
CITY OF KELOWNA

MEMORANDUM

Date: January 6, 2004
File No.: 5600-05

To: City Manager

From: Water Manager

Subject: Award of Consulting Assignment – Ultraviolet Retrofit Design

RECOMMENDATION:

THAT Associated Engineering Ltd. be engaged to perform the Equipment Pre-selection, Design and Construction engineering services for the Ultraviolet Retrofit Design for the amount of \$382,101 which includes engineering design and construction services, geotechnical and environmental work and GST.

BACKGROUND:

The City of Kelowna Water Utility is now proceeding with its enhanced water treatment plan which includes a provision for Ultraviolet Light (UV) treatment. This plan includes provisions for UV equipment selection for all current and future pump stations, and detailed design and retrofit for existing pumping facilities. Locations include Poplar Point, Eldorado, Swick Road, and the future Cedar Creek pump stations. The work covered by this recommendation is for Stage 1 of the plan, which includes pre-selection of the equipment for all four pump stations and design and construction at the Poplar Point, Eldorado and Swick pump stations. As well, this project includes the replacement of the existing intake header at Poplar Point PS#1. Stage 2 of the plan, which includes design and construction of the Cedar Creek Pump Station, will follow at a later date as a separate project.

The complete assignment involves the UV equipment pre-selection for the four pump stations mentioned above, the detailed design, a public pre-construction meeting and construction engineering services required to supervise and inspect construction during the installation of the UV equipment at the Poplar Point, Eldorado and Swick pump stations. The assignment also includes the design and construction engineering services for the replacement of the existing intake header at the Poplar Point PS#1.

Proposals were requested from six Consulting Engineering firms, and four proposals were received. Urban Systems and Kerr Wood Leidal did not submit proposals. The proposals were evaluated by a review team, who reviewed the Consultants' project team, methodology, historical performance and project fees. The summary of the results of the received proposals is as follows:

	CONSULTANTS			
	Associated Eng.	Stantec	Earth Tech/ Dayton & Knight	CH2MHill/ CTQ
Fees (incl. gst)	\$382,101	\$354,179	\$451,293	\$444,746
TOTAL points	86.3	84.3	75.6	63.3

All Consultants were provided with the rating criteria within the Terms of Reference. Associated Engineering was determined to be the most qualified Consultant that provided the best value for the price. The Ultraviolet Retrofit Design project encompasses specific technical challenges due to restraints associated with retrofitting the existing facilities, such as high operating and transient pressures, physically restricted space for the installation of the new equipment and challenges related to equipment selection to ensure best price. Associated Engineering demonstrated a superior ability and effectiveness to address these and other project issues in the most effective manner. The lower cost proposal did not address these issues in a manner that was believed to be as effective. Associated's innovative solutions to the challenges of this project suggest:

- the possibility of significant capital and operational cost savings to the Utility;
- significant increase in the safety and reliability of the UV system; and,
- a more comprehensive and competitive bidding environment for the UV suppliers.

We intend to have Associated Engineering proceed immediately with the detailed design work and construction services to supervise the Ultraviolet Retrofit Design project. Construction of this work is anticipated to start in June of 2004 and be completed before the end of 2004.

The 2004 approved budget for this project is \$400,000.

Don Degen
Water Manager

John Vos
Director of Works & Utilities

cc Director of Financial Services