$15,449,179 (inclusive of non-recoverable HST)

Total Project cost \$16,405,964

Funding Shortfall \$5,773,464

Administration acknowledges that this project tender is significantly over the original construction budget of \$9,600,000. When administration submitted the ICIP Green Stream grant application in 2021 the \$9,600,000 estimate that was used had been based on previous engineering studies related to the AWTP expansion costing. The detailed design commenced in 2023 but did not progress to a point where an updated construction estimate could be provided until late in 2024, after the 2025 budget had already been prepared. Inflation in the past few years has had a large impact on construction projects and projects of this nature (water and wastewater facilities) have been especially

impacted due to the pressure from the federal and provincial governments to provide additional housing. This demand requires the water and wastewater infrastructure to be built quickly and has put additional strain on that area of the construction industry.

Administration has reviewed this matter in concert with the updated Development Charge Study as well as the 2025 5-year capital budget to determine a funding strategy which does not require the issuance of additional debt for this project. The table below provides a high level summary of the results.

Recommended Funding Sources for Shortfall	
2025	
DC Water (0126)	\$ 1,900,000
2026 (to be pre-committed)	
OCIF (0625)	\$ 2,242,700
DC Highway (0123)	\$ 1,630,764
Total Additional Funding to address shortfall	\$ 5,773,464

The following information is to provide further clarity on recommendations in this report which reflect how this funding strategy was arrived at.

Based on the current DC Study, as well as the new costs for this project, Administration requested Watson and Associates, the consulting firm which developed the Town's 2025 DC Study, to provide clarity on the additional Water DC funding allowable for this project. Watson and Associates advised that based on the amended value of the project, as per the tender results, an additional use of \$3,832,483 is available to the Town. Based on the reserve forecasting, which includes planned capital projects from 2025 to 2029, there is not sufficient funding in the DC Water reserve for this full amount without adversely impacting other water projects which must be completed. Watson and Associates advises that the DC Act allows the Town to leverage DC funding from a different DC to cover another DC eligible project, provided those funds are repaid with interest. As such Administration recommends using \$1,900,000 in DC Water (0126) reserve in 2025 and another \$1,630,764 from the DC Highway (0123) reserve in 2026. While this is less than the allowable DC funding, given the use of DC Highway funding will need to be repaid with interest and Administration has alternative funding sources for the balance it is not recommended to draw the full \$3.8M from DCs.

This would result in a remaining shortfall in funding of \$2,242,700. In the current 2025 5-year capital budget the Urban Road Rehabilitation Program (RDS-002-23) in 2026 has \$2,242,700 in funding approved in principle for the Lowes Sideroad (Sandwich to Meloche) reconstruction. The Town is currently awaiting the results of the HEWSF Intake 2 grant application. If we are successful with the grant there would be a proposed 18-month construction schedule for the completion of the sewer installation. The sewer project would not be completed until the end of 2026. This would leave the reconstruction of Fryer Street (Pickering to Lowes) for 2027 and the reconstruction of Lowes Sideroad (Meloche to Sandwich) in 2028. This timing delay has allowed the Town to reprioritize these funds and redirect them for use in addressing the immediate funding shortfall for the ATWP project.

By reprioritizing this project, the \$1,300,000 in OCIF funding, which is permitted for use on water projects, can be redirected to fund part of the shortfall for the ATWP project. The remaining \$942,700 for this project is funded from the General Reserve (0400), which is identified to fund the rehabilitation and replacement of Town assets, however not water or wastewater as they are funded through User Rates. Use of the General Reserve for this project would create a deviation from the Town's AMP funding strategy and potentially create a need to repay these funds to that reserve over time.

To mitigate this risk, Administration reviewed other projects approved in principle in 2026 which are using OCIF funding and also qualify for use of General Reserve funding. Based on this review Administration found the Mill and Pave project (RDS-004-23) has \$400,000 in OCIF funding in 2026 and the Sanitary Sewer Upgrades and Replacements project (ENV-003-23) has \$500,000 in OCIF funding in 2026. It is recommended the General Reserve funding of \$942,700 for the Urban Road Rehabilitation Project be reallocated to RDS-004-23 and ENV-003-23 in the amount of \$400,000 and \$500,000 respectively. The residual amount of \$42,700 should then be returned to the General Reserve. This in turn allows the OCIF funding originally identified for those projects to be redirected to the ATWP project. The recommendations in this report allow for this funding swap to occur so that OCIF and DC funding is used to address the \$5,773,464 funding shortfall, without the issuance of additional debt.

Administration has also reviewed the projected total reserve fund balances from 2025 to 2029 based on this recommended funding strategy. The table below reflects the projected reserve balances from 2025 to 2029 based on approved capital and operating budget approvals as well as any in year approvals which impact reserves, inclusive of the recommended funding strategy in this report. Should Council support the recommendation in this report the total reserve balances over this period of time remain stable and reasonable.

	2025	2026	2027	2028
Total Reserves	\$ 41,856,511	\$ 40,701,759	\$42,200,005	\$ 44,396,082

6. ASSET MANAGEMENT IMPACTS:

This section is intended to identify the impact of new assets, not existing assets, on the Town's AMP funding requirements and funding strategies going forward.

As per Council direction:

Resolution: 20240625-018

Lifecycle and legacy costs **BE CONSIDERED** by Administration when bringing forward new capital assets to Council.

This project involves the construction of a new reservoir, new yard piping and the introduction of new baffles and distribution chamber in the existing reservoir. The project legacy cost associated with this project are included in an appendix to this report and summarized below.

New Reservoir and yard piping- \$11,073,406 Annual increase to AMP contribution - \$372,819

Modifications to existing Reservoir - \$2,946,966 Annual increase to AMP contribution - \$99,218

Completion of this project will result in a new water asset to be maintained and replaced. Based on a high-level assessment of the asset over its anticipated lifecycle increase of \$472,037 to the water reserve for its replacement is for Council's awareness. Future AMPs will include this information once the asset is completed and as a result impact the overall AMP funding shortfall and financial strategy.

7. CONSULTATIONS:

Director of Development Services / Deputy CAO Director of Corporate Services / CFO Stantec Consulting Ltd

8. CORPORATE STRATEGIC ALIGNMENT:

Vision: Preserving our past while forging our future.

Amherstburg Community Strategic Plan 2022 - 2026		
PILLAR 1 Deliver Trusted & Accountable Local Government	PILLAR 3 Encourage Local Economic Prosperity	
 □ Improve trust between council and staff, and residents, by strengthening governance and internal accountability structures. □ Deliver transparent and efficient financial management. □ Increase effective communication and engagement with residents. □ Develop our staff team, resources, and workplace culture. ✓ Continue to deliver strong core municipal services. □ Ensure Amherstburg is an inclusive accessible and welcoming community committed to reconciliation. 	 ✓ Encourage development of commercial and industrial lands. □ Continue to promote local tourism industry, especially overnight accommodation. □ Continue to facilitate downtown development for residents and visitors. □ Continue to leverage partnership opportunities with other provincial, federal, and local governments, agencies, and organizations. 	
PILLAR 2 Invest in Community Amenities and Infrastructure	PILLAR 4 Shape Growth Aligned with Local Identity	
 Maintain safe, reliable and accessible municipal infrastructure and facilities. 	☐ Define and communicate a vision for the Town's future and identity.	

☐ Increase access to recreation	☐ Promote and plan for green and "climate
opportunities for all ages.	change ready" development.
☐ Finalize and execute plans for town-	☐ Review and implement policies that
owned lands (e.g. Duffy's site, Belle Vue)	promote greater access to diverse
☐ Create public access to water and	housing.
waterfront	☐ Protect the Town's historic sites and
☐ Prioritize opportunities to reduce	heritage.
environmental impacts of Town	☐ Preserve the Town's greenspaces,
operations and increase Town resilience	agricultural lands, and natural
to climate change.	environment.

9. **CONCLUSION**:

Administration recommends that Council authorized the Chief Administrative Officer, or designate, to execute an agreement with Amico Design Build Inc., to complete the Amherstburg Water Treatment Plant Reservoir Upgrade and Redundancy Protection Project to mitigate a number of risks which include public safety and financial benefits.

Todd Hewitt

Manager of Engineering

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Report Approval Details

Document Title:	2025 01 27 - AWTP Reservoir Project - Tender Results.docx
Attachments:	- Stantec Letter - AWTP Reservoir Tender.pdf - AWTP reservoir - AM section.pdf
Final Approval Date:	Jan 16, 2025

This report and all of its attachments were approved and signed as outlined below:

Antonietta Giofu

Tracy Prince

Valerie Critchley

Kevin Fox