REGIONAL MUNICIPALITY OF OTTAWA-CARLETON REPORT
MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON RAPPORT

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Your File/V/Réf.

DATE 16 January 1997

TO/DEST. Co-ordinator
Corporate Services and Economic Development Committee

FROM/EXP. Environment and Transportation Commissioner

SUBJECT/OBJET **RICHMOND PUMPING STATION AND FORCEMAIN STUDY**

DEPARTMENTAL RECOMMENDATION

That the Corporate Services and Economic Development Committee and Council approve the awarding of the Richmond Pumping Station and Forcemain Study to Connelly McManus Engineering Limited, Nepean, for a total contract provision of $133,750.

INTRODUCTION

Since 1987, Goulbourn Township, with input from the Region, has spent almost $2.5 million on rehabilitation and improvements to the Richmond sanitary sewer system, about $500,000 of which was directly related to identifying and correcting sources of extraneous flow. In spite of these efforts, inflows to the Richmond Pumping Station occassionally exceed the rated capacity of the facilities, resulting in a by-pass of sewage to the Jock River during snowmelt and/or rainfall events. The study will investigate low-cost options for providing additional pumping capacity, thereby minimizing the risk of sewage by-passes. One option which will be investigated involves the use of the old Richmond Sewage Lagoons for temporary storage of excess sewage flows.

The study will also investigate options for providing an updated contingency plan for the management of sewage inflows in the event of a forcemain failure. (At 13.5 km, the Richmond forcemain is the longest in the Region, and one of the longest in Ontario).

Finally, the study will include the development of a decommissioning plan for the old pumping station, which was built to pump sewage from the Richmond area to the Richmond Lagoons, but was abandonned after the new pumping station and forcemain were built to deliver sewage from Richmond to the Glen Cairn Trunk Sewer at Hazeldean and Eagleson Rd. The old station has not been properly decommissioned, and presents a potential safety hazard to the public. During periods of high water levels in the Jock River, leakages through the old station into the new

station have been observed. Decommissioning of the old station will therefore eliminate both the safety hazard and a source of extraneous flow.

In order to meet the project objectives, a thorough review of the rated capacity of the system will be required. This review will include:

- computer modelling of dynamic pressures in the forcemain
- field inspections of the pumping station and all forcemain structures
- digging of test pits to expose, inspect, and remove samples of the forcemain for laboratory analysis of material properties

The consultant will identify and recommend the most cost-effective alternatives for meeting all project objectives. The report will comply with Phases 1 and 2 of the environmental assessment process.

DISCUSSION

Requests for proposals were forwarded to following five local consulting firms: McNeely Engineering Consultants Ltd. (Orléans), Novatech Engineering Consultants (Nepean), Connelly McManus Engineering Ltd. (Nepean), CH2M Gore & Storrie Ltd. (Ottawa), and J.L. Richards & Associates Ltd. (Ottawa).

The selection criteria outlined in the Request for Proposal included:

- proposed approach and understanding of scope
- company experience and specialization
- project team and resource allocation
- cost and proposed schedule
- completeness of the proposal submission

Based on the evaluation criteria, it is recommended that the study be awarded to Connelly McManus Engineering Ltd (CME). This company submitted a proposal which meets all of the project requirements, and which indicated a thorough understanding of scope. CME has a proven track record, and staff on the project team have conducted a significant number of pumping station/forcemain design and rehabilitation projects. Staff at CME were involved in the design and construction of the original pumping station and forcemain.

CONSULTATION

The study will meet the requirements of Phases 1 and 2 of the Class EA process for Municipal Water and Wastewater Projects. The review of alternatives proposed in the study and selection of a preferred solution will determine which Class EA Schedule is applicable. Public notification will be carried out as required in Phase 2 of the Class EA process, in addition to consultations with the Township of Goulbourn and concerned regulatory agencies.

EXPENDITURE JUSTIFICATION

This study is required to reduce the risk of sewage by-passes to the Jock River during storm events. In addition, this study will define an updated contingency plan in the event of a forcemain failure, and will eliminate a potential safety hazard with the decommissioning of the old Richmond Pumping Station. The study will also access short-term development constraints in the Richmond area and operations and maintenance concerns.

COMPLIANCE WITH REGIONAL OFFICIAL PLAN

This study is consistent with the objectives of the Regional Official Plan in that it will assess capacity for growth in the Richmond area as well as recommend improvements to minimize future operation and maintenance costs. Upgrading of the Richmond Forcemain was identified in the Wastewater Master Plan as an improvement for this area.

FINANCIAL STATEMENT

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Proposed Budget to Date	375,000
Total Committed	0
Balance Available	375,000
THIS REQUEST	133,750
Balance Remaining	241,250

Funds have been provided in the 1997 Capital Budget, Account No. 932-42056, Western Growth Area Sewer System Upgrade. This amount includes a base cost of $115,000, a contingency cost of $10,000, and G.S.T.

Approved by
M.J.E. Sheflin, P.Eng.

CR/

FINANCE DEPARTMENT COMMENT

Funds are available as indicated.

Approved by C. Colaiacovo
on behalf of the Finance Commissioner