ITEM	16
MANAGER'S REPORT NO.	46
COUNCIL MEETING	1980 07 07

RE: ENGINEERING SERVICES FOR THE DESIGN OF:
(a) BYRNE ROAD FLOOD CONTROL PUMP STATION
(b) WIGGINS STREET STORM DRAINAGE EXTENSION

Following is a report from the Municipal Engineer regarding proposals for engineering services.

RECOMMENDATION:

1. THAT the recommendation of the Municipal Engineer be adopted.

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TO: MUNICIPAL MANAGER 80 07 02

FROM: MUNICIPAL ENGINEER

SUBJECT: ENGINEERING SERVICES FOR THE DESIGN OF
1. BYRNE ROAD FLOOD CONTROL PUMP STATION
2. WIGGINS STREET STORM DRAINAGE EXTENSION

RECOMMENDATION:

THAT the Corporation of the District of Burnaby enter into an engineering agreement with Kerr, Wood Leidal Associates Ltd. for the supply of engineering services for the design of the Byrne Road flood control pump station and the design of the Wiggins Street storm drainage extension in accordance with the terms of reference set out by the Municipal Engineer's letter dated 80 06 05 for an estimated fee of $16,000 to $19,500 for the design fees and a further $6,800 for site supervision and contract administration.

REPORT

Subsequent to Council's approval for the 1980 Storm Drainage Program budget, your Municipal Engineer has invited proposals from four engineering consultants who are considered highly qualified for this type of work. The terms of reference given each of these consultants is the letter from your Municipal Engineer dated 80 06 05, a copy of which is attached for your reference.

Of the four consultants that were invited to submit a proposal for their services, only one consultant was unable to submit a proposal as he felt that the demands of his Company's current work load would prevent them from providing an adequate level of service. A brief summary of the proposals submitted by the other three consulting firms is as follows:

(cont'd)

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1. Web Engineering Ltd. - This proposal outlines Web Engineering Ltd.'s capabilities in this area of designing drainage facilities and notes their familiarity with the area in question because of their prior involvement in feasibility studies in the Big Bend area. Their proposal also indicates that they have the necessary staff available to start this project immediately. The proposal does not set out any estimate of engineering fees, however, it does set out a schedule of hourly charge rates for the various categories of principal design technician, draftsman, etc.

2. Dayton & Knight Ltd. - This proposal is presented with considerable detail outlining their plan of approach, the individual engineers and support staff that will be assigned to this project should they be successful, a list of sub-consultants for geotechnical and structural work as well as a very detailed schedule for design approval and construction. Their proposal also includes a reference to a pre designed brief which would be to review the various criteria set out in the earlier reports that were noted in the Engineer's terms of reference. This would give consideration to the latest techniques in storm drainage management.

   Their proposal includes a partial fee structure, namely, for the first phase, the pre designed brief, they propose a total fee not to exceed $14,000. With respect to the design phase, they suggest a fee ranging between eight and twelve percent of the estimated construction cost which we believe could be in the range of $200,000 to $250,000. For the contract supervision phase their proposal estimates approximately $6,100 per month and according to their proposed schedule this construction phase would extend over a three to four month period.

3. Kerr, Wood Leidal Associates Ltd. - This proposal concisely outlines the scope of work as given them by the Engineer's terms of reference and clearly indicates their understanding of these terms of reference. Their proposal also includes a preliminary schedule for designing and constructing the facilities. Their proposal indicates the principals and supporting staff that would become the project team for this project should they be successful as well as including the name of a geotechnical sub-consultant should it become necessary to consult with one. They have estimated that their design fees including the services of the geotechnical sub-consultant to range between $16,000 and $19,500 for the design phase of this project with a further $4,500 per month estimate for site supervision and contract administration, which they suggest in their proposal would take approximately one and one-half months.

Having given careful consideration to all aspects of each of the proposals received it is my conclusion that the proposal submitted by Kerr, Wood Leidal Associates Ltd. is the most "attractive" proposal and it is therefore my recommendation that the Corporation of Burnaby enter into a standard Engineering Agreement with Kerr, Wood Leidal Associates Ltd. to provide the necessary engineering services as outlined in the Municipal Engineer's terms of reference dated 80 06 05 and in accordance with the consultant's proposal for an estimated fee ranging between $16,000 and $19,500 for the design phase and an estimated $6,800 for the site supervision and contract administration phase.

MUNICIPAL ENGINEER

VW:sp
Attach.

cc: ( ) Municipal Treasurer

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80 06 05

Kerr Wood Leidal Associates Ltd.
144-B West 16th Street
North Vancouver, B. C.
V7M 1T4

Dear Sirs:

RE: ENGINEERING SERVICES FOR THE DESIGN OF:
1. Byrne Rodd Flood Control Pump Station
2. Wiggins Street Storm Drainage Extension

Burnaby Municipal Council has given approval to the 1980 Storm Drainage Program and accordingly I would hereby request that your firm give consideration to submitting a proposal for engineering services for the design of the following two projects which are part of the 1980 Drainage Program:

1. Byrne Road Flood Control Pump Station
2. Extension of the Storm Drainage Facility on Wiggins Street.

With respect to each of the two jobs mentioned, we are looking for a proposal which contains a complete realm of engineering services including field work, design, contract preparation and supervision, and resident field inspection.

With reppect to the Byrne Road flood control pump station design, we are using as a basic criteria the Big Bend Area Dyking and Drainage Report as prepared by Web Engineering Ltd. in 1970 March. As we have limited copies of this report I would suggest that you review our copy of the report and request copies of those portions which you feel would be pertinent to your submission. In general, the pump station at the foot of Byrne Road is to serve an area of approximately 970 hectares (2,400 acres).

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With respect to the second project mentioned above, namely the extension of the Wiggins Street storm drainage facility, we are basically trying to provide an outlet for a drainage area north of the Canadian National Railway line to help relieve a flooding problem at the intersection of Wiggins and Marshland Avenue. The principal part of this second project is to design a storm sewer to be constructed through the railway embankment in compliance with railway criteria. It may also involve some re-grading of the ditch as it runs northward from the railway towards the intersection of Marshland and Wiggins. The existing inlet immediately south of the railway embankment was done under our design No. 790501, plans of which are available in this Department. The tributary drainage area for this facility is shown on the attached sketch.

This work will be done under a standard Corporation of Burnaby Engineering Agreement and as it is our desire to have these works completed this year we would appreciate receiving your proposal by not later than 1980 June 17, which should then give us sufficient time to have a report before Council to ratify the hiring of the successful consultant by their meeting of 1980 June 23. Should you have any questions regarding this proposal please direct same to the undersigned.

Yours truly,

E. E. Olson, P. Eng.,
MUNICIPAL ENGINEER

by: V. N. Wiebe, P. Eng.,
DESIGN ENGINEER

VNW:sp
Attach.