

REGION OF OTTAWA-CARLETON  
RÉGION D'OTTAWA-CARLETON

REPORT  
RAPPORT

Our File/N/Réf. Your File/V/Réf.	<b>50 19-99-0015-V</b>
DATE	18 February 2000
TO/DEST.	A/Co-ordinator Corporate Services and Economic Development Committee
FROM/EXP.	Environment and Transportation Commissioner
SUBJECT/OBJET	<b>WEST NEPEAN COLLECTOR CRYSTAL BEACH/GRAHAM CREEK FLOW DIVERSION CONTRACT ETL00-0026 - CONSULTANT APPOINTMENT</b>

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**DEPARTMENTAL RECOMMENDATION**

**That the Corporate Services and Economic Development Committee and Council approve the appointment of CH2M Gore & Storrie Limited, Ottawa, to provide preliminary design, detailed design and construction services for the Crystal Beach/Graham Creek Flow Diversion for a total contract provision of \$494,340.**

**RATIONALE**

The 1997 Wastewater Master Plan for the Region of Ottawa-Carleton has identified insufficient capacity in the West Nepean Collector to convey all projected flows from the areas currently serviced by this sewer. The preferred method of providing additional sewer capacity is to re-direct some of the flow to the Lynnwood Collector System which currently has unused capacity.

The Wastewater Master Plan identified three separate diversions from the West Nepean Collector to the Lynnwood Collector. These are the Woodroffe Diversion, the Crystal Beach/Graham Creek Flow Diversion and the Mooney's Bay Collector Flow Diversion. The Woodroffe Diversion is currently under construction and the Crystal Beach/Graham Creek Flow Diversion is scheduled to be constructed next.

The Consultant Selection process was carried out in accordance with the Department's Guidelines for Procurement of Consulting Engineering Services.

In the first step, a Request for Qualifications (RFQ) was issued on the open Internet-based MERX bid distribution system by Supply Management Division of the Finance Department in conjunction with staff

of the Environment and Transportation Department. A total of six Consultants submitted Statements of Qualifications in response to the RFQ. These submissions were evaluated by a panel comprised of staff from the Environment and Transportation Department. The three Consulting firms of J.L. Richards & Associates Limited, Dillon Consulting Limited and CH2M Gore & Storrie Limited were selected for a detailed Request for Proposals (RFP).

In the second step, a Request for Proposal (RFP) was issued to each of the three short-listed Consultants. Proposals submitted were evaluated by a panel which was facilitated by a Purchasing Officer from the Supply Management Division. The proposals were rated using the following evaluation criteria:

- Experience, qualifications and availability of team members;
- Understanding of objectives;
- Quality of approach and methodology;
- Proposed work plan, schedule and level of effort;
- Creativity, innovation and vision;
- Financial.

The evaluation concluded that the proposal submitted by CH2M Gore & Storrie Limited represented best overall value to the Region.

The work programme includes the following elements:

#### Finalization of Preliminary Design

- Finalize size and capacity of pumping station, forcemain and related structures;
- Finalize the location of the diversion chamber, pumping station and forcemain;
- Carry out a utility circulation;
- Identify land requirements for all the infrastructure and assist in negotiating with current landowner(s);
- Finalize the operating strategy for this facility as an integrated component of the sewer collection system (installation to be incorporated into the existing SCADA System);
- Identify required approvals and initiate the approval process;
- Identify health, safety, environmental and maintenance issues related to this facility which will have to be addressed;
- Carry out a geotechnical investigation;

- Develop a cost estimate and schedule for the design, construction and commissioning of the facility;
- Develop and implement a public consultation/information program.

#### Detailed Design

- Carry out a detailed design of this facility. This will result in a set of design drawings and specifications ready for tender. Detailed design will address all health, safety, environmental and maintenance issues identified in the preliminary design;
- Provide testing/performance criteria for all components of the facility;
- Develop detailed commissioning plan;
- Develop training and maintenance program for operators of the facility;
- Finalize all the approvals;
- Assist in the tendering process up to award of the construction contract;
- Update the cost estimate and schedule for the project.

#### Contract Administration

- Chairing and minute-taking of regular project co-ordination meetings;
- Verification, approval and issuing of contractor's monthly billings, the justification and preparation of Change Orders, the review and evaluation of contractor's claims;
- Review of all submittals including shop drawings, and approval of alternate materials, the review of alternate methods and equipment requested by the contractor;
- Review and resolution of contractual disputes arising from conflicting interpretations of the contract documents;
- Monitoring of the contractor's work with regards to work schedules;
- Assisting in securing from authorities the necessary construction approvals and permits;
- Preparation of record drawings, the review/preparation of maintenance and operation manuals;

- Advising the public of the ongoing work, answering questions and assisting in scheduling to lessen impact of construction on the public;
- Carrying out the commissioning plan including providing technical support during commissioning and warranty period.

### Inspection

- Review of the contractor's work to ensure compliance with the requirements of the contract documents;
- Surveying to confirm field stakeout for the layout control, location of all permanent structures, and calculation of pay quantities for the work performed;
- Calculation and recording of quantities and the preparation of progress and final payment certificates, the compilation of survey notes, daily diaries, records and reports substantiating progress during construction and on completion of the work;
- Routine testing of backfill, concrete and other materials and systems to verify conformance with the specifications;
- Monitoring of a commissioning program to test the performance of all systems constructed before final approval;
- Performing final inspections at the conclusion of the construction contract and the preparation and verification of deficiency reports.

### Project Management

Establish project schedule and budget. Schedule to include all the key components/tasks.

The length of this assignment is approximately 20 months, therefore it will extend beyond 31 December 2000.

The Department recommends the award of Contract ETL00-0026 to CH2M Gore & Storrie Limited with a contract provision of \$420,000, plus a \$42,000 contingency and G.S.T. of \$32,340, for a total of \$494,340.

### CONSULTATION

This project obtained a Schedule 'B' EA approval as a part of the Wastewater Master Plan approval process. In the Schedule 'B' process, a Project File is maintained to clearly demonstrate that Phase 1 and 2 of the EA process has been followed. Upon completion of Phase 2, a Notice of Completion is issued followed by a minimum 30 calendar day period during which the public and agencies can review

the documentation and provide comments. If no “bump-up” requests are received during this 30 day period or if any are received and subsequently denied by the Minister, the project can then proceed to the design and construction phase.

#### EXPENDITURE JUSTIFICATION

Implementation of this project is required to address insufficient capacity in the West Nepean Collector as identified in the Wastewater Master Plan and to allow continued growth in the area serviced by this Collector.

#### FINANCIAL STATEMENT AND APPROVAL

	\$
Approved Budget to Date	981,974
Total Paid and Committed	<u>(235,526)</u>
Balance Available	746,448
THIS REQUEST	<u>(494,340)</u>
Balance Remaining	<u>252,108</u>

Funds are available in the 2000 Capital Budget, Order No. 900227, Crystal Beach/Graham Creek Flow Diversion, (Reference Page 398), Purchase Requisition No. 10045497.

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

TW/jw

#### SUPPLY MANAGEMENT DIVISION

I concur.

*G. Ford on behalf of*  
*the Finance Commissioner*