ITEM 14

MANAGER'S REPORT NO. 71

COUNCIL MEETING Sept. 24/73

# 14. Re: Design Services for Water Mains in the Big Bend Area

Following is a request from the Municipal Engineer for authorization to retain an engineering consulting firm to design water mains in the Big Bend Area.

#### RECOMMENDATIONS:

THAT Dayton and Knight Ltd. be retained for performance of services in Phase I of our request for proposals for a fee not to exceed \$13,500 as stipulated in their proposal dated September 20, 1973; and

THAT the expenditure for services rendered be charged to C.I.P. Code 20-02 (Mains, Pumping Stations, etc.); and

THAT an Engineering Agreement be entered into with Dayton and Knight Ltd. for the performance of the required services; and

THAT the Mayor and Municipal Clerk be empowered to sign the necessary Engineering Agreement.

Engineering Department 20 September, 1973.

Mr. M.J. Shelley MUNICIPAL MANAGER.

Dear Sir:

# Re: Engineering Services for Water Main in Big Bend Area

Our C.I.P. Budget for 1973 calls for the replacement and provision of certain water mains in the Big Bend Area, which area is quite highly in need of water main improvements. The design work involved is somewhat specialized, and furthermore, existing Engineering Department design staff are not in a position, in terms of workload, to undertake the desired design at the present time.

In response to our request by letter dated 12 September, 1973, (copy attached), proposals for engineering services stipulated in our letter have been received from Dayton and Knight Ltd. and Web Engineering Ltd., both of which firms specialize in this work.

The proposals undertake to perform the required services for the following fees:

# 1. Dayton and Knight Ltd.

Phase I:-- Not to exceed \$13,500 based on Scale I of the minimum scales recommended by the Association of Professional Engineers of British Columbia.

Phase II:-- A top limit for either general or resident supervision of construction not be set until contractor's schedule is determined. Cost of supervision varies widely depending on who does the work, when it is done, and how long it takes.

ITEM 14
MANAGER'S REPORT NO. 71
COUNCIL MEETING Sept. 24/73

# Web Engineering Ltd.

Phase I:-- Not to exceed \$14,680 based on payroll cost plus 100% (Scale I of minimum scales recommended by the Association of Professional Engineers of British Columbia) plus an additional \$1,000 for investigation of necessity of cathodic protection if required by the Corporation.

Phase II:-- Not to exceed \$12,800 for two-month construction period plus \$6,400 per additional month or prorated for each portion thereof, based on payroll cost plus 85% (Scale I as above).

It is doubtful whether or not we would find it necessary to retain services for Phase II as our <u>attached</u> letter stipulates. We are primarily concerned with the completion of Phase I and, therefore, consider it advisable to obtain these services at lowest cost.

#### IT IS RECOMMENDED:

That Dayton and Knight Ltd. be retained for performance of services in Phase I of our request for proposals for a fee not to exceed \$13,500 as stipulated in their proposal dated 20 September, 1973, and,

That an Engineering Agreement be entered into with Dayton and Knight Ltd. for the per formance of the required services, and,

That the Mayor and Municipal Clerk be empowered to sign the necessary Engineering Agreement.

Respectfully submitted,

E.E. Olson
MUNICIPAL ENGINEER

EEO/AP: op

Att.

c.c. ( ) Municipal Treasurer

( ) Municipal Solicitor

ITEM 14

MANAGER'S REPORT NO. 71

COUNCIL MEETING Sept. 24/73



# THE CORPORATION OF THE DISTRICT OF BURNABY

MUNICIPAL HALL 4949 CANADA WAY, BURNABY 2, B.C.

TELEPHONE 299-7211

September 12, 1973

The Office of the Engineer

Dayton & Knight Ltd. P.O. Box 247 West Vancouver, B. C.

Dear Sirs:

Re: Engineering Services for design and construction of water mains

Further to our discussion on the above subject on 12 September, 1973 we attach an outline of the engineering services we require and invite you to submit a proposal for the services specified.

As you are aware, we find it necessary that you stipulate an upset limite for your fee for this work and therefore suggest that you do so if you consider it possible. The work is divided into two phases which you should evaluate spearately as we do not guarantee that the services in Phase II will necessarily follow the completion of Phase I.

We would appreciate receiving your proposal by 20 September, 1973.

Yours truly,

E. E. Olson MUNICIPAL ENGINEER

NP

by: A. Phillips
DESIGN ENGINEER

AP:wlb / Design Engineer

Required Service from Consulting Engineer for design construction of water mains as follows:

20" diameter 10th Avenue and Marshland between Marine Drive and Wiggins St.

12" diameter Willard - 14th Avenue to 10th Avenue 14th Avenue - Meadow to Willard Street Meadow 400 feet north from 14th Avenue

## Phase I

- 1. Field Survey to establish location and grades for mains.
- 2. Study of sub-soil conditions.
- 3. Design of mains and all appurtenances including connections to existing mains.
- 4. Preparation of bill of quantities, specifications and tender-contract documents based on Corporation standards.
- 5. Cost estimate for the work.

This work to be completed by 31 October, 1973

### Phase II

- 1. Provide office administration of construction, including checking of construction proposals, interpretation of drawings and specifications to the contractor, evaluation of equipment to be installed for approval by the Corporation, routine visits by senior Engineering personnel to inspect the execution of the work, certification of interim and final payments to the contractor and preparation of as-built record drawings.
- 2. Provision of resident inspection and survey staff for detailed layout of all work and supervision of construction of the work as authorized by the Corporation.
- 3. Maintain a daily work diary of each days work for submission to the Corporation at completion of construction, submit to the Corporation a weekly progress report on the progress of the work, maintain continuous close liaison with the Corporation throughout the course of construction, in order to ensure that all work is performed to the satisfaction of the Corporation.