

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

REPORT
RAPPORT

Our File/N/Réf. **50 18-97-0005V**
Your File/V/Réf.

DATE 2 April 1998

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

FROM/EXP. Environment and Transportation Commissioner

SUBJECT/OBJET **FLEET STREET PUMPING STATION**
 DISCHARGE PIPING
 CONTRACT CZ 0305

DEPARTMENTAL RECOMMENDATION

That the Corporate Services and Economic Development Committee and Council approve the award of Contract CZ 0305 to Delcan Corporation, Ottawa, for engineering services for the detailed design and construction services for the Fleet Street Pumping Station Discharge Piping Replacement in the amount of \$281,800.

BACKGROUND

The Fleet Street Pumping Station pumps potable water from the Lemieux Island Water Purification Plant into the distribution system through six pre -1915 watermains ranging in size from 380 mm to 910 mm diameter. Between the pumping station and Slater Street there are a number of interconnections, many valves and connections to smaller distribution watermains which make the existing piping configuration problematic. This discharge piping is past normal life expectancy and the main reasons for replacement with a single 1500 mm diameter watermain include: elimination of significant water loss, reduction of excessive hydraulic losses due to the existing arrangement of the piping and increased roughness from corrosion (both increase pumping energy requirements), overcoming operational and maintenance problems, and reduction of costly and difficult maintenance of the infrastructure due to the age and deteriorating condition.

Replacement of the existing watermains on Bronson Avenue, two blocks south of Slater Street to Gloucester Street, is also proposed under this programme. This additional watermain replacement is identified as part of the watermain rehabilitation in the core area. The new Bronson Avenue watermain will tie into the Gloucester Street watermain which is scheduled for rehabilitation in 1998 and connecting at this location will significantly improve the performance

and reliability of the water distribution network in the core area. Additional benefits of replacing the watermain on Bronson Avenue under this programme include: construction cost savings by ordering all 1500 mm piping in one contract (reducing start-up costs) and by eliminating temporary connections to the existing Bronson and Slater Street watermains, providing increased reliability for the maintenance and operations of the infrastructure, traffic disruption in the Bronson and Slater Street intersection would be reduced to one construction season eliminating additional construction in the intersection in several years time, and, significant improvement to the system hydraulics above those realized by the original programme scope (which further reduces pumping energy requirements).

In summary the capital programme works include:

- 270 m of 600 mm diameter watermain from Fleet Street to Wellington Street (1998);
- Station discharge header connecting the five pumps to the 1500 mm diameter discharge piping (1999);
- 180 m of 1500 mm diameter watermain from the discharge header to Bronson Avenue and Albert Street (1999);
- 105 meters of 1500 mm diameter watermain from Slater Street to Laurier Avenue (1999);
- 75 meters of 1050 mm diameter watermain from Laurier Avenue to Gloucester Street (1999).

RATIONALE

Requests for proposals were sent to five local consulting engineering firms. Delcan Corporation was selected for this work based on the strength of their proposal, experience with the Fleet Street Pumping Station facility and the firm's expertise.

This award is for the detailed design and construction administrative components of the engineering services and is broken down as follows:

Design - Discharge header	\$69,000
Design - Wellington St. & Commissioner St. Watermains	\$55,000
Design - Bronson St. Watermain	\$53,000
Construction Services	<u>\$63,000</u>
Total (Excluding G.S.T.)	\$240,000

The Department recommends the award of Contract CZ 0305 in the amount of \$256,800 including G.S.T. In addition, a contingency allowance in the amount of \$25,000 is requested to allow for variations, bringing the total for this request to \$281,800.

CONSULTATION

The public consultation process is not applicable.

EXPENDITURE JUSTIFICATION

The approximate age of the existing infrastructure is 83 years. It has reached the end of its forecast life expectancy. This expenditure will allow for timely replacement.

FINANCIAL STATEMENT

	\$
Approved Budget to Date	700,000
Total Paid & Committed	<u>(48,888)</u>
Balance Available	651,112
THIS REQUEST	<u>(281,800)</u>
Balance Remaining	<u>369,312</u>

Funds were provided in the 1997 Capital Budget, Account Number 922-41925-3603, (Reference page 267).

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

MS/jw

FINANCE DEPARTMENT COMMENT

Funds are available as indicated.

*Approved by C. Colaiacovo
on behalf of the Finance Commissioner*