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Agenda Item #6
REPORT #JWDC 2010 - 07

REPORT TO THE JUAN DE FUCA WATER DISTRIBUTION COMMISSION
MEETING OF TUESDAY, 5 OCTOBER 2010

SUBJECT NEW HELGESEN PUMP STATION

ISSUE

To explain the selective bidder process for tendering for construction of new Helgesen Pump Station.

BACKGROUND

On October 1, 2009, the Capital Regional District (CRD) entered into an Agreement with Silver Creek Properties (661314 BC Ltd.) to construct Development Cost Charge (DCC) works, including a new Helgesen Pump Station and approximately 1,000 m of 300 mm pipe as part of their Stone Ridge Estates development in the District of Sooke. These works are identified as DCC work in the 2007 DCC Update Report. However, the Agreement is for the developer to front all costs of the pump station and water main and CRD will repay the developer from DCC monies as they are collected. As well, the CRD is not paying interest on the funding provided by the developer. The developer is using his own forces to construct the water main.

The developer retained the consulting engineering firm Genivar for the design of the new Helgesen Pump Station, which was acceptable to the CRD.

The estimated cost in the 2007 DCC Update Report for the pump station was $1.3M, which envisioned 3 - 85 hp pumps without emergency backup power. Emergency backup power was not included in the original concept as the station would pump directly to the reservoir. However, our detailed engineering analysis indicates that the new Henlyn reservoir is not needed for at least 20 years. The estimated cost of the new Henlyn Reservoir is $2.6M.

After reviewing development trends, it is apparent that a pump station designed with capacity for both domestic and fire protection is a more cost effective solution. Where a new station is responsible for delivering fire flow without a reservoir, emergency backup power is a requirement.

The proposed pump station will have 4 - 60 hp pumps and 1 - 15 hp pump to meet the domestic and fire flow requirements and a 300 KW Genset to provide emergency backup power. When the new Henlyn Reservoir is constructed, the small pump will be replaced by another 30 hp pump and the station will pump directly to the reservoir with no service connections. The station will be constructed next to the existing pump station and no additional land is required for the project.

The developer requires the facilities to be constructed and operational by January 2011. With a full public tender process, it would not be possible to meet this deadline. As such, Silver Creek tendered the project to two selected contractors, Knappett Projects Inc. and Scansa Construction. The low bid was Knappett Projects Inc. at $1.75M.

IMPLICATIONS

The developer elected an expedited tender process to ensure water is available to the second phase of his subdivision when it is required. The developer did intend use the public tender but encountered some design delays. Staff reviewed the tender results and are satisfied the prices represent fair market value for the project. Therefore, the cost to CRD is not negatively impacted by the expedited process.

Description of Work	Estimated Cost (2007 DCC Update Report)	Cost of Present Work
Pump Station	$1,102,000	$1,700,000
Pipelines	$1,647,000	$1,647,000
Reservoir	$2,709,000	0
Total Cost	**$5,458,000**	**$3,347,000**

In the 2007 DCC Update Report, the construction of the pump station, 2.2 km of pipeline to the reservoir and the reservoir, were envisioned as proceeding concurrently at a total cost of $5.458M. The logistics of extending the pipeline across numerous properties along with the high cost of the works made this project impossible for a developer to finance. As well, proceeding with a new 2,850 m^3 reservoir, which serves a limited amount of new development, will likely result in significant water quality issues due to the lack of turnover in the system. Delaying the reservoir for 20 years or until there is sufficient development, will resolve water quality issues and make DCC monies available for more urgent projects.

CONCLUSIONS

The selective bidder process is a compromise between the full public tender and using a sole source contractor. The process has achieved fair value for the construction of the work, while assisting the developer in meeting the constraints of bringing his development online.

The construction of a pump station with emergency backup power provides a better economical solution, better for water quality and allows development to proceed.

RECOMMENDATION

That the Juan de Fuca Water Distribution Commission receive this report for information.

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