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## CITY OF KELOWNA

# MEMORANDUM

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**Date:** March 5, 2008  
**File No.:** 5600-06 Water System Upgrades  
**To:** City Manager  
**From:** Water/Drainage Manager  
**Subject:** Award of Harvey Avenue Utility Upgrades (TE 08-01 and TE 08-02)

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### **RECOMMENDATION:**

THAT the Contract for the construction of the Harvey Avenue watermain and sewer upgrades be awarded to R355 Enterprises Ltd. for the amount of \$ 929,943.91, plus GST;

AND THAT the Contract for the construction of the Harvey Avenue watermain re-lining work be awarded to Insituform Technologies Limited for the amount of \$ 278,562.16, plus GST;

AND THAT the Mayor and City Clerk be authorized to execute the Contract on behalf of the City;

AND FURTHER THAT the 2008 Financial Plan for the Water Utility be amended by \$295,000.00 to reflect the new project cost with funding from the Water Utility Accumulated Surplus.

### **BACKGROUND:**

#### **Utility Upgrades TE08-01**

The City's Water Utility and Sanitary Sewer Utility are planning to replace existing infrastructure components along Harvey Avenue that are aging and showing signs of failure. The scope of the utility upgrades has been divided into two distinct phases. The section along Harvey Avenue, from Gordon Drive to Ethel Street will include both sewer and water upgrades, while the section from Ethel Street to Richter Street will include watermain upgrades only.

The major items of work for the Sewer and Water upgrade project (TE08-01) will include the following components:

- Excavation and replacement of 400m of watermain and service connections; from Ethel Street to Gordon Drive
- Excavation and replacement of 400m of sewer along Harvey Avenue; from Ethel Street to Gordon Drive
- Excavation and replacement of 150m of sewer along Gordon Drive at the Harvey Avenue intersection;
- Roadway and boulevard restoration work

In response to the City's Invitation to Tender TE08-01, three (3) bids were received as shown below.

<b>Tenderer</b>	<b>Tendered Price ( Excl GST)</b>
R355 Enterprises Ltd.	\$ 929,943.91
Peters Bros Construction	\$1,404,862.90
Copcan Contracting	\$1,844,866.67

*Handwritten signature*

Our Consultant has reviewed the bid submission and provided the City with a tender analysis and recommendation. The tender received from R355 Enterprises Ltd. contained minor arithmetic errors. The corrected tender price resulted in a decrease of \$47.25; however the order of tenders was not altered.

Prior to the tender closing, the Engineer's estimate for the project was \$996,810.40, plus GST.

### **Watermain Relining TE08-02**

The City's Water Utility is planning to upgrade the existing 200mm watermain along Harvey Avenue from Richter Street to Ethel Street. This existing ductile iron watermain, particularly in the area east of Richter Street, is showing signs of corrosion and is susceptible to failure. Sections of this watermain have been repaired in recent years, and staff has noted degradation of the pipe material while completing service connections for adjacent development projects. A corrosion study was undertaken and has identified that the soils in this area are considered corrosive. It is not possible to install cathodic protection at this stage however since the required electrical connectivity between the pipe sections was not installed with the original watermain.

Relining of the existing pipe, although new to Kelowna, is a proven technology and will result in less disruption to the existing highway, with a shorter installation period compared to standard open cut installation.

The Ministry of Transportation is planning to re-surface Highway 97 from Abbott Street to Gordon Drive with "Superpave" in the Fall of 2008, and in advance of this work, the City's Water Utility is striving to replace as much of this watermain as is practical.

The water main re-lining under this contract (TE08-02) will include the following works:

- 440m of re-lining and service connections on Harvey Avenue;
- 35m of re-lining on Richter Street;
- 55m of re-lining on Ethel Street;
- Hydrant lead replacement;
- Roadway and boulevard restoration work

In response to the City's Invitation to Tender TE08-02, one (1) bid was received as shown below.

<b>Tenderer</b>	<b>Tendered Price ( Excl GST)</b>
Insituform Technologies Ltd.	\$278,562.16

Our Consultant has reviewed the bid submission and provided the City with a tender analysis and recommendation. The tender received from Insituform Technologies Limited contained a minor arithmetic error, resulting in an increase of \$3.03 over the submitted amount.

Prior to the tender closing, the Engineer's estimate for the project was \$213,600.00, plus GST.

The City's utility construction crew will be actively involved with this section of the project to carry out the insertion pits for the re-lining material, complete the watermain connections, as well as completion of the restoration works.

### **Night-work**

Due to traffic volumes along the highway corridor, and as stipulated by the Ministry of Transportation, the permitted hours of work along the highway are restricted to 9pm until 6am. To inform the public and local residents of the proposed night time works, an Open House was held on February 21 at the Capri Hotel, and a separate meeting was also held at the Dorchester Retirement Centre on February 22. In addition, the project notice has been posted on the City's website and made available to the local media.

## FINANCIAL/BUDGETARY CONSIDERATIONS

Funding for TE08-01 is within the budgeted amounts of the 2008 Financial Plan and will be shared between the Water Utility and the Sewer Utility. Funds are available from the following accounts.

Water Utility	50-4700-W4500	\$ 422,016.25
Sewer Utility	40-4910-S4472	\$ 507,927.66
Total		\$ 929,943.91

Funding for the watermain re-lining portion of the project, when including the in-house construction costs, plus engineering and contingencies, will exceed the remaining budgeted amount. When considering the forthcoming superpave project by the Ministry of Transportation however it was deemed to be in the City's best interest to undertake as much upgrading as practical during this construction season.

The Lawrence Avenue utility upgrades have been dropped from the planned in-house construction schedule due to workload commitments, and staff is recommending the completion of this project as a higher priority item. Funds currently allocated for the Lawrence Avenue watermain upgrade will be directed towards completion of the Harvey Avenue watermain.

Additional funding will be required as presented below, to complete the re-lining work from Richter Street to Ethel Street. The planned capital improvement projects for 2009 will be scaled back accordingly, to permit completion of this section in 2008, prior to the Highway re-surfacing work.

### Summary of Watermain Upgrade Costs

Description	Estimated Amount
Contract TE08-01	\$422,016.25
Contract TE08-02	\$278,562.16
In-house Construction	\$215,000.00
Traffic Loop Restoration	\$45,000.00
Engineering	\$114,800.00
Contingency	\$118,680.00
<b>Total Project Costs for Water</b>	<b>\$1,194,058.41</b>
Current Budget (4700-W4500)	\$600,000.00
Budget Transfer from Lawrence Ave. (4710-W5270)	\$300,000.00
<i>Additional Funds Required</i>	<i>\$294,058.41</i>

**INTERNAL CIRCULATION TO:** Financial Planning Manager

**Considerations not applicable to this report:**

LEGAL/STATUTORY AUTHORITY:

LEGAL/STATUTORY PROCEDURAL REQUIREMENTS:

EXISTING POLICY:

PERSONNEL IMPLICATIONS:

TECHNICAL REQUIREMENTS:

EXTERNAL AGENCY/PUBLIC COMMENTS:

ALTERNATE RECOMMENDATION:

It is anticipated that both projects will start in mid March and be completed by May 17, 2008.



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Don Degen  
Water/Drainage Manager



Approved for inclusion:  
John Vos, Director of Works & Utilities