Report



Date March 15, 2023 File: Not Applicable

Subject Canada Avenue Flood Gate and Road Upgrade Project Construction Contract Award

PURPOSE

To award the construction contract for the Canada Avenue Flood Gate and Road Upgrade Project.

BACKGROUND

The Canada Avenue Flood Gate and Road Upgrade project generally consists of the following (refer to Figure 1 and Figure 2):

- 1) Installation of a new floodgate to prevent flooding of the urban core from the Somenos Marsh area. This is the final phase of flood protection works north of the Cowichan River.
- 2) Raising the road elevation for a portion of Canada Avenue in the proximity of Philips Street to up to 10-year flood level. This will allow vehicles and pedestrians to detour flooding in front of the RMCP via a bypass at Philips Street.
- 3) Replacing the existing road base with low-density fill to arrest road settlement due to a peat deposit located near the floodgate sill.
- 4) Installation of new storm mains with increased capacity to improve local drainage and to direct stormwater to the Canada Ave storm pump station.
- 5) Replacement of sanitary sewer main that is at the end of operational life.
- 6) Replacement of a City of Duncan water main (funded by the City) that is at the end of operational life.
- 7) Active transportation and road improvements that include sidewalk upgrades, paved multi-use trail, new signalized pedestrian crossing and new roadway pavement.
- 8) Traffic calming features such as new medians with narrow channelized driving lanes.

Note that this project's roads, sidewalk, and multi-use trail components are consistent with the future Canada Avenue Complete Streets Project, where similar roadway improvements will be constructed over the remainder of Canada Avenue from Beverly Street to Sherman Road.

The approved budget for the Canada Avenue Flood Gate & Road Upgrade Project is \$3,676,000, which includes a grant from the Union of BC Municipalities' Community (UBCM) Emergency Preparedness Fund of \$750,000 and \$363,055 of co-funding from the City of Duncan as a contribution towards the flood gate and replacement of their water main.

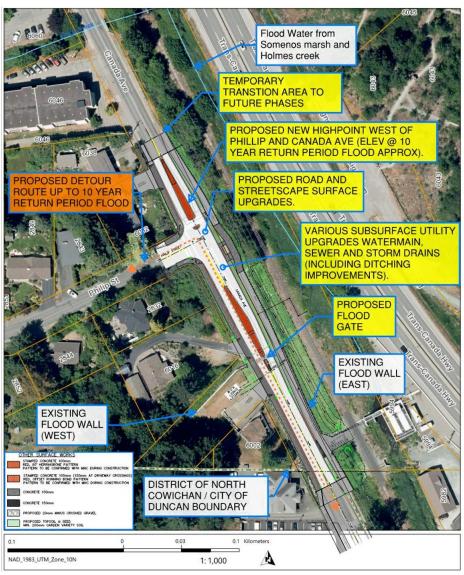


Figure 1 Key project elements.



Figure 2 Canada Ave looking north where the new flood gate will be located (in the gap in wall).

DISCUSSION

The Canada Avenue Flood Gate and Road Upgrade Project Tender closed on January 16, 2023. The results of the Tenderers are summarized in Table 1.

Table 1 Eligible bids.

Copcan Civil Ltd.	\$4,328,080.00
Stone Pacific Contracting Ltd.	\$3,301,702.21

The Copcan Civil tender was non-compliant and consequently was disqualified. The tender submitted by Stone Pacific Contracting Ltd exceeded the budget. As there was only one eligible bid, staff negotiated a revised project cost of \$2,532,534.05. The status of the budget based on the original tender price and the revised tender price is shown in Table 2. On the basis of the revised tender price, staff estimate that the total project cost will be roughly \$583,000 below the project budget.

Table 2 Project Cost Estimates & Budget

		With Original	With Revised
		Tender	Tender
Professional Services		\$328,000.00	\$328,000.00
Tendered Construction		\$3,301,702.21	\$2,532,534.05
Duncan Paving Contract Construction		\$232,470.00	\$232,470.00
	GRAND TOTAL	\$3,862,172.21	\$3,093,004.05
	2023 BUDGET	\$3,676,000.00	\$3,676,000.00
	Estimated Budget Remaining	-\$186,172.21	\$582,995.95
	Estimated Budget Remaining	-5.06%	15.86%

OPTIONS

- 1. **(Recommended Option)** THAT Council award the Canada Avenue Flood Gate and Road Upgrade Project to Stone Pacific Contracting Limited for the sum of \$2,532,534.05.
 - Approving the award of this contract:
 - Will complete the flood protection works on the north side of the Cowichan River that protects the urban core area to the 1 in 200-year flood event;
 - Will address the flood protection-related provisions of the 2022 OCP by providing the requisite climate adaptation infrastructure required to protect the community;
 - Will provide a by-pass around flooding in front of the RCMP building up to the 1 in 10year flood event; and,
 - o Will provide improvements to the active transportation corridor within the project area.

IMPLICATIONS

Consistencies with Current Programs and Policies

This project is consistent with Council's Strategic Plan goal of maintaining the existing high level of service to the community.

Financial Implications

This project has been included in the 2023 budget. There are sufficient monies budgeted to cover the full cost of this project.

The financial implication of not awarding the contract now would result in the loss of \$750,000 of co-funding provided by the UBCM.

Personnel Implications

This project will be constructed by an outside contractor with the contract administration and inspections carried out by an outside engineering consultant. This will assist in mitigating possible impact on staff resources in Engineering and Operations.

Environmental Implications

The consulting team has environmental expertise. The contractor will be responsible for ensuring that all environmental requirements are met.

The environmental implications of not awarding the contract at this time would include the potential for delay in flood response while Operations implement temporary flood protection measures. Further, the temporary flood protection measures expose the South End urban core area to a 1-in-200 year flood and potentially lesser flood events.

Social Implications

Canada Avenue will need to be closed periodically during construction. Traffic will be detoured during those times. The contractor will be required to have a traffic management plan and forces in place when detours and traffic control are required.

Driveways to two residents may be inaccessible from time to time. The contractor will be required to coordinate ingress and egress for those residents.

Businesses may be inconvenienced from time to time when the detour is in place, but access to the said businesses will not be impacted.

The social implications of not awarding the contract at this time would be more frequent road closures due to flooding without the ability to bypass traffic around the flooding.

Communication Implications

It is not anticipated that any extraordinary communications effort will be required. Communications will be assisting Engineering with any relevant communications that may be necessary with the community.

RECOMMENDATION

Ted Swabey

Chief Administrative Officer

THAT Council award the Canada Avenue Flood Gate and Road Upgrade Project to Stone Pacific Contracting Limited for the sum of \$2,532,534.05.

Report prepared by:	Report reviewed by:
John Dehoop	Clay Reitsma
John Dehoop, AScT.	Clay Reitsma, M.Eng., P.Eng.
Manager, Infrastructure	Director, Engineering
Approved to be forwarded to Council:	