

то:	CHAIR AND MEMBERS CIVIC WORKS COMMITTEE MEETING ON DECEMBER 19, 2011
FROM:	RON STANDISH, P. ENG. DIRECTOR – WASTEWATER AND TREATMENT PLANNING, ENVIRONMENTAL AND ENGINEERING SERVICES
SUBJECT:	REQUEST TO INCREASE THE SCOPE OF RV ANDERSON AND ASSOCIATES RELATED TO PRELIMINARY WORK ON THE EXPANSION OF THE GREENWAY WASTEWATER TREATMENT PLANT (ES 2685)

# **RECOMMENDATION**

That, on the recommendation of the Director-Wastewater and Treatment, Planning, Environmental and Engineering Services, the following action **BE TAKEN** with respect to preliminary work for the expansion of the Greenway Wastewater Treatment Plant. (ES 2685)

(a) That the scope for RV Anderson Associates be increased from providing a preliminary design roadmap for the Greenway expansion to include technical services through the Expression of Interest (EOI), the request for Proposals (RFP) and the initial design submissions of the selected consultant. This will increase the total fees for RVA on this project from \$84,010 to \$171,510.

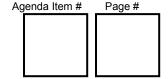
# PREVIOUS REPORTS PERTINENT TO THIS MATTER None BACKGROUND

# Purpose:

RV Anderson Associates (RVA) has been contracted, due to their extensive knowledge and the availability of key staff in London, to develop a roadmap for the Greenway Wastewater Treatment Plant expansion. The roadmap will be included in the Expression of Interest (EOI) and the Request for Proposals (RFP) and will serve to identify the construction phasing and the desired process configuration for potential project consultants. This report recommends expanding the initial scope of RVA to include the provision of technical expertise through consultant selection and project design, noting that RVA will not be eligible for the design portion of the project. Council approval is required as the total cost for RVA's services will increase from \$84,010 to \$171,510. Expanding the scope of work for RVA offers excellent value for the City through increased clarity and focus during the critical initial phases of the expansion.

## **Discussion:**

The Greenway Wastewater Treatment Plant has a rated capacity of 152 megalitres per day (MLD) and an additional 18 MLD is needed to service the expected 20 year growth in the south area of the city; expanding Greenway offers significant cost savings over building the new Southside Treatment Plant. RVA was contracted to do a roadmap for the expansion focused on the optimization of the existing tanks and processes with the addition of new infrastructure where needed. Their work also focused on utilizing the existing works for wet weather flow treatment. Identifying these opportunities at the beginning of the process will help define the scope and complexity of the work for the consultants interested in the main design work for the project.



The road mapping exercise utilized extensive computer modeling to identify bottlenecks and underutilized capacity in the plant's current configuration. A phasing sequence has been developed that will add the needed capacity while eliminating the bottlenecks and maximizing the existing capacity. Most importantly, the phasing strategy will allow the major treatment processes to remain online, thereby avoiding extra construction costs without compromising the effluent quality at the plant.

Due to the project's complexity and reliance on the computer modeling, RVA has been asked to expand their scope to include document preparation for the EOI and RFP processes in addition to assisting with consultant selection and review of design submissions. This will provide continuity between the modeling and design phases and will help keep the project focused by preventing revalidation of selected plant configurations and processes. We also anticipate that using RVA to prepare the documentation for the EOI and RFP will provide clarity for the proponents while their participation on the selection and design review group will be valuable when evaluating the technical feasibility of the proposals. Utilizing RVA's expertise in this fashion will help minimize the total costs for the project while expediting the design and construction phases. The expected costs for these works are estimated at close to \$30 million including \$2-3 million in consulting fees.

### **Conclusions:**

It is recommended that Council approve the increase in scope of work for RV Anderson related to the Greenway Wastewater Treatment Plant expansion. This will help to keep the project focused and will expedite the consultant selection and design component, while helping to ensure the new capacity is online when needed.

# **Acknowledgements:**

This report was prepared by Geordie Gauld, Division Manager, Wastewater and Treatment Operations.

SUBMITTED BY:	RECOMMENDED BY:	
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REVIEWED & CONCURRED BY:		
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Attach: c.c.