

ITEM 3
MANAGER'S REPORT NO. 21
COUNCIL MEETING 91/03/25

TO: MUNICIPAL MANAGER 1991 MARCH 20
FROM: DIRECTOR ENGINEERING
SUBJECT: GRIFFITHS/19TH/20TH STREET MAJOR ROAD PROJECT
PURPOSE: To seek Council approval to award an engineering agreement for construction supervision of the Griffiths/19th/20th Street Major Road Project Phase I, and to bring forward a Capital Works Expenditure Bylaw to finance the construction.

RECOMMENDATIONS:

1. THAT a Capital Works Machinery and Equipment Reserve Fund Expenditure Bylaw in the amount of \$2.5 million be brought forward for construction of the Griffiths/19th/20th Street Major Road Project Phase I.
2. THAT Associated Engineering (B.C.) Ltd. be retained to provide engineering consulting services for construction supervision of the Griffiths/19th/20th Street Major Road Project Phase I, upon adoption of the bylaw to fund this project.

REPORT

INTRODUCTION

The Griffiths/19th/20th project is currently scheduled to be constructed over a period of two years. Phase I, which is planned for construction in 1991, will include the portion of Griffiths Avenue between Kingsway and Edmonds Street. Phase II will cover the portion of 19th/20th Streets between Edmonds Street and 10th Avenue and is scheduled to be constructed in 1992. This schedule will facilitate coordination with the proposed off-site works required as part of the proposed B.C. Hydro development. The Hydro development would also provide the Municipality with the bulk of outstanding right-of-way in this section.

In order to meet this schedule and take maximum advantage of the 1991 construction season, a professional engineering consultant is required to provide services of construction supervision. More specifically, the consulting services we require include contract preparation and administration, survey for construction layout, resident field inspection, and general engineering supervision.

Engineering proposals for these projects were invited from three (3) consulting engineering firms, each of which has had extensive experience in supervising works construction calling for expertise in this particular discipline of professional civil engineering.

ENGINEERING PROPOSALS

The three companies invited to propose on the project are all well established firms having engineers and technicians on staff who are highly qualified in this work. The companies were:

- . UMA Engineering
 - . Associated Engineering (B.C.) Ltd.
 - . N.D. Lea Consultants Ltd.
- (Cont.)

The consultants were asked to provide details of the experience and expertise of each of their respective firms and assigned staff related to this type of project, together with details of their intended method of approach to the project. They were also requested to submit a detailed work schedule and a schedule of "per diem" rates for their services.

PROPOSAL REVIEW

Proposal submissions were received from all three firms. **111**

The submitted proposals were reviewed by a selection committee comprised of senior members of the Engineering Department. This review process included assessment of the proposals based on predetermined factors such as: the consultant's company and assigned staff experience and expertise, proven ability based upon the consultant's previous work history in Burnaby (either for the Corporation or otherwise), list of references, understanding of the nature of the work, proposed methodology, innovation, total cost implications, scheduling, and public relations.

Individual assessment by members of the selection committee of each of the factors on a scored points basis provided a quantitative method for the consultant evaluation process. It should be noted that the consultants are considered competent to do the work and the quantitative rating represented an appraisal of the Corporation's particular needs in this specific major road program.

CONSULTANT SELECTION

The evaluation rating method established Associated Engineering (B.C.) Ltd. as the leading candidate who would most closely meet the needs of the Corporation. Associated Engineering (B.C.) Ltd. have extensive experience in major road type works in Burnaby as well as surrounding municipalities. Their staff demonstrated a complete understanding of the project and concern for the sensitive nature of this particular type of work.

The consultants did not submit a fixed maximum fee, primarily because it is unrealistic to do so given the number of variables with potential to impact on their fees. The preferred method of remuneration would be on a per diem basis for actual hours worked. Your Director Engineering concurs that this method of payment is the most suitable for work of this nature.

As mentioned, total costs implications was a factor in the evaluation process. Associated Engineering (B.C.) Ltd. submitted a proposal which was competitive in terms of per diem rates and in terms of total cost effectiveness.

It is therefore recommended that the firm of Associated Engineering (B.C.) Ltd. be retained to provide engineering consultant services for construction supervision of the Phase I Griffiths/19th/20th Street Major Road Project upon adoption of the bylaw to fund this project. The Purchasing Agent concurs with this recommendation.

The consultant and the Corporation will enter into an engineering agreement which includes the Corporation's Terms of Reference and the consultant's Engineering Proposal as integral parts.

FINANCING AND AGREEMENT AWARD

The anticipated construction cost of Phase I is \$2.5 million which includes contract costs, engineering, utility relocations, ancillary works and contingency requirements. The preliminary estimate of the contracted construction component for the work under Phase I is \$1.75 million. Engineering fees for construction supervision for previous works of a similar nature have equated to approximately 8% of total construction cost. Therefore the estimated value of the recommended assignment could reach 8% of \$1.75 million = \$150,000 (including GST) and therefore we recommend the budget be set at \$150,000..

It is in the Corporation's interest to tender the construction works as soon as possible to take advantage of:

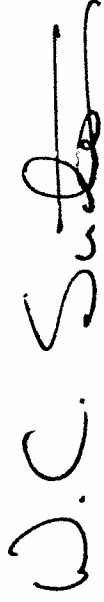
- a competitive bidding market
- a full construction season

Award of an engineering agreement at this juncture would permit the consultant to commence work on preparation of the tender documents and place us in a position to take advantage of optimum timing.

The 1990-1994 Capital Budget includes funds for property acquisitions, design and construction in 1990 and 1991. At present \$1.7 million remains unallocated in 1990 and a further \$2.5 million is identified for 1991. As a minimum it would be necessary to bring forward a Capital Works Expenditure Bylaw to finance the engineering agreement however it would also be appropriate to include all Phase I construction costs at this time. Therefore, it is recommended that a Capital Works Expenditure Bylaw in the amount of \$2.5 million be brought forward for construction of Phase I of the Griffiths/19th/20th Street Major Road Project.

BCD:jb

cc: A/Director Finance
Purchasing Agent
Municipal Solicitor
Director Administrative & Community Services


W.C. Suter

DIRECTOR ENGINEERING

