

RE: CONTRACT #8305 - BNR GRADE SEPARATION - CONCRETE DECK - 2

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Purchasing Agent be adopted.

* * * * *

ITEM	9
MANAGER'S REPORT NO.	15
COUNCIL MEETING	1984 02 27

DATE: 1984 February 22

TO: MUNICIPAL MANAGER

FROM: PURCHASING AGENT

RE: CONTRACT #8305 - BNR GRADE SEPARATION -
CONCRETE DECK - 2

RECOMMENDATION:

1. THAT the lowest tender received for Contract #8305 in the amount of \$1,133,038.00 submitted by SGM Construction Ltd., be accepted with final payment based on actual quantities and unit prices tendered.

REPORT

Tenders for Contract #8305 were received up to 15:00 h local time on Tuesday, 1984 January 31st.

The work involves construction of concrete deck and parapet with lighting conduit and drainage of approximately 98 metres of main bridge structure between 21 metres to 30 metres wide and 260 metres of bridge ramp 6.05 metres wide and a pedestrian foot bridge and ramp.

The estimated cost of this project is \$1,588,000.00

Eight (8) tenders were received for this Contract. All tenders were opened in the presence of Staff and representatives of the Firms bidding.

Tabulations of the tenders received are attached. (ATTACH. A)

Funds are available to finance this Contract.

A combination of the schedule of quantities, coupled with the unit prices submitted by the lowest bidder is also attached. (ATTACH. B-1 to B-5)

The Director Engineering concurs with the recommendation, however, because of the complexity of this award, I have attached his complete report. (ATTACH. C-1 & C-2)



K.F. Williams,
PURCHASING AGENT.

KFW/gbw
Attachments

c.c. Municipal Clerk
Director Engineering

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THE CORPORATION OF THE DISTRICT OF BURBARY
TABULATION OF TENDERS
CONTRACT #8305
BNR GRADE SEPARATION
CONCRETE DECK - 2
 PURCHASING DEPARTMENT
 1984 January 31

NO.	COMPANY NAME	TOTAL
1.	G.W. Carlson Construction Ltd.	\$ 1,563,660.00
2.	Jaemar Construction Co. Ltd.	1,618,983.00
3.	MDM Enterprises Ltd.	1,350,681.00
4.	Miller Contracting Ltd.	1,480,080.00
5.	Hansa Construction Ltd.	1,445,381.00
6.	Smith Bros & Wilson Limited	1,318,013.35
7.	SGM Construction Ltd.	1,133,038.00
8.	Kingston Construction Ltd.	1,311,334.00
LOWEST BIDDER:		
S.G.M. Construction Ltd.		
2996 Lonsdale Avenue		
North Vancouver, B.C.		
V7N 3J5		
(604) 984-4127		



ATTACH. B1

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TENDER FORM

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SCHEDULE OF QUANTITIES AND PRICES

The following are our tendered prices for the cost of the work for each item as outlined in the respective payment clauses in the specification.

Item	Description	Quantity	Unit Price	Extension
PART 1.0 - TEMPORARY CONSTRUCTION FACILITIES				
1.1	Industrial first-aid requirements Section 1B.4.1.1. Price per month.	4.5 months	3150 ⁰⁰	<u>14175</u>
TOTAL PART 1.0 -				<u>\$ 14 175</u>
TEMPORARY CONSTRUCTION FACILITIES				
PART 2.0 - <u>STANDARD CONCRETE REINFORCEMENT</u>				
2.1	Standard concrete reinforcement. Section 3B.4.1. Price per kilogram.	238,000 kg	<u>80.4 ¢</u>	<u>191 352</u>
TOTAL PART 2.0 -				<u>\$ 191 352</u>
STANDARD CONCRETE REINFORCEMENT				
PART 3.0 - <u>EPOXY-COATED REINFORCEMENT</u>				
3.1	Epoxy coating of reinforcement. Section 3C.4.1. Price per kilogram.	138,000 kg	<u>45.5 ¢</u>	<u>62 790</u>
TOTAL PART 3.0 -				<u>\$ 62 790</u>
EPOXY-COATED REINFORCEMENT				

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Addendum No. 1

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Item	Description	Quantity	Unit Price	Extension
<u>PART 4.0 - CONCRETE</u>				
4.1	Blockout for Expansion Joints. Section 3D.4.1.1. Price per cubic metre.	90 m ³	560	50,400
4.2	Bridge Deck. Section 3D.4.1.2. Price per cubic metre.	1300 m ³	296 ⁵⁰ 295	385450 389500
4.3	Parapet. Section 3D.4.1.3. Price per metre.	750 m	86	64500
4.4	Concrete protection. Section 3D.4.1.4. Price per square metre.	9500 m ²	3 ²⁰ 3	30400 31920
4.5	Sealing of shrinkage cracks. Section 3D.4.1.5. Price per metre.	200 m	31 ⁰⁰ 32	6200 6510
4.6	Miscellaneous concrete. Section 3D.4.1.6. Price per cubic metre.	60 m ³	138	8280
TOTAL PART 4.0 - CONCRETE				545110 545230
<u>PART 5.0 - POST-TENSIONING CONCRETE</u>				
5.1	Post-tensioning of concrete. Section 3E.4.1. Lump sum price			93915
	.1 Pedestrian ramp	LS		98915
	.2 Still Creek pedestrian bridge	LS		49812
TOTAL PART 5.0 - POST-TENSIONING CONCRETE				148727 143727

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ATTACH. B-3

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Item	Description	Quantity	Unit Price	Extension
PART 6.0 -				
MISCELLANEOUS METALWORK				
6.1	Aluminum handrail. Section 5B.4.1.1. Lump sum price.	LS		<u>22 775</u>
6.2	Sign post. Section 5B.4.1.2. Lump sum price.	LS		<u>1 340</u>
TOTAL PART 6.0 -				
MISCELLANEOUS METALWORK				
PART 7.0 -				
EXPANSION JOINTS				
7.1	Expansion joints. Section 10A.4.1. Lump sum price.	LS		<u>92 177</u>
TOTAL PART 7.0 -				
EXPANSION JOINTS				
PART 8.0 - DRAINAGE WORKS				
8.1	Storm drainage piping. Section 15A.4.1.1. Lump sum price.	LS		<u>\$ 21 000</u>
8.2	Ditches. Section 15A.4.1.2. Price per metre.			
	.1 0- to 1-metre depth	45 m	<u>15⁶⁰</u>	<u>702</u>
	.2 1- to 2-metre depth	45 m	<u>21</u>	<u>945</u>
TOTAL PART 8.0 - DRAINAGE WORKS				
				<u>\$ 22 647</u>

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Item	Description	Quantity	Unit Price	Extension
PART 9.0 - <u>ELECTRICAL INSTALLATION</u>				
9.1	Electrical installation. Section 16B.4.1. Lump sum price.	1S		<u>6825</u>
TOTAL PART 9.0 - ELECTRICAL INSTALLATION				<u>\$ 6825</u>

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REGIMENTAL ENGINEER
 1984 JAN 13
 ATTACH. B-5
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TENDER FORM

FOR OFFICE USE
 [Signature]

TENDER SUMMARY

Total Part 1.0	Temporary Construction Facilities	\$ 14 175 ✓
Total Part 2.0	Standard Concrete Reinforcement	\$ 191 552 ✓
Total Part 3.0	Epoxy-Coated Reinforcement	\$ 62 790 ✓
Total Part 4.0	Concrete	\$ 545 110 545 230 ✓
Total Part 5.0	Post-Tensioning Concrete	\$ 140 747 143 727 ✓
Total Part 6.0	Miscellaneous Metalwork	\$ 24 115 ✓
Total Part 7.0	Expansion Joints	\$ 92 177 ✓
Total Part 8.0	Drainage Works	\$ 22 647 ✓
Total Part 9.0	Electrical Installation	\$ 6 825 ✓
Total Part 10.0	Contingency Allowance	\$ 30,000.00** ✓

TOTAL TENDER . . .
 \$ ~~1,137,918~~ 1,133,038 ✓
~~148,058~~

** Payment of the Contingency Allowance or portions thereof will only be made in the event that the Engineer authorizes additional work, in which case the amount of the payment will be determined as specified in the General Conditions. Any unused portion thereof will be retained by the Owner.

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TO: PURCHASING AGENT 84 02 21

FROM: DIRECTOR ENGINEERING

SUBJECT: B.N.R. GRADE SEPARATION -
CONTRACT #8305 - CONCRETE DECK 2

We have conducted a thorough review of the question of awarding Contract #8305 to the lowest tenderer, who is a non-union contractor. We were primarily concerned about being able to identify the various labour relations ramifications of having a non-union contractor on the job so that our report to the Municipal Manager and Council would not be deficient in information on this very vital topic. You were present at the meetings held to conduct that review.

The report we received from our engineering consultant, Associated Engineering Services Ltd., was written primarily from a technical public works point of view but the report did identify some of the possible ramifications of accepting a non-union tender (Attachment I). It is important to note that Associated's report states: "... we have no reason to believe that S.G.M. is not capable of completing the work.". When considered in conjunction with the policies, operating practises, and past precedents of handling public tenders for the Corporation, the Director Engineering considers that Associated's statement quoted above is tantamount to a recommendation to award the contract to the lowest bidder.

In order to be satisfied that we have provided adequate coverage in our Council report of the labour relations aspect of employing a non-union contractor, the Director Engineering requested the involvement of the Director Administrative and Community Services who in turn involved the Personnel Director. The Personnel Director recommended that the Corporation seek the advice and opinion of Mr. John L. McConchie of the firm of Campney & Murphy, Barristers & Solicitors, on this very current and rapidly-changing aspect of labour relations law. Meetings were held with Mr. McConchie, attended by the Director Engineering and staff, Associated's representatives, the Purchasing Agent, and the Personnel Director. Thorough discussion took place on the possible labour relations implications and these have been summarized by Mr. McConchie in a written report.

Mr. McConchie's report is being provided to Council this evening as an "In-Camera" item because his summary of the situation may well be required to become part of possible future litigation.

(cont'd)

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ATTACH. C-2

We have made arrangements to delay commencement of work on Contract #8305 until all work under Contract #8303 - Steelworks II is complete in order to minimize possible labour disruptions between the union and non-union contractors; this will delay the project some three to five weeks. The last contract for the entire B.N.R. Overpass project is #8401 - Roadworks and it is currently out to tender. We intend to advise the bidders before tender closing on Contract #8401 as to the outcome of Contract #8303 so that they are fully cognizant of a non-union contractor being on the job, if such is the final decision with respect to Contract #8303. If it should be necessary to schedule construction so as to not have a union and non-union contractor on the job at the same time, the overall project completion date could move from 1984 July 08 to the early part of 1985. There is normally some cost associated with delays and the full saving of \$178,296, which is the difference between the lowest and second lowest tenders, may not be fully realized.

The Director Engineering has considered and debated the possible alternative courses of action available to the Corporation and concludes that the principle of accepting the lowest tender is of overriding significance in this matter. Accordingly, he recommends the lowest tender received for Contract #8305 in the amount of \$1,133,038.00 submitted by S.G.M. Construction Ltd., be accepted with final payment based on actual quantities and unit prices tendered.

An updated tabulation of all project costs to date showing original estimates and actual contract bids is provided in Attachment II. The total "saving" from total original estimates now stands at \$1,413,143; this figure will hold to be the total "saving" through to the end of the project provided that tenders for the final contract (Contract #8401 - Roadworks) come in no higher than the estimated cost for that work, which is certainly expected to be the case.


DIRECTOR ENGINEERING

EEO:sp
Attach. (2)

cc: () Director Administrative & Community Services
() Personnel Director

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ENGINEERING DEPT.

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FEB 10 1984

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CEO E.S.D.
MR. D.A.

ATED ENGINEERING SERVICES LTD 4940 CANADA WAY, BURNABY, B.C. V5G 4M5 TEL: (604) 293-1411 TELEX: 04-354757 CABLE: CANENCO

February 9, 1984
File: V64F

The Corporation of the
District of Burnaby
4949 Canada Way
BURNABY, B.C.
V5G 1M2

Attention: Mr. W.M. Ross, P.Eng.
Deputy Director Engineering

Dear Sirs:

Re: BNR Grade Separati
Contract No. 8305
Concrete Deck - 2
Review of Tenders

Tenders were received for the above contract and opened at 3:00 p.m. local time January 31, 1984 at the office of the purchasing agent, District of Burnaby, a summary of tenders received is provided in Table 1.

All tenders were checked and found to be arithmetically correct. The lowest tender was received from S.G.M. Construction Ltd. in the amount of \$1,133,038.00. The estimated cost of this contract as shown in the project cost and sharing table (November 1982) was \$1,588,000.00.

The lowest tenderer, S.G.M. Construction Ltd. was formed recently as a non-union affiliate of Armeco Construction and Development Ltd. and has performed no work as yet. We understand that Armeco Construction and Development Ltd. was established in B.C. in 1982 and is associated with Armi Construction, an Iranian construction company. We are aware of two projects that they have completed in Vancouver, a Parkade for B.C. Place and the Cordova Street Extension Bridge for the City of Vancouver. We contacted the owners of each facility as well as their respective consulting engineers. They indicated that Armeco basically act as project managers and subcontract all of their work. Thus the quality of workmanship is largely dependent on the skill of the subcontractor and the ability of the project manager to control and organize the subcontractors. The consensus of those contacted is that, generally workmanship was not first class and that there was at least initially, a lack of knowledge and understanding of Canadian construction principles and methods. Our inspection of these Armeco projects confirms that workmanship was not of the

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OUVER VICTORIA NANAIMO PRINCE GEORGE KAMLOOPS KELOWNA EDMONTON CALGARY REGINA

ATTACHMENT I

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SOCIATED ENGINEERING SERVICES LTD

February 9, 1983

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quality achieved thus far on the BNR project. We consider that the level of resident engineering services might have to be increased to ensure that the quality of the finished product is similar to that completed to date. It is to be noted that as Armeco are a union contractor and S.G.M is non-union that the subcontractors proposed by S.G.M. would not have worked on the Armeco projects.

One of the principals of S.G.M., Mr. George Lockery, P.Eng, was formerly vice president and chief engineer of Stevenson Construction, a well established lower mainland contractor. Mr. Lockery would appear to be well experienced in this type of construction and has indicated that although not resident on site, he would visit the site frequently.

Consideration must be given to the implications of S.G.M. Construction Ltd. being a non union contractor. To date all the work on this project has been completed, or is currently being completed by union contractors. The contractor for Contract No. 8401 - Roadworks 2 which is presently being tendered will probably be a union contractor. Recent rulings of the Labour Relations Board have centered on whether the project can be defined as one site. In this regard, we recommend that you seek, through your legal counsel, an opinion as to how the L.R.B. would likely rule.

Should this opinion be that the total project would be classified one site, we believe there is the potential for labour unrest on the project, unless the contracts not be permitted to overlap. This however, could lead to potential claims against the Corporation. The only way to separate the union structural contractor and a non-union deck contractor would be to eliminate a 5-week overlap permitted in the present project schedule i.e., delay the Notice to Proceed of the concrete deck contract by 5 weeks. There is also a complete overlap between deck contract and the Roadworks - 2 contract. To avoid overlap here would mean a delay in the start of the roadworks contract until August, 1984 with a resultant completion in early 1985. This delay may be extended due to inability to place asphalt during winter months.

In conclusion, we have no reason to believe that S.G.M. are not capable of completing the work. However, if you cannot receive assurance from your legal counsel that the potential labour problems may be resolved and completion is required as currently scheduled, you may wish to consider making the award to the second low bidder, Kingston Construction Co. Ltd. Kingston Construction Co. Ltd. are an experienced, Burnaby based union contractor who have extensive bridge experience. We have contacted the Ministry of Transportation and Highways who have indicated they are well satisfied with their performance and the quality of their work.

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OCIATED ENGINEERING SERVICES LTD

February 9, 1984

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District of Burnaby

Should you decide to accept the bid submitted by Kingston Construction Co. Ltd. we would point out that they have offered a credit of \$22,466.00 for the use of Wercholoz-Honel expansion joints, thus making their bid \$1,288,868.00. We would if requested accept the substitution of this expansion joint.

Should you wish to discuss the foregoing in greater detail we would be please to do so.

Yours truly,

NPD'Andrea

N. P. D'Andrea, P.Eng.
Project Engineer

NPD/JG

Enc:

TABLE 1

BNR GRADE SEPARATION

CONTRACT NO. 8305 - CONCRETE DECK - 2

Summary of Tenders

TENDER	TOTAL TENDER VALUE
S.G.M. Construction Ltd.	\$1,133,038.00
Kingston Construction Ltd.	\$1,311,334.00
Smith Bros, and Wilson	\$1,318,013.35
MDM Enterprises Ltd.	\$1,350,681.00
Hansa Construction Ltd.	\$1,445,381.00
Miller Contracting Ltd.	\$1,480,080.00
G. W. Carlson	\$1,563,660.00
Jaemar Construction Co. Ltd.	\$1,618,983.00

B.N.R. GRADE SEPARATION
 PROJECT COSTS TO DATE SHOWING ORIGINAL ESTIMATES
 AND ACTUAL CONTRACT BIDS

CONTRACT/ITEM	ORIGINAL \$ ESTIMATE	ACTUAL \$ CONTRACT BID	COMPLETED \$ CONTRACT	\$ DIFFERENCE
1. PROPERTY ACQUISITION	500,000	629,879	ON-GOING	-(129,879)
2. EARTHWORKS - CONTRACT #8109	1,200,000	1,119,725	1,215,600	- (15,600)
3. FOUNDATIONS I - CONTRACT #8211	1,718,000	1,483,590	1,439,131	+ 278,869
4. FOUNDATIONS II - CONTRACT #8212A	1,863,000	1,622,155	1,536,830	+ 326,170
5. STEELWORK I - CONTRACT #8213	2,772,000	3,082,780	3,051,802	-(279,802)
6. CONCRETE DECK I - CONTRACT #8301	1,167,000	1,087,489	996,082	+ 91,407
7. ROADWORKS I - CONTRACT #8309	466,000	380,132	430,584	+ 35,416
8. STEELWORKS II - CONTRACT #8303	2,850,000	2,392,000	ON-GOING	+ 458,000
9. FOUNDATIONS III - CONTRACT #8302	1,054,000	860,400	ON-GOING	+ 193,600
10. CONCRETE DECK II - CONTRACT #8305	1,588,000	1,133,038	ON-GOING	+ 454,962
			BALANCE	+1,413,143.

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