

REGION OF OTTAWA-CARLETON
RÉGION D'OTTAWA-CARLETON

MEMORANDUM
NOTE DE SERVICE

Our File/N/Réf.
 Your File/V/Réf.

DATE 08 October 1999

TO/DEST. The Chair and Members of Council

FROM/EXP. Environment and Transportation Acting Deputy Commissioner

SUBJECT/OBJET **CATHODIC PROTECTION PROGRAM
 BACKFILL MATERIAL -
 CONTRACT NOS. CW 9616 AND CW 9626
 (IN ACCORDANCE WITH *CORPORATE POLICY MANUAL*
 SECTION 4.6.9)**

INTRODUCTION

Occasionally, the Department is faced with an urgent requirement and is unable to meet the standard report routing process to Committee. Section 4.6.9 of the Corporate Policy Manual addresses such situations. The Water Division recently followed this section of the Corporate Policy Manual.

BACKGROUND

The Water Division, as part of a long term maintenance strategy, conducts a Cathodic Protection Program to protect the water distribution infrastructure. Anodes are welded directly to the watermain pipe at pre-determined intervals to prevent further corrosion and substantially extend infrastructure longevity.

The technique used to install the anodes requires a supply of stone screening slurry backfill material to fill all installation holes. Field trials last year resulted in the Region implementing a new method of backfilling. This year, Centennial Construction Rockland Ltd. was the successful bidder for the provision of backfill. Unfortunately, they were unable to provide and place the backfill quantities necessary to complete the contract.

INFORMATION PREVIOUSLY DISTRIBUTED
 TO BE LISTED ON CORPORATE
 SERVICES AND ECONOMIC DEVELOPMENT
 COMMITTEE AGENDA - 2 November 1999

It was agreed with Centennial Construction Rockland Ltd. to share the backfill provision with Mirad Mobile Mix Ltd., the next lowest bidder and the provider of the backfill material from the previous year. Centennial Construction Rockland Ltd., Contract No. CW 9616 (\$43,099.60 authority), provides backfill for the eastern program area anode installations and Mirad Mobile Mix Ltd., Contract No. CW 9626 (\$31,377.75 authority) provides for the western/southern program areas.

Operational difficulties related to native soil conditions and co-ordination with the overlay programs of local municipalities, resulted in unexpected changes to the Program schedule that was originally established for this season. This caused disruption to the already approved Delegated Authority Transaction Approval (DATA) authorities granted for the supply and placement of backfill material required for the Program. As well, the quantity of backfill material estimated for this year's program was underestimated.

DISCUSSION

Through the course of this season's Cathodic Protection Program, the anode installation schedule was dramatically affected by three key factors. (1) Centennial Construction Rockland Ltd. continued to have difficulty providing backfill in a timely manner even with the reduced supply requirement; (2) large boulders were discovered in the subgrade soil of the eastern area, making it impossible in some cases, to access the watermain using the excavation equipment; (3) attempts to co-ordinate anode installations with the local municipality overlay programs for the purpose of reducing further reinstatement costs required adjustments to the Program's original schedule.

As a result, the number of anode installations and backfill requirements in the Centennial Construction Rockland Ltd. eastern area was greatly reduced. In order to keep the anode program moving and respond to local asphalt overlay programs, installation efforts were expanded in the western area resulting in an increased demand for backfill supplied by Mirad Mobile Mix Ltd.

Backfill material estimates for this year had been based on a previously conducted pilot project. In addition to the new method of backfilling being undertaken, a lack of historical data made it difficult to estimate the quantity of material required for this year.

To date, Centennial Construction Rockland Ltd. has \$37,282.27 remaining authority and Mirad Mobile Mix Ltd., based on backfill quantities delivered up to 30 September 1999, will have exceeded its authority by \$49,929.35. The remaining authority for Centennial Construction Rockland Ltd. will not be utilized and the company is in agreement with this approach.

Once the Water Division became aware of the problem, Mirad Mobile Mix Ltd. was informed they were well extended beyond their granted authority and to cease backfill delivery and placement.

Additional funds have been paid to Mirad Mobile Mix Ltd. for material already supplied and placed, in the amount of \$49,929.35. This equates to an amount of \$12,647.08 above the original total authority requested at the start of the 1999 season.

PUBLIC CONSULTATION

The public consultation process is not applicable.

EXPENDITURE JUSTIFICATION

The Cathodic Protection Program is a proactive management method which extends the longevity of watermain infrastructure assets and is a cost saving mechanism for capital rehabilitation and emergency repairs. Without the Program, the Water Division could not keep up with replacement demand and the number of watermain breaks (failures) would escalate.

Even though operational and supply difficulties, co-ordination efforts with local municipalities, and backfill underestimates have challenged this year's Cathodic Protection Program, the benefits the Program provide are significant. Additional funds have been expended in order to deal effectively with these challenges.

FINANCIAL IMPLICATIONS

Funds in the amount of \$49,929 were available in the 1999 Capital Budget, Account No. 922-41924 (Order No. 900197), Water Distribution Rehabilitation Programme (Reference Page No. 350). Purchase Requisition No. 10023452. The remaining balance available in the account is \$3,656,025.

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

FINANCE DEPARTMENT COMMENT

Funds were available as indicated.

*Approved by T. Fedec
on behalf of the Finance Commissioner*