

RE: ENGINEERING SERVICES FOR 1977
LOCAL IMPROVEMENT PROGRAM

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

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

RECOMMENDATIONS:

1. THAT Robert F. Binnie Ltd. be retained to provide engineering services as outlined in the Municipal Engineer's letter dated 30 July, 1976, and the Consultant's letter dated 12 August, 1976, more particularly Design and Supervision services for Project "A" of the 1977 Local Improvement Program; and
2. THAT Council ratify the action taken to retain Robert F. Binnie Ltd. to provide engineering services as outlined in the Municipal Engineer's letter dated 30 July, 1976, and the Consultant's letter dated 12 August, 1976, for Project "B" of the 1977 Local Improvement Program, with fees not to exceed \$8,975.00, excluding Disbursements; and
3. THAT Council ratify the action taken to retain Vector Engineering Services Ltd. to provide engineering services as outlined in the Municipal Engineer's letter dated 30 July, 1976, and the Consultant's letter dated 12 August, 1976, for Project "C" of the 1977 Local Improvement Program, with fees not to exceed \$14,600, excluding Disbursements; and
4. THAT suitable Engineering Agreements be entered into with the aforementioned two firms.

* * * * *

26 August, 1976

TO: MUNICIPAL MANAGER
FROM: MUNICIPAL ENGINEER
SUBJECT: ENGINEERING SERVICES FOR 1977
LOCAL IMPROVEMENT PROGRAM

Council will recall that policies for Local Improvement Street Works were recently amended to include the provision that petitions for work would be accepted for construction in the year following, provided that valid petitions were received no later than 30 June in the year preceding the year of proposed construction. To be valid, petitions must have been signed by at least ten owners of affected parcels or 51% of the number of parcels, whichever was the lesser. Petitions for such works for 1977 were very popular with property owners in 1976 (making up 42.2% of the total program on basis of estimated costs).

Since we have really no control over the particular streets for which petitions are received, there may or may not be a design available "on the shelf". For the vast majority of this year's petitioned works, designs were not available, with the result that arrangements must be made immediately for such design work to proceed if we are to be successful in meeting the deadlines recommended to be met in the Capital Improvement Program Committee's report dated 19 August, 1976 (on Manager's Report of 30 August, 1976).

In accordance with the foregoing, proposals were invited from three engineering consultants who were considered to be the most qualified and suitable ones for the performance of the required services. These firms are:

1. McElhanney Surveying and Engineering Ltd.
2. R.F. Binnie Ltd.
3. Vector Engineering Services Ltd.

The required services were broken down into three Projects, i.e. "A", "B", and "C" in order to maximize the possibility of getting more than one firm involved in the Program concurrently.

Copies of the Request for Proposals, the Schedule of Works, and the Proposals received are attached.

In reviewing and assessing the proposals, the following factors had to be borne in mind for Project "A" (i.e. Still Creek Street and Norland Avenue).

1. These works require special consideration because of the technical complications of constructing new roads and reconstructing existing roads in severe peat lands,
2. The high construction cost and disruption to existing properties requires that the very best methods and expertise be employed,
3. Some considerable display of ingenuity and active interest should be displayed on the part of the Consulting Engineer,
4. It is not in the best interests of the Corporation to be fixed to a maximum cost for this particular type of work because of the possible danger of a tendency to compromise in the quality of work.

After careful review, it was considered that the proposal from Robert F. Binnie Ltd. for Project "A" was the most attractive to the Corporation in meeting the concerns expressed in the four foregoing points. The Proposal calls for bringing together the services of Design and Supervision of Construction, which is almost essential on works of this nature for reasons of continuity and stability, as well as the greater exposure to problems of Professional Liability; this firm, in concert with Golder Brawner & Associates, is the most eminently suited to providing this range of services.

For Project "B" (works involving more normal ground conditions) Robert F. Binnie has submitted the most attractive proposal with a maximum limit of their fees of \$8,975.00, exclusive of Disbursements.

For Project "C", Robert F. Binnie Ltd. is unable to complete all three Projects because of the time limitations involved. Accordingly the next most attractive proposal was submitted by Vector Engineering Services Ltd., with a maximum fee of \$14,600, exclusive of Disbursements.

All three firms are currently working for the Corporation on other projects.

The Acting Municipal Manager has recognized the urgency of commencing the design program and has authorized us to approve of commencement of Projects "B" and "C", which has now been done.

RECOMMENDATIONS:

1. THAT Robert F. Binnie Ltd. be retained to provide engineering services as outlined in the Municipal Engineer's letter dated 30 July, 1976, and the Consultant's letter dated 12 August, 1976, more particularly Design and Supervision services for Project "A" of the 1977 Local Improvement Program.

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

2. THAT Robert F. Binnie Ltd. be retained to provide engineering services as outlined in the Municipal Engineer's letter dated 30 July, 1976, and the Consultant's letter dated 12 August, 1976, for Project "B" of the 1977 Local Improvement Program, with fees not to exceed \$8,975.00, excluding Disbursements.
3. THAT Vector Engineering Services Ltd. be retained to provide engineering services as outlined in the Municipal Engineer's letter dated 30 July, 1976, and the Consultant's letter dated 12 August, 1976, for Project "C" of the 1977 Local Improvement Program, with fees not to exceed \$14,600, excluding Disbursements.
4. THAT suitable Engineering Agreements be entered into with the aforementioned two firms.


MUNICIPAL ENGINEER

EEO:cmg

Attch.

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76



McELHANNEY SURVEYING & ENGINEERING LTD.

7832 120th STREET, SURREY, B.C. V3W 3N2 • TELEPHONE (604) 596-0391

10 August 1976
File: P-363

The Municipal Engineer
Corporation of the District of Burnaby
Municipal Hall - 4949 Canada Way
Burnaby, British Columbia
V5G 1M2

Attention: Mr. V. N. Wiebe, P. Eng.
Design Engineer

Dear Sir:

RECEIVED IN
ENGINEERING DEPT.

AUG 11 1976

REFER TO	NOTED	DATE
VA	ms	

Engineering Services for 1977 Local Improvement Program

In response to your letter of 30 July 1976 inviting our proposal for the above, we wish to confirm that McElhanney is most interested in completing the works involved.

We note that Burnaby will supply the usual design package and the survey control. McElhanney has well qualified staff available to handle all of the projects for first submission to your office by November 15, 1976, provided the work is assigned and Burnaby supplied data is available on or before August 20. Should your data not be available by that date, then we could provide Section A and one other section by November 15, provided your data is available by September 10.

We have estimated the fees appropriate for each part of the works. Disbursements for materials, vehicle mileage, further soil testing if required and other items listed under Section V of the B.C. Association of Professional Engineers Schedule will be additional to the above. Our labour fee for the projects will be based on our standard scale of hourly rates. Each project has been estimated as follows:-

continued....

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

McELHANNEY SURVEYING & ENGINEERING LTD.

10 August 1976
 File: P-363
 The Municipal Engineer
 Corporation of the District of Burnaby
Page Two

Project A.....\$9,700.00

We note here that Norland Avenue is approximately 5,200 ft. in length.

Project B

(a) all excluding 730079-6, 730078-10, 720036.....\$15,600.00

(b) 730079-6, 730078-10, 720036 alone.....\$2,500.00 to \$3,500.00

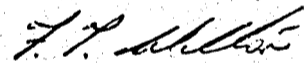
We note that it would seem desirable for Burnaby staff to complete part (b) of the above.

Project C.....\$16,850.00

We look forward to working with you on these projects.

Yours very truly,

McELHANNEY SURVEYING & ENGINEERING LTD.



F. T. Wilton, P. Eng., Manager
 Lower Mainland Municipal Engineering Branch

FTW/dfs

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

Robert F. Binnie Ltd.

RECEIVED IN
ENGINEERING
650 CLYDE AVENUE/WEST VANCOUVER/BRITISH COLUMBIA V7T 1E2
TELEPHONE 928-7734

AUG 12 1976

RF Binnie, P. Eng.

REFER TO:

VW *mmw*

August 12, 1976

The Corporation of the
District of Burnaby
4949 Canada Way
BURNABY, B. C.

Attention: Mr. E. E. Olson, P. Eng.,
Municipal Engineer.

Dear Sirs:

Re: Engineering Services for 1977
Local Improvement Program, Project A.

Thank you for the opportunity of submitting a proposal for the above works on Still Creek Avenue and Norland Avenue.

You and I have previously discussed the general problems of Professional Liability insurance coverage and concluded that, for normal local improvement programs, the risk of major claims was relatively remote. However, we feel that for these two streets the exposure is considerably more significant.

You included with your letter a portion of a soils report for Still Creek Avenue prepared by Golder Brawner & Associates which we studied with considerable interest. You stated in your letter that the soils report "... should in principle also be applicable to Norland Avenue." Inasmuch as we did not have the entire report it is difficult to make specific statements, but several comments in the report are noteworthy.

Essentially, the report indicates pre-loading of the right-of-way for a period of about six months. This pre-loading would have to be carefully monitored, using piezometers and settlement gauges. These procedures would govern the rate of loading and might indicate that the work should proceed in stages.

There are three major areas of concern. First, the effect of pre-loading on adjacent property on which there are existing

... 2.

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

The Corporation of the
District of Burnaby

August 12, 1976

structures or facilities; second, the effect on your proposed road of future construction on unoccupied property adjacent to your right-of-way; third, the protection of existing services and utilities.

In this regard, in order to lessen the latter problem, we suggest that the installation of the proposed storm sewer should be deferred until the pre-loading and subsequent settlement have taken place.

Golder Brawner & Associates have agreed to work with us as sub-consultants.

We are strongly of the view that the design and supervision of the two projects should be undertaken by the same consultant to avoid duplication of design services, thus assuring stability. It should be recognized that the monitoring would be of no value unless the design calculations were known or recalculated.

We understand you wish to commence the pre-loading work early in 1977, possibly with your own forces. It is conceivable that the date of commencement of the pre-loading could be advanced, but the detailed designs would not be complete because it is probable that the design grades cannot be established until the soils examinations and settlements have been more fully assessed.

As a result of previous construction activities in the area, we are aware of many of the precautions that will be necessary. For example, considerable care will be required to control ground flows and surface run-off by ditching. Minor unscheduled changes in loading procedures can cause serious damage or even failures.

Design changes may be required after removing the pre-load material and possibly even after construction commences. This happened during the construction of the Trans Canada Highway.

Traffic maintenance is essential in the built-up industrial areas and will require frequent, if not constant, inspection in the light of anticipated settlement.

(2)

Robert F. Binnie Ltd.

180

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

The Corporation of the
District of Burnaby

August 12, 1976

We, in conjunction with Golder Brawner & Associates, are extremely interested in undertaking the work as outlined in your letter, but it is not possible to determine a meaningful estimate of the fees for such a potentially complex project.

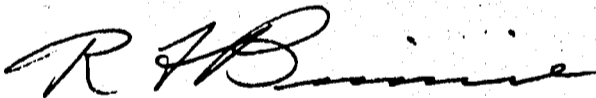
We trust you will give serious consideration to this proposal. The personnel available are the same as those who have done previous designs for Burnaby as well as those who have supervised road and sewer construction work in Burnaby. This applies to both companies.

The expertise of Golder Brawner & Associates coupled with that of Robert F. Binnie Ltd. would, we feel, assure you of very satisfactory results.

Fees would be based on "Outline of Services and Scale of Minimum Fees to be Charged for General Engineering Projects" published by the Consulting Engineers' Division of the Association of Professional Engineers of British Columbia, dated February 1, 1975.

Yours very truly,

ROBERT F. BINNIE LTD.



R. F. Binnie, P. Eng.

RFB:eb

(3)

Robert F. Binnie Ltd.

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

Robert F. Binnie Ltd.

RECEIVED IN
ENGINEERING DEPT.
550 CLYDE AVENUE / WEST VANCOUVER / BRITISH COLUMBIA V7T 1E2
TELEPHONE 926-7734

AUG 12 1976

R.F. Binnie, P. Eng.

REFER TO	DATE
VW	11/11/76

August 12, 1976

The Corporation of the
District of Burnaby
4949 Canada Way
BURNABY, B. C.

Attention: Mr. E. E. Olson, P. Eng.,
Municipal Engineer.

Dear Sirs:

Re: Engineering Services for 1977
Local Improvement Program,
Projects B and C.

Thank you for the opportunity of submitting a proposal for the above works.

We submit the following maximum limits to our fees for performing the work in accordance with your letter of July 30, 1976.

Project B:	\$ 8,975.00
Project C:	\$11,925.00

We note that completion is required by December 1, 1976 and, in the event you decide to award some work to us, we are of the opinion that we could only complete one project by that date, although we could complete both projects by December 31, 1976.

The following would constitute grounds for an extension of time:

1. Any delays in receipt of required information from the Corporation of the District of Burnaby.
2. Any delay in the award of the contract and possible start of the field work beyond August 30, 1976.

... 2.

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

The Corporation of the
District of Burnaby

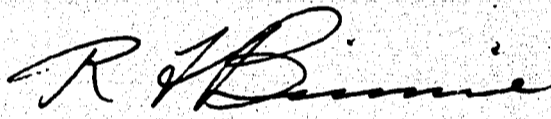
August 12, 1976

3. Delays occasioned by snow, force majeure, or other conditions beyond our control.

Fees would be based on "Outline of Services and Scale of Minimum Fees to be Charged for General Engineering Projects" published by the Consulting Engineers' Division of the Association of Professional Engineers of British Columbia, dated February, 1975.

Yours very truly,

ROBERT F. BINNIE LTD.



R. F. Binnie, P. Eng.

RFB:eb

(2)

Robert F. Binnie Ltd.

Vector engineering services ltd.

3375 NORLAND AVENUE - BURNABY, B.C. V5B 3A9

TELEPHONE 298-2333

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

August 12, 1976

RECEIVED IN
ENGINEERING DEPT.

AUG 12 1976

REFER TO	NOTED	DATE
Va	mmv	

Corporation of the District of Burnaby,
4949 Canada Way,
Burnaby, B.C.

ATTENTION: Mr. V. Wiebe, P. Eng.

Dear Sir:

Re: Engineering Services for 1977
Local Improvement Program
Our File No. 67-15

We are pleased to submit our proposal for Engineering Services for field survey, drafting, and design of the projects listed in your letter of July 30, 1976.

Our fee would be in accordance with Section III - Schedule of Fees as published by the Association of Professional Engineers of B.C. and using Scale I - Payroll Cost plus 125%.

Our upset fees for the projects would be:

Project A.....	\$13,100.00
Project B.....	\$14,900.00
Project C.....	\$14,600.00

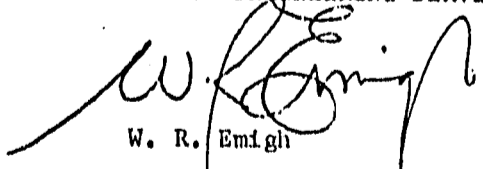
Our upset fee does not include any allowance for disbursements as covered by Section V of the Scale of Minimum Fees and these would be charged as an expense additional to the maximum fee. The use of survey vans would be considered a disbursement.

These projects can be completed by December 1, 1976 provided that work begins within one week.

We thank you for the opportunity to present this proposal.

Yours truly,

VECTOR ENGINEERING SERVICES LTD.,



W. R. Emigh

WRE/kg

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

The Office of the Engineer

30 July, 1976

McElhanney Surveying & Engineering Ltd.
7832 - 120th Street
Surrey, B.C.

Dear Sirs:

Re: Engineering Services for 1977
Local Improvement Program

Our 1977 L.I.P. has now been finalized and has been divided into three projects as indicated by the attached lists.

We hereby invite you to submit proposals for your engineering services for the field survey, drafting and design of the projects listed. Please submit separate proposals for each project.

Please note that the works in Project "A" require special treatment because of their location in a "poor ground" area and therefore I am attaching a copy of a soils report done for Still Creek Avenue which should in principle also be applicable to Norland Avenue. Also note that a number of the jobs listed in Project "B" are only modifications and/or revisions to existing designs. All work shall be performed in accordance with our current design standards and as detailed on the attached specification sheets.

Due to the size and nature of the program it is critical that the Corporation is ready to go to tender by January 1977 at the very latest. Therefore in order to allow sufficient time to assemble contract documents the absolute deadline for approved drawings must be December 1, 1976. Please acknowledge this when submitting your proposal(s).

Please submit your proposal(s) by not later than August 12, 1976.

Yours truly,

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



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

VNW:wlh
Attchs.
cc: () Design Engineer

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

The Office of the Engineer

30 July, 1976

R. F. Binnie Ltd.
650 Clyde Avenue
West Vancouver, B.C.
V7T 1E2

Dear Sirs:

Re: Engineering Services for 1977
Local Improvement Program

Our 1977 L.I.P. has now been finalized and has been divided into three projects as indicated by the attached lists.

We hereby invite you to submit proposals for your engineering services for the field survey, drafting and design of the projects listed. Please submit separate proposals for each project.

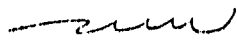
Please note that the works in Project "A" require special treatment because of their location in a "poor ground" area and therefore I am attaching a copy of a soils report done for Still Creek Avenue which should in principle also be applicable to Norland Avenue. Also note that a number of the jobs listed in Project "B" are only modifications and/or revisions to existing designs. All work shall be performed in accordance with our current design standards and as detailed on the attached specification sheets.

Due to the size and nature of the program it is critical that the Corporation is ready to go to tender by January 1977 at the very latest. Therefore in order to allow sufficient time to assemble contract documents the absolute deadline for approved drawings must be December 1, 1976. Please acknowledge this when submitting your proposal(s).

Please submit your proposal(s) by not later than August 12, 1976.

Yours truly,

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


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

VNW:wlh
Atch.
cc: () Design Engineer

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

The Office of the Engineer

30 July, 1975

Vector Engineering Services Ltd.
3375 Norland Avenue
Burnaby, B.C.
V5B 3A9

Dear Sirs:

Re: Engineering Services for 1977
Local Improvement Program

Our 1977 L.I.P. has now been finalized and has been divided into three projects as indicated by the attached lists.

We hereby invite you to submit proposals for your engineering services for the field survey, drafting and design of the projects listed. Please submit separate proposals for each project.

Please note that the works in Project "A" require special treatment because of their location in a "poor ground" area and therefore I am attaching a copy of a soils report done for Still Creek Avenue which should in principle also be applicable to Norland Avenue. Also note that a number of the jobs listed in Project "B" are only modifications and/or revisions to existing designs. All work shall be performed in accordance with our current design standards and as detailed on the attached specification sheets.

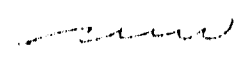
Due to the size and nature of the program it is critical that the Corporation is ready to go to tender by January 1977 at the very latest. Therefore in order to allow sufficient time to assemble contract documents the absolute deadline for approved drawings must be December 1, 1976. Please acknowledge this when submitting your proposal(s).

Please submit your proposal(s) by not later than August 12, 1976.

Yours truly,

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

VNW:wlh
Attchs.
cc: () Design Engineer

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

ITEM 20
 MANAGER'S REPORT NO. 511
 COUNCIL MEETING Aug. 30/76

1977 LOCAL IMPROVEMENT PROGRAM

PROJECT A

<u>Design No.</u>	<u>Street</u>	<u>Width</u>	<u>Improvement</u>
760037	Still Creek Avenue - Douglas to W.P.L. Lot 24, D.L. 73, Plan 42037	46'	Curbwalks B/S.
760038	* Norland Avenue - Douglas to Sprott	46'	Curbwalks B/S.

* See attached sketch for alignment.

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

1977 LOCAL IMPROVEMENT PROGRAM

PROJECT B

<u>Design No.</u>	<u>Street</u>	<u>Width</u>	<u>Improvement</u>
750018	Lozells Ave. - Winston to Conrad	46'	Curbs B/S.
760039	* Dawson - Madison to Gilmore	46'	Curbwalks B/S.
730079-6	** Second Ave. - Ingleton to Gilmore	36'	Curbwalk N/S; Curb S/S.
730078-10	+ Gamma - Hastings to Albert	46'	Curbs B/S, 4.5 ft. abutting walk B/S.
730078-10++	Gamma - Albert to Pandora	36'	Curbs B/S; 4 ft. separated walks B/S.
760040	Springer Ave. - Capitol to Empire	N/A	4 ft. separated walk W/S.
760041	Invergarry - Carnegie to Dunnedin	28'	Curbs B/S.
760042	Carnegie - Invergarry to L/N Dunnedin	28'	Curbs B/S.
760043	Dunnedin - Duncan to Cliff	28'	Curbs B/S.
760044	Duncan - Dunnedin to Curtis - Carnegie to Union	28' 28'	Curbs B/S. Curbs B/S.
760045	Georgia - Delta to Springer	28'	Curbwalks B/S.
760046	Gilpin St. - Inman to Patterson & Gilpin Court - Gilpin to dead end north	28' 28'	Curbwalks B/S. Curbs B/S
720036	+++ Sumas - Kensington to Fell	28'	Curbwalks B/S.
760047	Lorraine - Burke to L/S Price	28'	Curbs B/S.

- * See 730079-11 for continuation east of Madison
 ** Redesign to new standard of improvement and reduced width
 + Redesign to new standard of improvement and increased width
 ++ Redesign to new standard of improvement
 +++ Survey and base plan already completed

ITEM	20
MANAGER'S REPORT NO.	54
COUNCIL MEETING	Aug. 30/76

1977 LOCAL IMPROVEMENT PROGRAM

PROJECT C

<u>Design No.</u>	<u>Street</u>	<u>Width</u>	<u>Improvement</u>
760048	Portland - Nelson to 25 ft. W. of E.P.L. Lot T, Blks. 27 & 28, D.L. 157, Pl. 1802	28'	Curbs B/S.
760049	McKee - McPherson to 10 ft. W. of E.P.L. Lot 25, Blks. 24 & 25, D.L. 159, Pl. 1268	28'	Curbs B/S.
760050	Rumble - Boundary to McKay	36' flaring to 46' from L/E Boundary to Boundary	Curbs B/S; 4 ft. sep. walk N/S.
760051	Griffiths - Imperial to Kingsway	46'	Curbs B/S.
760052	15th Ave. - Wright to Cumberland	28'	Curbs B/S.
760053	Sunland Place - cul-de-sac west of Strathearn east to E.P.L. Lot E, Blk. 32, D.L. 157, Pl. 15194	28'	Curbs B/S.
760054	Strathearn - Marine Dr. to Sunland	28'	Curbs B/S.
760055	Suncrest Dr. - Patterson to Patterson	28'	Curbs B/S.
760056	17th Ave. - Canada Way to Mary	28'	Curbs B/S.