

**TO:** CITY MANAGER

**DATE:** 1999 12 13

**FROM:** DIRECTOR ENGINEERING

**FILE:** 50-06-02 (04)

**SUBJECT:** MARINE WAY/10TH AVENUE CONNECTOR - PHASE IV

**PURPOSE:** To seek approval for the retention of a consultant to provide engineering services for Phase IV of the Marine Way/10th Ave. Connector Road Project

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**RECOMMENDATION:**

1. **THAT** Council approve the retention of Associated Engineering (B.C.) Ltd. to provide engineering services for the design and construction of Phase IV of the Marine Way/10th Avenue Connector project.

**R E P O R T**

**1.0 BACKGROUND**

The Marine Way/10th Avenue Connector is a planned four-lane divided primary arterial roadway that will provide linkage between Marine Way and 10<sup>th</sup> Avenue. During the last few years the City has developed a phased design and construction program to complete the Marine Way/10th Ave. Connector by the year 2002. Phases I and II were completed during the 1997 and 1998 construction seasons. Phase III is currently under contract and will be completed in the early part of the year 2000.

Phase IV which is scheduled for construction in the summer of 2000 includes the following works:

- 1 Road construction for future eastbound lanes between Southpoint Drive and 10<sup>th</sup> Avenue at 20<sup>th</sup> Street.
  - design and construct final geometrics between Southpoint Drive and 10<sup>th</sup> Avenue including the 10<sup>th</sup> Avenue/20th Street intersection.
  - design and construct southside sidewalk
  - design and construct street lighting
  - review and modify traffic control signals at 10<sup>th</sup> Avenue
  - design and construct retaining walls as necessary
  - design, construct and protect utilities as required

2. ALRT Bridge Crossing:
  - modify for impact resistance
  - complete construction so that it will function correctly as a grade separation for the connector
3. Environmental Issues:
  - install methane gas barriers in the vicinity of the old Stride landfill
  - dispose of excavated landfill material
4. Railway Bridge Construction for Southern Rail of B.C.
5. Bridge Construction over 14<sup>th</sup> Avenue Ravine:
  - adequate span to provide pedestrian access underneath the bridge

It should be noted that completion of the Marine/10th Connector project is planned for 2002. This subsequent phasing includes construction of two westbound lanes from 10<sup>th</sup> Ave. to Southpoint Drive plus completion of roadworks from Byrne Creek to Marine Drive.

## 2.0 CONSULTANT SELECTION

Proposals for engineering services for Phase IV have been received from three consulting firms. Each firm is well established with qualified engineers and technicians on staff. As well, each firm has assembled the necessary sub-consultants to address some of the specialty aspects of this project. The three firms are Associated Engineering (B.C.) Ltd., N.D. Lea Consultants Ltd., and Aplin & Martin Consultants Ltd.

Each of the proposals has been reviewed on the basis of several weighted factors such as experience, proven ability based on the consultant's previous work history, project understanding, scheduling and total cost implications. Based on this assessment the proposal presented by Associated Engineering (B.C.) Ltd. most closely addresses the Terms of Reference. Associated Engineering and their design team of sub-consultants have sound experience in major road and structural design and in project management, both in Burnaby as well as in other Lower Mainland municipalities. The team demonstrated a complete understanding of the City's needs for this project. Their proposal stresses the importance of ensuring that all affected agencies are involved and given adequate time to process our various permit applications. This includes agencies such as B.C. Transit, Southern Rail of B.C., Translink and Ministry of Environment.

Their proposal also discusses the specialized nature of converting the existing buried ALRT bridge to exposed operating conditions and some options for the support of rail service and pedestrian access across the proposed Marine Way/10th Connector. Their proposal includes bridging options for the 14<sup>th</sup> Ave. ravine. Although the current program calls for construction of two lanes in 2000 and the other two lanes in 2001, Associated Engineering are proposing to design the full width this year which will reduce the design effort required for Phase V.

Associated Engineering and its design team have been involved in the Marine Way/10th Connector project during design and construction of the previous phases.

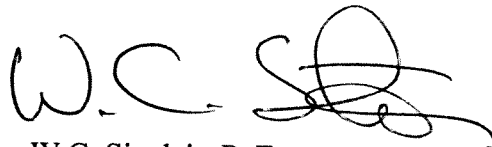
The consultant's team commission has been approved through to the completion of Phase III construction. It would be cost effective for the City of Burnaby to retain the same consultant team to complete the remaining engineering services required. Retention of Associated Engineering would provide continuity of service and would take advantage of the knowledge gained over the past number of years. Associated's performance to date has been completely satisfactory and continuation of their assignment would obviate any learning curve for a new consultant.

Associated Engineering's fee estimate for this work is \$390,000 exclusive of GST. We believe that this will provide the appropriate level of effort necessary to fulfil the Terms of Reference for this project. The preliminary estimate of costs for Phase IV of the Connector is approximately \$4.0 million which means that the engineering budget will be approximately 10% which is within the normal range for a project of this magnitude and complexity.

It is therefore recommended that the consulting firm of Associated Engineering be retained to provide engineering design services for Phase IV of the Marine Way/10th Avenue Connector. Based on the proposal from Associated Engineering, it would be our recommendation to establish a budget in the amount of \$405,000 to provide a small contingency allowance.

### 3. FINANCING

This project is identified in the 2000 - 2004 Provisional Capital Program and sufficient funds are available in work orders previously approved by Council.



W.C. Sinclair, P. Eng.  
DIRECTOR ENGINEERING

VNW:jh

cc: Director Finance  
Director Planning & Building  
Acting City Solicitor

