

AGENDA ITEM NO: 7.2

MEETING DATE: January 23, 2024

STAFF REPORT – COVER SHEET

SUBJECT: WWTP Outfall Rehabilitation – RFPQ DATE: January 15, 2023
Award

DEPARTMENT: Engineering PREPARED BY: Sheldon McKinlay

1. SUMMARY OF ISSUE:

The City of Chilliwack invited responses to a Request for Pre-Qualifications (RFPQ) for urgent repairs to the Wastewater Treatment Plant (WWTP) Outfall. One response was received by the stipulated closing time.

A decision to enter a contract with Jakes Construction based on a time and materials contract for the repair and rehabilitation of the WWTP Outfall based on a time and materials contract is required. The repair costs are currently estimated at \$7.0 million dollars.

2. RECOMMENDATION:

Recommendation that Council award for the contract for WWTP Outfall Rehabilitation Project to Jakes Construction based on a time and materials contract; and further, that the Mayor and Corporate Officer be authorized to sign any necessary documentation.



Kara Jefford, Director of Engineering

3. FINANCE COMMENTS:


This project has been allocated within the approved 2024 Financial Plan. The anticipated total cost is expected to be higher than the allocated funding, however, the cost can be accommodated from within the Sewer Fund.



FOR: Glen Savard, Director of Finance

4. CHIEF ADMINISTRATIVE OFFICER'S RECOMMENDATION/COMMENTS:

Supports Recommendation.



Chris Crosman, CAO

**STAFF REPORT ON
WWTP OUTFALL REHABILITATION – RFPQ AWARD**

PREPARED BY: Sheldon McKinlay DATE: January 23, 2024
POSITION: Project Engineer DEPARTMENT: Engineering

1. DEFINITION OF ISSUE:

The City of Chilliwack invited responses to a Request for Pre-Qualifications (RFPQ) for urgent repairs to the Wastewater Treatment Plant (WWTP) Outfall. One response was received by the stipulated closing time.

A decision to enter a contract with Jakes Construction based on a time and materials contract for the repair and rehabilitation of the WWTP Outfall based on a time and materials contract is required. The repair costs are currently estimated at \$7.0 million dollars.

2. BACKGROUND:

- 2.1 The City of Chilliwack owns and operates a WWTP that treats the municipal wastewater generated from approximately 70,000 residents and commercial, institutional and industrial operations within the City. The WWTP is authorized under the Municipal Wastewater Regulation for a maximum flow of 80,700 m³/day. The treated effluent is discharged through a submerged 1,200 mm diameter outfall located downstream of Wellington Bar in the Fraser River.
- 2.2 A bathymetric survey of the outfall was completed in early November 2023 which indicated a potential break in the outfall pipe, approximately 70m downstream of the grassy bar and in the Fraser River. The break was confirmed in late November 2023 by dive inspection and a camera from the surface. The total length of pipe in the Fraser River is approximately 180m.
- 2.3 The change in discharge point and separation of the diffusers result in a potential non-compliance under the Environmental Management Act, Municipal Wastewater Regulation. The City has notified the regulatory agencies of the potential non-compliance and has requested emergency authorizations to complete the repairs to the outfall.
- 2.4 The outfall lies in a very dynamic section of the Fraser River. The conceptual design and work plan are based on recent surveys, site visits and on the consultant's experience with the requirements typically imposed by regulators. The City's consulting engineer, Stantec, has provided the conceptual design and work plan, but the final scope of work will be dependent on the condition of the outfall.
- 2.5 The timeline for construction of the outfall rehabilitation project is from late January to March 2024 time frame before spring freshet raises the Fraser River's water level. Subject to approvals, a remaining section of pipe in aside channel and habitat restoration works will likely be scheduled during the summer in-stream works "least risk window" from August 1 to September 1.

- 2.6 The conceptual plan includes reusing the existing diffusers and replacing approximately 160m of steel pipe with HDPE pipe.

3. FACTORS:

- 3.1 Only one response to the RFPQ was received: Jakes Construction;
- 3.2 *Due to the urgency of the work and unknown condition of the detached pipe, the work plan is based on a conceptual design and the proponents were asked to provide equipment and labor rates to be used for the project.*
- 3.3 The evaluation committee concluded that the technical proposal provided by Jakes Construction demonstrated capability to undertake the project, team composition, team organization, relevant experience, understanding and vision of the project. Jakes has the necessary expertise in construction for similar projects.
- 3.4 City staff, Stantec and Jakes will collaborate to find efficiencies, minimize cost risks and reduce the amount of time and materials that the project requires to be completed.
- 3.5 Based on preliminary probable costs independently from Stantec and Jakes Construction, the repair works are estimated around \$7 million.
- 3.6 Funding for the Engineering Services for the WWTP Outfall Rehabilitation project is allocated in the Sewer Fund.

4. RECOMMENDATION & SUBSTANTIATION:

Recommendation:

Recommendation that Council award for the contract for WWTP Outfall Rehabilitation Project to Jakes Construction based on a time and materials contract; and further, that the Mayor and Corporate Officer be authorized to sign any necessary documentation.

Substantiation:

The proposed project will ensure that the City's wastewater treatment plant outfall can continue to operate effectively and that the City is in compliance with regulatory requirements.