

THE CORPORATION OF THE  
**CITY OF WHITE ROCK**  
CORPORATE REPORT



**DATE:** January 15, 2024  
**TO:** Mayor and Council  
**FROM:** Corrine Haer, P.Eng., Manager, Engineering  
**SUBJECT:** Contract Award – New Water Well #5 Completion and Site Work

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**RECOMMENDATIONS**

THAT Council:

1. Receive the corporate report dated January 15, 2024, from the Manager, Engineering, titled “Contract Award – New Water Well #5 Completion and Site Work;”
  2. Approve additional funding of \$800,000 in 2024 for this project from the Water Infrastructure (capital) Reserve in advance of approving the 2024 Consolidated Five-Year Financial Plan;
  3. Approve award of New Water Well #5 Civil Work to Drake Excavating (2016) Ltd. In the amount of \$1,420,000 (excluding GST);
  4. Approve award of construction management and contract administration to Kerr Wood Leidal in the amount of \$68,250 (excluding GST); and
  5. Authorize the Director of Engineering and Municipal Operations to execute all contract documentation required for the project.
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**EXECUTIVE SUMMARY**

The purpose of this corporate report is to obtain Council approval to award the New Water Well #5 Civil Work Contract to Drake Excavating (2016) Ltd. in the amount of \$1,420,000 (excluding GST).

The city currently has seven ground water wells in order to provide drinking water to the city. The original Well #5, located at Buena Vista Avenue and Oxford Street, was decommissioned in 2018 due to salt water intrusion. In December 2022, Council awarded the drilling contract for the New Water Well #5, and this work was substantially completed mid-2023.

This project includes all the civil and site work components to tie the New Water Well #5 into the City’s water system.

**PREVIOUS COUNCIL DIRECTION**

| <b>Motion # &amp; Meeting Date</b> | <b>Motion Details</b>  |
|------------------------------------|--|
| 6.2.e December 5, 2022             | Motion Number: 2022-449 It was MOVED and SECONDED<br>THAT Council: |

|  |  |
|--|--|
|  | <ol style="list-style-type: none"> <li>1. Receive the Corporate report dated December 5, 2022, from the Director of Engineering and Municipal Operations, titled “Contract Award – New Water Well #5 Drilling”;</li> <li>2. Approve award of New Water Well #5 Drilling to Drillwell Enterprises Ltd. in the amount of \$279,625 (excluding GST); and</li> <li>3. Authorize the Director of Engineering and Municipal Operations to execute all contract documentation required for the project.</li> </ol> <p>Motion CARRIED (7 to 0)</p> |
|--|--|

**INTRODUCTION/BACKGROUND**

The city’s water utility provides safe and clean drinking water to its residents and businesses, sourced from Sunnyside Aquifer and treated at the city’s Water Treatment Plant. Population growth, climate change and sea level rise all put increasing pressure on the city’s water supply system.

The city currently operates seven ground water wells that have the capacity to extract between 19 L/s and 28.7 L/s of raw water each. The city’s most recent well installation, New Water Well #5 was installed in 2023 and has the capacity to extract 34.2 L/s.

This project includes all the civil and site work components to tie the New Water Well #5 into the City’s water system. This will increase the city’s total well capacity, allowing the city to meet the needs of projected population growth and predicted climate change impacts.

**ANALYSIS**

This project will connect the recently drilled New Water Well #5 to the existing water system that feeds the Oxford Water Treatment Plant. The work includes the supply and installation of:

- A submersible well pump, check valve, and drop pipe;
- Site improvements including grading and pavement;
- A 150 mm diameter water main on Anderson Street;
- Mechanical piping kiosk including check valve and flow meter;
- Electrical/control kiosk, including control panels,
- Standby genset; and
- Miscellaneous components including fire hydrant, drainage sump, and fencing.

Kerr Wood Leidal Consulting Engineers (KWL) was retained to design the work and provide tender support for the project. A tender (WR23-024 Well 5 Completion and Site Work) was issued to the market on BC Bid with a tender submission closing date of November 21, 2023. The city received one bid and the result is summarized in the table below.

**Table 1 – Bid Summary**

| Contractor                   | Price (Excluding GST) |
|------------------------------|-----------------------|
| Drake Excavating (2016) Ltd. | \$1,420,000           |

KWL reviewed the bid on behalf of the city and a tender evaluation has been included as Appendix A. The evaluation determined that Drake Excavating (2016) Ltd. will provide the best value to the city as they are a large civil contractor that have completed numerous projects in the lower mainland. In addition, the tender included several subcontractors that staff are familiar with that have performed electrical and well completion work in White Rock.

**FINANCIAL IMPLICATIONS**

The design and construction of the New Water Well #5 has approved funding of \$1.825M in the 2022/2023 Financial Plan and additional funds of \$800,000 are being requested in the draft 2024 Financial Plan to complete this project. Staff recommend Council bring forward the additional funds being requested in the draft 2024 Financial Plan to support this contract award.

A summary of the project budget is as follows:

**Table 3 – Project Budget**

|  | <b>Total</b>       |
|--|--------------------|
| <b>Total approved 2022/2023 funding (Project code 30048)</b>           | <b>\$1,825,000</b> |
| <b>Additional funding requested for 2024 (Project code 30048)</b>      | <b>\$800,000</b>   |
| Spent to date (as of November 24, 2023)                                | \$368,800          |
| Previously awarded / encumbered  | \$26,500           |
| Construction management and contract administration (Kerr Wood Leidal) | \$68,250           |
| New Water Well #5 Civil and Site Works (Drake Excavating (2016) Ltd.)  | \$1,420,000        |
| Provincial Well Licensing Application (approximation)                  | \$10,000           |
| SCADA control system upgrades (approximation)                          | \$100,000          |
| Fiber Optics (Jett Networks)   | \$10,000           |
| BC Hydro Undergrounding (approximation)                                | \$200,000          |
| Contingency (approximately 23%)  | \$420,000          |
| <b>Remaining budget</b>  | <b>\$1,450</b>     |

**COMMUNICATION AND COMMUNITY ENGAGEMENT IMPLICATIONS**

Engineering and Municipal Operations staff will work with Communications staff to deliver messaging to the community if deemed necessary in the event of any disruption in service to the public, although not anticipated.

**INTERDEPARTMENTAL INVOLVEMENT/IMPLICATIONS**

Staff will continue to work directly with Recreation and Culture to mitigate impacts of the construction on Centennial Arena, Peninsula Productions and the Center for Active Living operations and nearby parking lot. Recreation and Culture will be informed of the contractor’s schedule and laydown area prior to project commencement.

## **CLIMATE CHANGE IMPLICATIONS**

During the heat dome that occurred in summer 2021, demand for potable water reached the maximum capacity of the city's seven ground water wells. With projected climate change impacts, including more extreme weather events, it's prudent the city continues to increase our total well capacity.

## **ALIGNMENT WITH STRATEGIC PRIORITIES**

This project is in alignment with the Infrastructure Strategic Priority that identifies that the City plan, build and maintain infrastructure to enhance quality of life and civic service delivery while mitigating and adapting to environmental impacts. Specifically, this project ensures future infrastructure resiliency by making decisions through a long-term lens.

## **OPTIONS / RISKS / ALTERNATIVES**

The following option is available for Council's consideration:

1. Not approve the recommendation to award the Completion and Site Work for the New Water Well #5 to Drake Excavating (2016) Ltd., preventing the increase in the city's total well capacity. This in turn has a risk of compromising future water delivery and requiring the city's existing wells to operate a maximum capacity during extreme weather events, resulting in more frequent well replacements. Additionally, there is a risk that the city may not be able to keep up with water demand if the new well is not connected to the City's water system.

## **CONCLUSION**

Staff recommend that the New Water Well Completion and Site Work be awarded to Drake Excavating (2016) Ltd. in the amount of \$1,420,000 (excluding GST) and that Kerr Wood Leidal be awarded construction management and contract administration in the amount of \$68,250 (excluding GST). Staff also request a preauthorized contingency in the amount of \$420,000 (approximately 23% of remaining costs to complete this project) to support the project. Additionally, staff recommend that the Director, Engineering & Municipal Operations be authorized to execute all contract documentation required for the project to proceed. To move forward with this, Staff recommend Council approve additional funding of \$800,000 in 2024 for this project from the Water Infrastructure (capital) Reserve in advance of approving the 2024 Consolidated Five-Year Financial Plan.

Respectfully submitted,



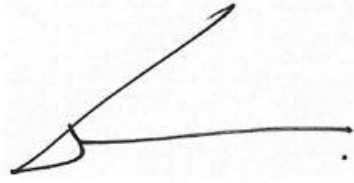
Corrine Haer, P.Eng.  
Manager, Engineering



Jim Gordon, P.Eng.  
Director, Engineering & Municipal Operations

**Comments from the Chief Administrative Officer**

I concur with the recommendations of this corporate report.

A handwritten signature in black ink, consisting of a series of connected loops and a long horizontal stroke extending to the right.

Guillermo Ferrero  
Chief Administrative Officer

Appendix A: Tender Evaluation