



THE CORPORATION OF THE CITY OF COURTENAY

STAFF REPORT

To: Council

File No.: 5335-20

From: City Manager (CAO)

Date: November 8, 2023

Subject: 1st Street Lift Station Project Update

PURPOSE:

The purpose of this report is to provide Council an update on the project status and request direction to proceed with construction in the summer of 2024.

BACKGROUND:

The 1st Street Lift Station is at the end of its service life and is operating significantly over capacity. The existing lift station is located inside a concrete block building at 1201 – 1st Street adjacent to the entrance to Puntledge Park.

The project includes:

- Installation of new lift station including 7.5m deep wet well, pumps, an above ground valve chamber, a power and controls kiosk, as well as site fencing to enclose the new lift station.
- Installation of approximately 450m length of gravity sanitary sewer main on 1st Street.
- Installation of approximately 250m length of sanitary sewer force main between 1st Street and Pidcock Avenue through an existing City owned Right of Way.

The existing lift station is at the end of its service life and is operating over capacity. These upgrades are essential to improve the overall service of the local sewer system, mitigate operational risk, and reduce ongoing maintenance costs.

DISCUSSION:

The City of Courtenay tendered the 1st Street Lift Station project in summer 2023 with construction expected to run through late 2023 and early 2024. The reason for the timing of the construction was to minimize impacts to Puntledge Park users during the summer. Tendering municipal infrastructure projects in the summer with the intent to construct during the winter is not typical in the municipal construction industry.

The City received only one bid with a tender price of \$4.5M. Consultants working on behalf of the City estimated the cost of this work at \$2.4M in July of 2023. Due to the lone bid being significantly over budget, the City cancelled the tender. The project team began investigating why the lone bid was so much higher than expected. Feedback received from bidders and potential bidders outlined concerns with the project. Two of the largest issues are detailed below.

Project Timing

The City had planned construction work to occur over the winter months in order to minimize disruption to Puntledge Park during the summer. Feedback received from the contracting community indicated that there were large construction risks with completing deep excavation work during the winter. These risks included maintaining erosion and sediment control as well as dewatering the deep excavations required for installing the 7.5m deep wet well.

Traffic Management

Another concern was around traffic management during construction. The City required traffic management plans to be developed by the contractor immediately after the project was awarded. The City did not provide many requirements for the traffic management plan hoping that contractors could provide innovative solutions that would lead to efficiencies in completing the project for less money and in a shorter amount of time. Feedback received suggested that this may have led to ambiguity and perceived risk on behalf of potential contractors.

Next Steps and Recommendations

City staff along with support from the consulting team have reviewed the feedback and have made modifications to the design and as well as to the contract language that directs the contractors to work with the intent to reduce ambiguity and construction risk.

1. Project Timing

Staff are recommending to re-issue the construction tender in early 2024 with a proposed summer construction window. This is a large and complex project that not all general contractors will bid. It's expected that tendering in early 2024 will allow potential contractors to bid on this project before they are booked for the typical summer construction window.

Building in the summer season, which is traditionally when construction projects are built, is also expected to increase competition and attract more bidders.

Constructing in the summer also reduces schedule and constructability risk as summers are typically dry and weather delays are less of an issue.

2. Traffic Management

In order to minimize impacts to the park during construction, the project team will develop a site-specific traffic management plan to be included in the construction tender which the contractor will have to follow during construction. Included in the traffic management plan will be construction fencing to delineate the work zone at Puntledge Park (Figure 1). This will formalize a temporary park access during construction. It will also formalize additional public parking and temporary park access. Additionally, a temporary bank of port-a-potty washrooms is being proposed to allow closure of the existing lift station washrooms. These combined features seek to strike a balance between public access to amenities and constructability.

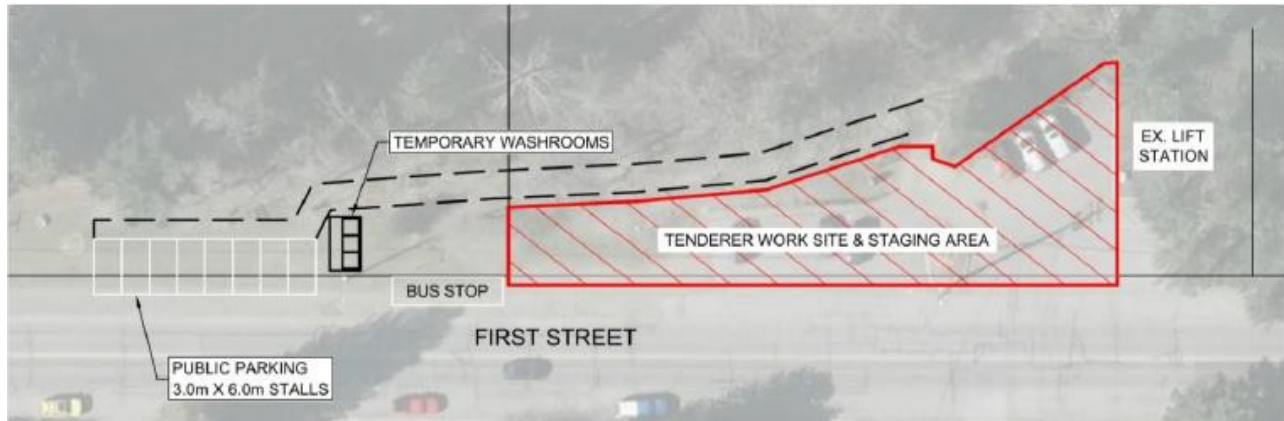


Figure 1 – Concept Park Access / Staging Plan

It's expected that the development of the traffic management plan will reduce contractor risk while allowing the City to maintain access to the park.

Although Puntledge Park is quite busy during the summer, constructing during this time when school is out is expected to reduce impacts to school buses and transit in the area.

Schedule

Staff have developed a proposed schedule for the revised construction timing and is shown below. Construction tendering would occur early in 2024 with construction to follow in Q2 of 2024. Construction is expected to last approximately 6 months with commissioning and closeout occurring in Q4 of 2024.

SCHEDULE	2023				2024			
	Jan – Mar	Apr – Jun	Jul – Sept	Oct – Dec	Jan – Mar	Apr – Jun	Jul – Sept	Oct – Dec
Project Optimization								
Tender Process								
Construction								
Commissioning/Project Closeout								

POLICY ANALYSIS:

The OCP sets out the following policies in Objective 5 Municipal Infrastructure planning and investments align with the urban framework concept.

LU 16 Prioritize infrastructure investment using a multiple bottom line decision-making approach based generally on the following parameters and priorities:

- a. High-growth areas;
- b. Public health and safety;

- c. Environmental responsibility;
- d. Regulatory need;
- e. Asset management principles;
- f. Economic efficiencies and impact, such as partnerships, project coordination, and economic spinoffs

FINANCIAL IMPLICATIONS:

As noted previously, the lone tender came in significantly over estimated costs. The project team has made many revisions to the design in order to reduce ambiguity and increase constructability. Revising the construction timeline is expected to attract multiple bidders and increase competition.

The budget for 2023 was \$3,095,600 which was intended to fund construction as well as support from consultants for contract administration and construction inspection. As noted previously, the City received only one bid with a tender price of \$4,500,000. This price is viewed as an extreme outlier as it was almost double the City’s cost estimates, which were finalized one month before the construction tender.

Staff are requesting an increase of \$602,400 to the project budget to bring the total value up to \$3,698,000 to cover the additional design optimization costs, and to increase contingency. The requested increase is proposed to be funded from reserves as the Loan Authorization Bylaw No. 3093, 2023 has already been adopted and is not a simple process to amend. The table below outlines the proposed funding structure of the project:

	General Revenue	Reserves	Debt	Total
Original	\$ 295,600	\$ 300,000	\$ 2,500,000	\$ 3,095,600
Amended	298,000	900,000	2,500,000	3,698,000
Change	\$ 2,400	\$ 600,000	\$ -	\$ 602,400

If the increased project budget is not sufficient the City does not have sufficient sewer capital reserves to fund an increase in budget and would be required to amend the loan authorization bylaw and increase reliance on debt.

ADMINISTRATIVE IMPLICATIONS:

The 1st Street Lift Station Project will be led by Engineering Services, with support from most other City Departments. Consultants with technical knowledge specific to this work will be utilized to administer the contract as well as provide construction inspection services during the construction phase.

STRATEGIC PRIORITIES REFERENCE:

This initiative addresses the following strategic priority:

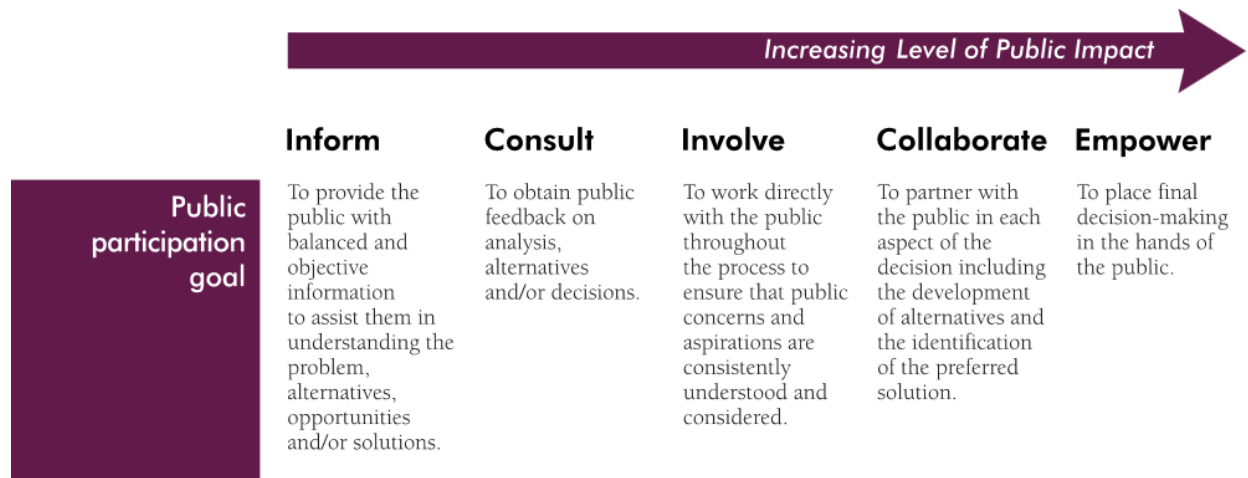
- Public Safety - Build capacity for emergency planning and local response

PUBLIC ENGAGEMENT:

City staff will continue to inform the public and community groups as the project progresses. A project specific website is kept up to date. Once construction timing is confirmed, letters to residents in the area

will be delivered and project signage will be installed. Media releases and social media posts will be used to support messaging and provide updates.

Staff would inform the public based on the IAP2 Spectrum of Public Participation:



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OPTIONS:

1. THAT based on the November 8, 2023 report "1st Street Lift Station Project Update", Council direct staff to proceed with retendering the 1st Street Lift Station tender in early 2024 with the intent to schedule construction for spring, summer, and fall of 2024.
And
THAT Council increase the "1st Street Lift Station Project" budget to \$3,698,000 funded from Sewer Operating and Capital Reserves.
2. THAT Council provide alternative direction to staff.

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