

ADDENDUM NUMBER 1

R18-35 Saltair Rail with Trail Connector Phase 1

April 16, 2018

This Addendum shall be read in conjunction with and considered as an integral part of the Invitation to Tender. Respondents should acknowledge the addendum on Appendix B the Submission Form. The Addendum is as follows:

The Submission Deadline is now April 23, 2018 @ 2 p.m. local time.

Revised Sections of Tender Document

1.1 Revise Tender Documents

- .1 General Conditions are hereby issued.
- .2 Supplemental Conditions are hereby issued.
- .3 Appendix G Prime Contractor Designation Form is hereby issued.

1.2 Revise Appendix C - Pricing

- .1 Revise Paragraph 1(e) to read "the Schedule of Prices and Approximate Quantities" deleting *Unit*.
- .2 Revise Paragraph 2 to read "unit prices multiplied by estimated quantities" from *volumes*.
- .3 Revised Schedule of Prices and Approximate Quantities is hereby issued.
- .4 Revise Force Account Rates by deleting Note 1.
- .5 Issue Tenderer's Experience in Similar Work form.
- .6 Issue Tenderer's Senior Staff Assigned to the Project form.

1.3 Revise Appendix D - ITT Particulars

- .1 Add following to 4. Other Submission Requirements:
 - .1 Each bid must include the following completed forms: Force Account Rates; Tenderer's Experience in Similar Work; and, Tenderer's Senior Staff Assigned to the Project.
- .2 Add following to Policy for Protection of Work Over, Under or Around the Railway:
 - .1 "d. Contractor to provide proof of insurance with a 5 million dollar liability and to have SVI and ICF named on the Certificate."
- .3 Revise Policy for Protection of Work Over, Under or Around the Railway:
 - .1 Revise Note **a.** by adding "Owner to bear all costs for flag person up to Contract completion date. If a flag person is required after the Contract completion date, such costs will be at the Contractor's expense."
- .4 Add following to Pre-condition of Award:
 - .1 Provide a Performance Bond and a Labour and Material Payment Bond each in the amount of fifty percent (50%) of the Contract Price.

- .2 Provide these bonds within five (5) Working Days of contract award. Maintain bonds in good standing until Contract fulfillment.
- .5 Delete Section C Mandatory Submission Requirements 3. Bid Security.

1.4 Revise Drawings

.1 Delete all reference to 15mm CART PATH MATERIAL and replace with 10mm CART PATH MATERIAL.

1.5 Issue Minutes of Non-Mandatory Site Meeting

.1 Minutes from non-mandatory site meeting are hereby issued.

Questions & Answers

- **Q1.** Bid Bonds. Would the CVRD accept a certified cheque in lieu of a bid bond? When and how would you like to receive the Bid Bond given that you are accepting Tenders via email?
- **A1.** As per the revised Appendix D mentioned above Bid Bonds are not required. A Performance and Labour and Materials Bond will be a pre-condition of contract award.
- **Q2.** Can you please clarify if the contractor is required to hire Madrone as the EM for the project or are they able to hire other environmental service providers?
- **A2.** The intent would be that the Contractor hire a Qualified Environmental Professional from a firm separate from Madrone, since Madrone has been retained by the Owner.
- **Q3.** Are the proposed HDPE culverts BOSS 2000?

A3. Yes.

- **Q4.** Within the proposed 10m wide clearing limit is all trees to be removed even if not in the direct route of the trail alignment?
- **A4.** The proposed clearing limit is 5m wide. Not 10m wide. All trees to be removed within the 5m trail corridor.
- **Q5.** What is required for gravel base for the concrete Pad?
- A5. Sub base: 200mm of 3", and 100mm of 34" minus
- **Q6** At the south side start their is two crosswalks to be installed, do each crosswalk require two crosswalk signs, for a total of 4,as the drawings only asks for one?
- A6. All Crosswalk Signs to be double sided i.e 2 signs per post.
- **Q7.** Will the 2m high stacked boulder wall require any geo grid?

A7. No.

Q8. Is the Geotechnical testing to be provided by the Contractor?

A8. Yes.

Q9. Is the construction survey to be provided by the contractor?

A9. Yes.

- Q10. Who is responsible for paying for BCLS to mark out the west railway boundary prior to construction?
- A10. Contractor.

Q11. Please confirm the size of boulders used for the stacked boulder wall.

A11. 900mm.

Q12. Is the 200mm concrete drain referred to on Sheet 1 of 7 an existing drain or a new one to be installed? If it is a new one, please confirm what is expected (headwall? Length? Outlet location?)

A12. Existing drain.

- **Q13.** Will the owner flag the trail alignment prior to the contractor arriving on site? Or will all layout be completed by the contractor?
- A13. Owner will flag trail alignment
- **Q14.** The note on all drawing sheets regarding the clearing limit says "clearing/limbing a 5m x 5m clear corridor from CL.". Are you trying to say it is a 5m wide corridor and 5m in vertical height? **A14.** Yes.
- **Q15.** Is the Teleglobe sign post existing or a new sign post that needs to be installed (sheet 4 of 7)?

A15. Existing.

End of Addendum 1

Anthony Jeffery
Procurement Officer
Cowichan Valley Regional District
175 Ingram Street, Duncan, BC V9L 1N8

Email: purchasing@cvrd.bc.ca

Tel: 250.746.2580 / Toll free: 1.800.665.3955



6468 Norcross Road Duncan BC V9L 6C5 Phone 250-737-1440 Fax 250-737-1551 cowichanengineering@shaw.ca

MEETING MINUTES

Cowichan Valley Regional District

Saltair Rail with Trail Connector - Phase 1 Pre-Tender Meeting

Held On: March 27, 2018 at 1:00 pm

Held At: On-site

Present:

For Cowichan Valley Regional District (CVRD)

For Cowichan Engineering Services Ltd. (CES)

Michael Miller

Luke Kostyk

Tenderer's

Peter Schilling; Stone Pacific Contracting Ltd. Steven Edwards; David Stalker Excavating Ltd. Dan Pontious; Pontious Contracting Ltd. Rod Lowe; Cutting Edge Enterprises Ltd.

Prepared By: Luke Kostyk

	ITEMS DISCUSSED	ACTION BY:
1.	General	Noted
	 Introduction of the Cowichan Valley Regional Districts (Owner's) representative. 	
	 Introduction of CES representative. 	
	 Purpose of meeting was to provide an opportunity to view the site and provide a broad overview of the project by CVRD. 	
	 All technical questions should be provided in writing as indicated within the Tender Documents. 	
	 This was a non-mandatory Site Meeting, but it was requested that all attendants sign the attendee sheet. 	
	CVRD acknowledged that a second Phase of RWT construction is scheduled for	



6468 Norcross Road Duncan BC V9L 6C5 Phone 250-737-1440 Fax 250-737-1551 cowichanengineering@shaw.ca

ACTION BY:

Noted

ITEMS DISCUSSED

Tender and construction later this year. Estimated distance is 2.3 km.

2. Tender - General Overview of Tender Documents:

(Tender Documents take precedence)

- Tenderer's should note all criteria indicated in the Tender Documents for submission of Tenders.
- Tenders will be received until 2:00 p.m. local time of April 18, 2018, by email.
- A bid bond in the amount of 10% of the total tender sum is required.
- The successful Tenderer must furnish a Labour and Material Payment Bond and Performance Bond, each in the amount of 50% of the total tender sum.

3. General Overview:

(Tender Documents take precedence)

Noted

- The successful Tenderer will be required to take on the Prime Contractor designation for the project.
- It was noted that if a tenderer feels that there is insufficient time to complete the project, that tenderer can send a request in writing to extend schedule.
- It was noted that the Contract Completion date is **14 weeks** after a notice to proceed has been issued.
- CVRD to bear all costs for the SVI flag person up to the Contract completion date. If a flag person is required after the Contract completion date, such costs will be at the Contractor's expense. CVRD to provide information regarding flag person rates.
- It was noted that the Contractor is responsible for coordinating with SVI for scheduling of a flag person, contact information has been provided within the Tender Documents.
- It was noted that Part A Item 1 of the Schedule of Prices and Approximate Quantities within the Tender Documents is to cover all works outside of the unit rate items, including, but not limited to: clearing and grubbing; stripping; subgrade preparation; disposal of all waste material; layout; and, coordination.
- Contractor is responsible for clearing/limbing a 5.0 m x 5.0 m cleared corridor from the proposed centreline of the Trail.
- It was noted that trail alignment and drainage is subject to change, these items
 are paid by unit rate for this purpose. The unit prices in the Schedule of Prices
 and Approximate Quantities and the actual quantities will form the basis for
 payment of the unit price component of the Work.



6468 Norcross Road Duncan BC V9L 6C5 Phone 250-737-1440 Fax 250-737-1551 cowichanengineering@shaw.ca

ITEMS DISCUSSED

ACTION BY:

- CVRD noted that they have issued letters to residents adjacent to the trail alignment.
- Contractor is responsible for any and all traffic control required for the duration of the Works.
- Contractor is expected to maintain the condition of the roads for the duration of the Works.
- CVRD has made an application for permit with the Ministry of Transportation and Infrastructure (MoTI) for work adjacent to Old Victoria Road.
- It was noted that the Contractor will have to apply for a right-of-way permit with the Municipality of North Cowichan.
- It was noted that an addendum will be issued within the next few days to include liquidated damages; sieve gradation limits for the Cart Path Material; along with other items.
- It was noted that all waste derived during clearing and grubbing, stripping, subgrade preparation, etc. is to be disposed off-site by the Contractor at the Contractor's expense.
- It was noted that there is a line item within the Schedule of Prices and Approximate Quantities for over-excavation and import 300 mm minus crushed quarry rock. This shall be full compensation for over-excavation of the design subgrade due to unsuitable soil conditions as determined by the Contract Administrator. No consideration for payment of over-excavation will be considered, if in the opinion of the Contract Administrator, the subgrade is made unsuitable by the Contractor.
- It was noted that an archaeological review was not performed for the site. Contractor to notify the CVRD and Contract Administrator if anything untoward is found or exposed.

"The preceding is the writer's interpretation of the meeting. If there are any discrepancies or omissions, please bring them to the writer's attention within three days of receipt of these minutes."

SCHEDULE OF PRICES AND APPROXIMATE QUANTITIES

1. It is understood that:

- (a) The quantities in the Schedule of Prices and Approximate Quantities are estimated and may vary;
- (b) The unit prices in the Schedule of Prices and Approximate Quantities and the actual quantities will form the basis for payment of the unit price component of the Work; and,
- (c) The extensions of unit prices and addition of unit price extensions will be checked by the Consultant and where arithmetical errors are discovered, the unit prices will be considered as representing our intentions and the unit price extensions and the total amount entered above for the unit price component of the work will be corrected accordingly.

TRAIL CONSTRUCTION

NO.	DESCRIPTION	UNIT	AMOUNT (\$)
	PART A: STIPULATED LUMP SUM Sta. 1+000 to 3+468		
1.	ALL WORKS & APPURTENANCES ASSOCIATED ON COWICHAN ENGINEERING SERVICES LTD. DRAWINGS 1194-C-TITLE SHEET and 1194-C-01 to 1194-C-07, INCLUDING, BUT NOT LIMITED TO: CLEARING & GRUBBING; STRIPPING AND SUBGRADE PREPARATION TO CONSTRUCTION EXTENTS AND TO THE REQUIRED SUBGRADE ELEVATIONS; DISPOSAL OF ALL WASTE, TREES, BRUSH, DEBRIS & SURPLUS MATERIALS OFF-SITE, EXCEPT SOILS THAT MAY BE SUITABLE FOR FINISH GRADING; SURVEY AND LAYOUT, INCLUDING B.C.L.S. LAYOUT FOR RAILWAY BOUNDARY, AS REQUIRED; AND, COORDINATION WITH RELEVANT AUTHORITIES. Refer to MMCD SECTIONS 31 11 01 and 31 24 13.	L.S.	

TOTAL PART A

ITEM			APPROX	UNIT	
NO.	DESCRIPTION	UNIT	QTY	PRICE (\$)	AMOUNT (\$)
	PART B: UNIT PRICES Sta. 1+000 to 3+468				
1.	200mm COMPACTED THICKNESS OF 75mm minus CRUSHED GRANULAR SUBBASE INSTALLED TO LINES AND GRADES SHOWN ON THE DRAWINGS. COMPACTION TO MINIMUM 95% MODIFIED PROCTOR DENSITY. Refer to MMCD SECTIONS 31 05 17 and 32 11 16.1.	Sq. m	9,375		
2.	100mm COMPACTED THICKNESS OF 19mm minus CRUSHED GRANULAR BASE INSTALLED TO LINES AND GRADES SHOWN ON THE DRAWINGS. COMPACTION TO MINIMUM 95% MODIFIED PROCTOR DENSITY. Refer to MMCD SECTIONS 31 05 17 and 32 11 23.	Sq. m	8,250		
3.	75mm COMPACTED THICKNESS OF 10mm minus CART PATH MATERIAL INSTALLED TO LINES AND GRADES SHOWN ON THE DRAWINGS. COMPACTION TO MINIMUM 95% MODIFIED PROCTOR DENSITY. Refer to MMCD SECTION 32 11 23.	Sq. m	7,700		
4.	300mm minus CRUSHED QUARRY ROCK INSTALLED TO LINES AND GRADES SHOWN ON THE DRAWINGS. COMPACTION TO MINIMUM 95% MODIFIED PROCTOR DENSITY. Refer to MMCD SECTIONS 31 05 17 and 32 11 16.1.	Cu. m	2,900		
5.	STACKED BOULDER WALL AS PER GEOTECHNICAL REPORT	Sq. m FACE	110		
6.	SUPPLY & PLACE 600mm DIAMETER RIPRAP ARMOURING. Refer to MMCD SECTION 31 37 10.	Tonne	20		

7.	TRAIL HEAD: INSTALL OWNER-SUPPLIED REMOVABLE BOLLARD COMPLETE WITH CONTRACTOR-SUPPLIED BOULDERS IN LOCATIONS AND AS DETAILED ON THE DRAWINGS	EA	1	
8.	SUPPLY & INSTALL 250mm DIAMETER RIBBED PVC STORM DRAIN EXTENSION. Refer to MMCD SECTION 33 40 01.	Lin. m	7	
9.	SUPPLY & INSTALL 300mm DIAMETER HDPE CULVERT. Refer to MMCD SECTION 33 42 13.	Lin. m	174	

SUB-TOTAL PART B

ITEM			APPROX	UNIT	
NO.	DESCRIPTION	UNIT	QTY	PRICE (\$)	AMOUNT (\$)
	PART B: UNIT PRICES (CONTINUED)				
	Sta. 1+000 to 3+468				
10.	SUPPLY & INSTALL 450mm DIAMETER HDPE CULVERT. Refer to MMCD SECTION 33 42 13.	Lin. m	8		
11.	SUPPLY & INSTALL 600mm DIAMETER HDPE CULVERT. Refer to MMCD SECTION 33 42 13.	Lin. m	24		
12.	SUPPLY & INSTALL SAND/CEMENT BAG HEADWALLS IN LOCATIONS AND AS DETAILED ON DRAWINGS	EA	72		
13.	CONSTRUCT DITCHING IN LOCATIONS AND AS DETAILED ON DRAWINGS	Lin. m	2,500		
14.	SUPPLY & INSTALL 1200mm CONCRETE MANHOLE COMPLETE WITH BASE, LID	EA	1		

TOTAL PART B					
18.	SUPPLY & INSTALL CHAINLINK FENCING IN LOCATIONS AND AS DETAILED ON DRAWINGS. Refer to MMCD Section 32 31 13.	Lin. m	400		
17.	INSTALL PAINTED CROSSWALKS IN LOCATIONS AND AS DETAILED ON DRAWINGS. Refer to MMCD Section 32 17 23.	L.S.			
16.	SUPPLY & INSTALL TRAFFIC SIGNS IN LOCATIONS AND AS DETAILED ON DRAWINGS.	L.S.			
15.	CONSTRUCT 3.0m x 5.0m x 100mm THICK CONCRETE APPROACH PAD	L.S.			
	AND FRAME. Refer to MMCD SECTION 33 44 01.				

ITEM			APPROX	UNIT	
NO.	DESCRIPTION	UNIT	QTY	PRICE (\$)	AMOUNT (\$)
	PART C - PROVISIONAL				
1.	OVER-EXCAVATION AND IMPORT 300mm MINUS CRUSHED QUARRY ROCK	Cu. m	300		

TOTAL TENDERED AMOUNT (Ex	<u>xcl. GST)</u> : \$
	(Sum of Parts A, B and C)
TOTAL TENDERED AMOUNT (Inc	cl. GST) : \$
TENDERER'S SIGNATURE	
TENDERER'S NAME	
TENDERER'S ADDRESS	
DATE	, 2018



COWICHAN VALLEY REGIONAL DISTRICT

PRIME CONTRACTOR DESIGNATION

As per the requirements of the Workers Compensation Act, Part 3, Division 3, S113 (1-3) which states:

Coordination of Multiple-employer workplaces

118	(1)	In this s	section:
-----	-----	-----------	----------

"multiple-employer workplace" means a workplace where workers of 2 or more employers are working at the same time:

"prime contractor" means in relation to a multiple-employer workplace,

- (a) the directing contractor, employer or other person who enters into a written agreement with the owner of that workplace to be the prime contractor for the purposes of this Part, or
- (b) if there is no agreement referred to in paragraph (a), the owner of the workplace.
- (2) The prime contractor of a multiple-employer workplace must:
 - (a) ensure that the activities of the employers, workers and other person at the workplace relating of occupational health and safety, are coordinated, and
 - (b) do everything that is reasonably practicable to establish and maintain a system of process that will ensure compliance with this Part and the regulation in respect to the workplace.
- (3) Each employer of workers at a multi-employer workplace must give to the prime contractor the name of the person the employer has designated to supervise the employer's workplace at that workplace.

I fully understand and accept the responsibility of the prime contractor designation in accordance with the Workers Compensation Act while contracted by the Cowichan Valley Regional District and will abide by Workers Compensation Regulation requirements.

Project:	 -
Company:	_
Signed:	 _Date:
Witness:	

TENDERER'S EXPERIENCE IN SIMILAR WORK

Year	Description		
Completed	of Contract	Value	Consultant

TENDERER'S SENIOR STAFF ASSIGNED TO THIS PROJECT

Name	Location	Appointment	Qualifications & Experiences



COWICHAN VALLEY REGIONAL DISTRICT

SECTION A

GENERAL CONDITIONS

TABLE OF CONTENTS

1.	DEFINITIONS:	5
2.	AUTHORITY OF THE OWNER:	6
3.	SUB-CONTRACTS:	7
4.	SUB-CONTRACTORS:	7
5.	EXTENT OF CONTRACT:	7
6.	CONTRACT DOCUMENTS:	8
7.	BONDS:	8
8.	DRAWINGS AND SPECIFICATIONS:	9
9.	WORK TO BE TO THE SATISFACTION OF OWNER:	9
10.	PROGRAM OF WORKS:	9
11.	CONTRACTOR'S SUPERINTENDENCE:	10
12.	CONTRACTOR'S EMPLOYEES:	10
13.	LINES, GRADES AND MEASUREMENTS:	10
14.	PUBLIC CONVENIENCE AND ACCESS:	11
15.	STREET CLOSURES, DETOURS, BARRICADES:	11
16.	DAMAGE TO WORKS:	12
17.	DAMAGE TO PERSONS AND PROPERTY:	12
18.	COMPLIANCE WITH STATUTES, REGULATIONS	12
19.	FOSSILS, ETC.:	12
20.	PATENT RIGHTS:	13
21.	CO-OPERATION AND COLLATERAL WORKS:	13
22.	SUPPLY OF PLANT, MATERIAL AND LABOUR:	13
23.	AIR POLLUTION CONTROL:	13
24.	FIRES:	13
25.	EXPLOSIVES:	14
26.	CONTRACTOR'S RESPONSIBILITY:	14
27.	WORKERS' COMPENSATION:	15
28.	EMPLOYMENT OF LABOUR:	15
29.	EMERGENCY SITUATIONS	16
30.	SANITARY ACCOMMODATION ON SITE:	16
31.	QUALITY OF MATERIALS AND WORKMANSHIP:	16
32.	ACCESS TO SITE:	17

33.	EXAMINATION OF WORK BEFORE COVERING UP:	17
34.	TESTING, REJECTED WORK AND MATERIALS	17
35.	SUSPENSION OF WORK:	19
36.	MATERIALS SUPPLIED BY THE OWNER:	19
36.	COMMENCEMENT OF WORK:	20
37.	RIGHT-OF-WAY AND RIGHT OF ACCESS:	20
38.	TIME FOR COMPLETION:	20
39.	EXTENSION OF TIME FOR COMPLETION:	20
40.	RATE OF PROGRESS:	20
41.	CERTIFICATE OF SUBSTANTIAL PERFORMANCE:	21
<i>4</i> 2.	MAINTENANCE:	21
<i>4</i> 3.	CERTIFICATE OF MAINTENANCE:	21
44.	ALTERATIONS AND DELETIONS:	22
<i>45.</i>	EXTRA WORKS:	22
46.	QUANTITIES:	24
<i>47.</i>	WORKS TO BE MEASURED:	24
48.	PROVISIONAL AND CONTINGENCY ITEMS:	25
<i>4</i> 9.	PAYMENTS AND MONTHLY PROGRESS ESTIMATES:	25
50.	CANCELLATION OF CONTRACT:	25
51.	FRUSTRATION:	26
52.	BRIBERY AND CORRUPTION:	27
53.	SETTLEMENT OF DISPUTES:	27
<i>54.</i>	SALES TAX, ETC.:	28
55.	LIENS:	28
56.	INSURANCE:	28
57.	NOTICES:	29
58.	INTOXICATING LIQUOR; DRUGS:	29
59.	TESTING OF MACHINERY AND/OR EQUIPMENT:	29
60.	WAIVER:	30
61.	LIQUIDATED DAMAGES:	30
62.	EMERGENCY PERSONNEL:	30
63.	CONTRACT ADMINISTRATION FORMS	31

CONTRACTOR'S DECLARATION REGARDING CLAIMS FOR EXTRA WORK	32
CERTIFICATE OF SUBSTANTIAL PERFORMANCE	33
CONTRACTOR'S CERTIFICATE OF COMPLETION	34
RELEASE OF HOLDBACK CERTIFICATE	35
CERTIFICATE OF MAINTENANCE	38
LETTER OF CREDIT	39

1. **DEFINITIONS**:

In the Contract hereinafter defined the following words and expressions shall have the meaning here by assigned to them:

<u>"Approved"</u> means approved in writing by the Owner including subsequent written confirmation of previous verbal approval.

<u>"Contract"</u> is the agreement between the Owner and the Contractor for the provision of labour, plant, and materials for the execution of the Works by the Contractor.

<u>"Contract Documents"</u> The Contract Documents consist of the executed Agreement and the General Conditions of Contract, Supplementary General Conditions, Specifications, Drawings, Tender Documents, and such other documents as are listed in the agreement including all amendments thereto made pursuant to the provisions of the Contract or agreed upon between the parties.

<u>"Contractor"</u> means the person or persons or a company whose tender has been accepted by the Owner and who has entered into a contractual "Agreement" with the Owner, and includes the Contractor's personal representative or successors.

"Contract Price" means the sum named in the Tender subject to such additions and deductions as may be made under the provision of the Contract.

<u>"Drawings"</u> means the Drawings referred to in the Contract Documents together with any modification of such Drawings approved in writing by the Owner and such other Drawings as may be furnished or approved in writing by the Owner.

<u>"Material Supplier"</u> means any person, firm or corporation furnishing material to the Contractor for incorporation into the Works, such material not being worked to a special design.

<u>"Owner"</u> means Company, Corporation, District, Board, Council, Commission, or Authority identified as such in the Agreement between the Owner and the Contractor. The word "Owner" shall also mean the Owner's authorized representative and successors as designated in writing.

<u>"Plant"</u> shall mean all equipment and materials of every kind whatsoever brought onto the site by the Contractor, incidental to, or to assist him in the performance of the Works, but does not include materials or equipment intended to form or forming an integral part of the works.

"Public Utilities" means the authorities responsible for the distribution of Utility Services.

<u>"Sub-Contractor"</u> includes only a person, firm or corporation having a contract with the Contractor for the execution of a part or parts of the work included in the Contract, and a person, firm or corporation furnishing material called for in the Contract and worked to a special design according to the Drawings or Specifications, but does not include one who merely furnishes material not so worked.

<u>"Substantial Performance"</u> shall have the meaning ascribed to it by the Lien Legislation applicable to the location of the project, or if no such legislation is in effect or does not contain such definition, Substantial Performance shall have been reached when the Works are ready for use or are being used for the purpose intended as certified by the Owner.

"Tender Sum" means the sum named in the Form of Tender.

"Utility Services" means electric cables, telephone lines, gas pipes, water mains or pipes, sanitary sewers, storm water drains, conduits, or transmission lines, street lighting facilities, and traffic signal systems, whether public or private.

<u>"Work or Works"</u> means the whole of the works, materials, matters and things to be done, furnished and performed by the Contractor under the Contract.

2. AUTHORITY OF THE OWNER:

- .1 The Owner shall have the following powers:
 - A. The whole of the Work and manner of performing it and the Plant and materials furnished in respect thereof shall be subject to the inspection of the Owner, who shall be entitled at all times to do or to require the Contractor to do anything necessary to satisfy the Owner that it is being done or furnished exactly in accordance with the Contract.
 - B. The Owner shall be the sole judge of the Works and Plant as to quality, quantity and suitability and his decision on all questions in dispute with regard to the requirements of the Contract or to the Works or to Plant shall be final.
- .2 The approval by the Owner of any drawing or any method of work proposed by the Contractor shall not relieve the Contractor of his responsibility for any errors therein and shall not be regarded as any assumption of risk or liability by the Owner, and the Contractor shall have no claim under this Contract on account of the failure or partial failure or inefficiency of any plan or method so approved. Such approval shall be considered to mean merely that the Owner has not objected to the Contractor's using upon his own full responsibility, the plan or method proposed.
- .3 Any plan or method or work suggested by the Owner to the Contractor, but not specified or required, if adopted or followed by the Contractor in whole or in part, shall be used at the risk and responsibility of the Contractor; the Owner shall assume no responsibility therefor.
- .4 The Owner will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs required for the Work in accordance with the applicable construction safety legislation, other regulations or general construction practice. The Owner will not be responsible for or have control or charge over the acts or omissions of the Contractor, his Subcontractors, or their agents, employees or other persons performing any of the Work.

3. SUB-CONTRACTS:

The Sub-Contractors named in the Tender Form, and others as may be approved by the Owner following execution of the Contract Agreement, shall not be changed nor shall additional Sub-Contractors be employed except with the written approval of the Owner. The Contractor is responsible to the Owner for the acts and omissions of his Sub-Contractors and of their employees, to the same extent that he is responsible for the acts or omissions of persons employed by himself. Nothing in the Contract Documents shall create any contractual relation between any Sub-Contractor and the Owner. The Contractor shall bind every Sub-Contractor to the terms of the Contract Documents.

4. SUB-CONTRACTORS:

- I Before issuing any certificate of payment under Clause 50 hereof which includes any payment in respect of work done or goods supplied by any Sub-Contractor, the Owner shall be entitled to demand from the Contractor reasonable proof that all payments (less retention) included in previous certificates in respect of work or goods of such Sub- Contractor have been paid or discharged. In default, unless the Contractor shall inform the Owner in writing that he has reasonable cause for withholding such payment and produce to the Owner reasonable proof that he has so informed such Sub-Contractor in writing, the Owner shall be entitled to pay to such Sub-Contractor, direct, upon certification by the Owner, all payments (less retentions) which the Contractor has failed to make to such Sub-Contractor and to deduct by way of set-off the amount so paid by the Owner from any sums due or which may become due from the Owner to the Contractor.
- .2 Before issuing any certificate under Clause 50 hereof the Owner shall be entitled to demand from the Contractor proof in a form satisfactory to the Owner that all Sub- Contractors have fully paid and discharged all accounts for labour and materials directly or indirectly connected with such sub-contracts, which have accrued due in respect of work and materials for which such Sub-Contractors have been paid by virtue of previous certificates issued by the Owner. In default of such proof the Owner may require the Contractor as a condition of payment of the amount certified by the Owner in any certificate issued under Clause 50 hereof, to pay the accounts of such Sub-Contractor as may then have accrued due as aforesaid, and to furnish to the Owner proof of such payment.

5. EXTENT OF CONTRACT:

Except as the Contract otherwise provides, it comprises the completion and maintenance of the Works, as shown on the drawings and described in the Specification; the provisions of all labour, materials, construction plant, insurance, bonds, superintendence, temporary protection, temporary works and everything of a temporary or permanent nature required in and for the construction, completion and maintenance of the works included in this Contract.

6. CONTRACT DOCUMENTS:

- .1 The Contract Documents are to be taken as mutually explanatory and in case of ambiguities or discrepancies these shall be explained and adjusted by the Owner, and any such adjustment shall be considered as part of the Contract. On all questions relating to the interpretation of specifications or drawings and acceptability of the materials the decision of the Owner shall be final and binding.
- .2 The Contract Documents are to be considered as one, and whatever is called for by one of the documents shall be as binding as if called for by all.
- .3 In the event of conflicts between Contract Documents the following shall apply:
 - a) The executed Form of Agreement between the Owner and the Contractor shall govern over all documents.
 - b) Supplementary Conditions shall govern over the General Conditions.
 - c) The General Conditions shall govern over the Specifications.
 - d) Specifications issued by the Owner shall govern over Drawings.
 - e) Drawings shall govern over specifications and standard details issued by the Cowichan Valley Regional District.
 - f) Drawings of larger scale shall govern over drawings of smaller scale of the same date.
 - g) Figured dimensions shall govern even if they differ from dimensions scaled on the same drawing.

Notwithstanding the foregoing, documents of later date shall always govern.

.4 In addition to the Tender Documents and Contract Drawings issued by the Owner, all of the Works to be constructed under this Contract shall be carried out in accordance with the British Columbia Building Code, as adopted by the Cowichan Valley Regional District (latest revision). In cases where the term Municipal Owner, Consulting Owner, or Consultant, may be used in specifications issued by other than the Owner, substitute with "Owner" for the purposes of this Contract."

7. BONDS:

.1 The Contractor shall furnish on demand, if called for in the Tender Documents, prior to the signing of the contract, two bonds, each in the amount of fifty percent of the Tender Sum; one for the faithful performance of the Works in accordance with the Contract, and one for the payment of all bills and obligations incurred in carrying out the work under the Contract. The bonds shall be in the form attached hereto or in a similar form acceptable to the Owner, issued by a Company licensed to conduct business in the Province where the project is located.

- .2 The Contractor shall notify in writing every Sub-Contractor and Supplier having a direct Contract with him for work, materials or services to be expended under this Contract that they are protected by the terms of the Labour and Material Payment Bond. In addition, the notice from the Contractor shall especially point out that a creditor must file a claim by registered mail to the Contractor, Owner and surety before the expiration of 120 days from the date on which the work or services were completed or materials were supplied.
- .3 The Contractor shall post and maintain such posting, in a conspicuous position on the site of the works, a notice to the effect that the Labour and Material Payment Bond is in force, and setting out the information required to be provided in the preceding paragraph.
- .4 Any Sub-Contractor or Supplier having a direct contract with the Contractor and who has not been paid in full within the period stated in the Labour and Material Payment Bond may claim against the surety issuing same.

8. DRAWINGS AND SPECIFICATIONS:

The Owner will provide the Contractor with three (3) sets of Drawings and Specifications free of charge for the Contractor's use in constructing the Works. If the Contractor requires additional copies, these shall be provided by the Owner at the Contractor's expense. The Drawings and Specifications remain the property of the Owner and the use of these documents on other work is not permitted.

9. WORK TO BE TO THE SATISFACTION OF OWNER:

The Contractor shall carry out the Works in strict accordance with the Contract and to the satisfaction of the Owner.

10. PROGRAM OF WORKS:

- .1 Before commencement of the Works, the Contractor shall submit to the Owner for his approval a program showing the order of procedure and methods by which he intends to complete the Works by the required date stated on the Tender.
- .2 The Contractor shall also furnish details to the Owner whenever required of construction plant engaged or proposed to be engaged on the Works and temporary works to be undertaken.
- .3 The submission to and approval of the Owner of such program, or the furnishing of such particulars shall not relieve the Contractor of any of his duties or responsibilities under the Contract.

11. CONTRACTOR'S SUPERINTENDENCE:

- .I The Contractor shall give or provide all necessary superintendence during the execution of the Works and as long thereafter as the Owner may consider necessary for the proper fulfilling of the Contractor's obligations under the Contract.
- .2 The Contractor, or a competent and authorized representative satisfactory to the Owner, is to be constantly on the Works during working hours and shall give his whole time to the superintendence of the same. Any explanations, orders, instructions, directions and requests given by the Owner to the Contractor's site representative shall be held to have been given to the Contractor.

12. CONTRACTOR'S EMPLOYEES:

- .1 The Contractor shall provide and employ on the site, in connection with the execution and maintenance of the Works, only such technical assistants as are skilled and experienced in their respective callings, and such foremen as are competent to give proper supervision to the work they are required to supervise, and such skilled, semi-skilled and unskilled labour as is necessary for the proper and timely execution and maintenance of the Works.
- .2 The Owner shall be at liberty to require the Contractor to remove forthwith from the Works any person employed by the Contractor in or about the execution or maintenance of the Works, who, in the opinion of the Owner, is incompetent or unsatisfactory in any way, and such person shall not be again employed upon the Works without the written permission of the Owner.

13. LINES, GRADES AND MEASUREMENTS:

- .1 All work shall be constructed in accordance with the lines and grades shown on the Drawings or as prescribed by the Owner.
- .2 The Contractor must satisfy himself prior to commencing work at any point, as to the meaning and accuracy of all stakes and marks, no claim will be entertained by the Owner for or on account of any alleged inaccuracies, or for alterations subsequently rendered necessary on account of such alleged inaccuracies, unless the Contractor had notified the Owner thereof in writing before commencing the work there from.
- .3 The Contractor will be held responsible for the preservation of all stakes and marks established in position by the Owner. In the event any are disturbed, lost or destroyed after once having been established, he shall immediately advise the Owner in writing. All costs incurred by the Owner in re-establishing the same shall be a charge for the Contractor, or deducted from monies due him.
- .4 No compensation will be made to the Contractor for the cost of any work or delay occasioned by the reasonable time taken for establishing or checking line and grade nor will any extension of time be allowed for any delay occasioned thereby.

14. PUBLIC CONVENIENCE AND ACCESS:

- .1 The Contractor shall conduct his operations so as to cause the minimum obstruction and inconvenience to traffic and to places of business and residences adjacent to the Works. No greater quantity of work shall be undertaken at any one time than can be properly conducted with due regard for the right and interests of the public as may be determined by the Owner.
- .2 The Contractor is to provide safe, satisfactory and convenient means of approach and entrance to adjoining lanes, driveways, buildings and property both for vehicles and pedestrians wherever necessary in the opinion of the Owner. For this purpose, he shall construct and maintain suitable and safe platforms, approaches, structures, bridges, diversions or other works.
- .3 During all phases of the operation the Contractor shall take precautions to abate nuisance caused by mud or dust by clean-up, sweeping, sprinkling with water, or other means as necessary to accomplish results satisfactory to the Owner.
- .4 The Contractor shall not deposit any material upon any street, sidewalk, boulevard, or other property, without the Owner's permission, nor shall he allow the same to remain longer than necessary. All surplus spoil and rubbish and other waste material shall be removed from the site so that the area of work is cleaned up and restored to as clean a condition as it was before the Contract started, within four days of the Owner's written request so to do, failing which the Owner may carry out the work or have the work carried out by others and recover the costs from the Contractor or may deduct the cost from any monies due or that may become due to the Contractor.

15. STREET CLOSURES, DETOURS, BARRICADES:

- .1 The Contractor, during the progress of the Works, shall make adequate provision to accommodate the normal traffic along street and highways immediately adjacent to or crossing the Works so as to cause the minimum of inconvenience to the general public.
- .2 The Contractor shall give due notice to local police and fire departments prior to beginning construction and shall comply in all respects with their requirements.
- .3 The Contractor shall comply with the requirements of the appropriate authority concerned with the closure of streets or highways and shall post proper notices and/or signals, and provide necessary barriers, guards, lights, flagmen or watchmen as may be necessary in the best interests of the public. All costs involved in respect of the above requirements will be deemed to be included in the Contract Price.

16. DAMAGE TO WORKS:

The Contractor from the commencement of the works to the completion of the Period of Maintenance, shall take full responsibility for the care of the Works and of all temporary works, and in case any damage, loss or injury shall happen to the Works or to any part thereof or to any temporary works from any cause whatsoever (except that caused solely by the act of the Owner) shall, at his own cost, repair and make good same to the complete satisfaction of the Owner.

17. DAMAGE TO PERSONS AND PROPERTY:

- .I The Contractor shall indemnify and save harmless the Owner, his officers, employees, agents and invitees from all claims, demands, debts, suits, actions, causes of action and liability whatsoever from any and all loss, damage, injury, death, infringement, costs and expenses which the Owner may be liable for, pay, sustain or incur and caused by or indirectly arising from or out of or in consequence of the construction and maintenance of the Works.
- .2 The Contractor shall, at his own expense, arrange for a qualified person to reset any survey monuments, street furniture or traffic signs disturbed by him and shall replace any such thing damaged by him during the progress of the Works.

18. COMPLIANCE WITH STATUTES, REGULATIONS

- .1 The Contractor shall conform in all respects to the provisions of all laws, ordinances, by-laws and regulations in any manner affecting those engaged or employed in the Works or temporary works, or applicable to the Works in any way whatsoever.
- .2 The Contractor shall obtain and provide all the required licenses and permits required for the proper execution of the Works.
- .3 The Contractor shall keep the Owner indemnified against all penalties and liability of every kind for the Contractor's breach of any such law, ordinance, by-law or regulation.

19. FOSSILS, ETC.:

All fossils, coins, articles of value or antiquity and other remains or things of geological or archaeological interest discovered on the site of the Works shall be deemed to be the absolute property of the Owner and the Contractor shall take reasonable precautions to prevent his workmen or any other persons from removing or damaging any such article and shall, at the Owner's expense, carry out the Owner's orders as to the disposal of same.

20. PATENT RIGHTS:

The Contractor shall save harmless and indemnify the Owner from and against all claims and proceedings, damages or any cost whatsoever for or on account of infringement of any patent rights, design, trademark or name or other protected rights in respect of any construction plant, machine, work or material used for or in connection with the Works or temporary works.

21. CO-OPERATION AND COLLATERAL WORKS:

The Contractor shall conduct his operations in such manner as not to cause any unnecessary delay or hindrance to any other Contractor or Agency who may be employed in related or adjacent work and shall co-operate to the fullest extent with workmen engaged in or near the site on any work not included in this Contract.

22. SUPPLY OF PLANT, MATERIAL AND LABOUR:

- .1 Except where otherwise specified, the Contractor shall, at his own expense, provide all labour, materials, water, fuel, machinery, power, tools, implements, scows, boats, pumps and all appliances together with all necessary facilities for moving and transporting same and all storage grounds, sheds and offices requisite for the satisfactory completion and maintenance of the Works. The Contractor is prohibited from removing any plant or material or any part thereof from the site during the progress of the work without the written consent of the Owner. No advance of money will be made to the Contractor on plant delivered to the site and such allowance will only be made on materials which, in the opinion of the Owner, have reasonably been delivered to the site for early incorporation in the permanent Works and for which adequate and proper storage facilities have been provided.
- .2 The Contractor alone shall, at all times, be responsible for the safety, adequacy, efficiency and sufficiency of his plant, his equipment and his method of prosecuting the work under this Contract.

23. AIR POLLUTION CONTROL:

The Contractor shall so prosecute his work as not to discharge into the atmosphere from any source whatsoever smoke, dust or other air contaminants, which would create a nuisance or prove detrimental to public health.

24. FIRES:

The Contractor shall obtain any necessary fire permits from the appropriate authority and shall comply with all restrictions issued therewith.

25. EXPLOSIVES:

- .I The method of use and the character of all explosives shall be subject to the approval of the Owner who shall have the power to control or restrict the hours during which blasting operations may be carried out.
- .2 Explosives shall be properly transported, housed and protected as required by law, and no explosive known to have deteriorated shall be used. Approved methods of handling and thawing of frozen explosives shall be followed and the greatest care shall be exercised at all times by the Contractor in blasting operations.

26. CONTRACTOR'S RESPONSIBILITY:

- .I The Contractor shall be responsible for the design, adequacy, safety and efficiency of all false work, temporary structures and construction processes required in connection with the completion of the Contract. All such designs and plans shall be submitted to the Owner for comment and review, but such review shall not relieve the Contractor of any responsibility. The Contractor shall make good immediately any defects arising from faulty design of equipment for which he is responsible or of faulty application, at his sole expense.
- .2 The Owner has by visual search and enquiry endeavoured to locate and indicate on the drawings all underground utility services, which exist or existed within the limits of the site. However, the accuracy or completeness of the drawings in this respect, is not guaranteed. Service connections to adjacent properties may not be shown on the drawings. It shall be the responsibility of the Contractor to determine the exact location of all utilities and their service connections and he will advise the Owner of any utility services which have been incorrectly shown or omitted from the drawings.
- .3 The Contractor shall give the appropriate Public Utilities 72 hours' advance notice of his intention to carry out excavations in the vicinity of their services. The Contractor must take every reasonable precaution to avoid damage to utility services or connections and he shall be held responsible for any such damage which must be made good with all speed and diligence to the entire satisfaction of the Public Utility concerned and in such manner as they shall dictate. Any costs involved in this connection will be borne by the Contractor and will be deemed to have been included in the unit prices.
- .4 The Contractor shall make adequate provision to the satisfaction of the Owner to maintain the flow of sewers, drains and water courses encountered during construction. Any such structures which may be disturbed during the Contract shall be satisfactorily restored by the Contractor, as may be required by the Owner, at the Contractor's expense.
- .5 The Contractor shall not interrupt any utility service or throw any valve, switch or other control or otherwise interfere with any utility system for any purpose without the prior approval of the Owner and the Public Utility. All consumers affected by any such operations shall be notified by the Contractor as directed by the Owner or Public Utility before the operation and advised of the probable time when service will be restored.

- .6 If, in the opinion of the Owner the Contractor fails, neglects or omits to observe or perform any or all of his liabilities under this Contract, the Owner on giving three days' notice (or such other notice as may be provided for in the Contract) may take such steps, procure such material, equipment or labour and carry out such work as may in his opinion be necessary, and all expenses so incurred may be recovered from the Contractor by the Owner or may be deducted by the Owner from any monies due or which may become due to the Contractor.
- .7 The Contractor shall pay any and all accounts for labour, services, and materials used by him during the fulfillment of this Contract as and when such accounts become due and payable, and shall furnish the Owner with proof of payment of such accounts in such form and as often as the Owner may request. Should payment of such accounts not be made when and as they become due, the Owner, after notifying the Contractor, shall be at liberty to pay the same and to deduct any amounts so paid from the monies due or to become due to the Contractor under this Contract. Such payments shall be regarded as payments made by the Owner to the Contractor on account of this Contract and shall operate as a discharge of the monies due or to become due to the Contractor and such payments may be recovered from the Contractor.
- .8 If the Contractor, in the course of his work, finds any errors or omissions in drawings or in layout as given by survey points and instructions, or if he finds any discrepancy between the drawings and the physical conditions of the locality, he shall immediately inform the Owner in writing, if he deems necessary, shall rectify the matter and advise the Contractor accordingly. Any work done after such discovery, until authorized, will be done at the Contractor's risk.

27. WORKERS' COMPENSATION:

The Contractor shall be responsible for compliance with all conditions and regulations under the Workers' Compensation Act and for all levies which may be made thereunder.

28. EMPLOYMENT OF LABOUR:

- .1 The Contractor shall employ skilled labour on work requiring special qualifications and he shall at all times as far as it is reasonably possible so to do, employ labour for engagement on the Works, whose ordinary place of residence lies within the administrative boundaries of the Owner, if such exist.
- .2 The Contractor shall pay rates of wages which are not less favourable than those recognized from time to time by the office of the Provincial Ministry of Labour, for payment in the vicinity of the said Works to the appropriate trades.
- .3 The Contractor shall not refuse employment or otherwise discriminate against any person in regard to employment because of that person's race, colour, religion or national origin.

29. EMERGENCY SITUATIONS

- .1 Where the exigencies of the situation demand urgent action to meet the Contractor's obligations, the Contractor shall work outside normal working hours in either single or double shifts without additional remuneration. The Owner may order such action if he deems it to be necessary or he may authorize payment for such work under Extra Work where the work is outside the scope of the Contract.
- .2 Unusual conditions may arise on the Works which will require that immediate and unusual action be taken to protect the public from danger or loss or damage to life or property due directly or indirectly to the prosecution of the work, and it is part of the service required of the Contractor to make such provisions and to furnish such protection. Whenever, in the opinion of the Owner, an emergency exists against which the Contractor has not taken sufficient precaution for the safety of the public or the protection of utilities or of adjacent structures or properties which may be injured by process of construction on account of such neglect and whenever, in the opinion of the Owner, immediate action shall be necessary in the public interest, the Owner may take such action as is necessary to safeguard the public interest.
- .3 All costs involved in implementing the above contractual requirements will be properly chargeable to the Contractor and may, if necessary, be deducted from any sums due or which may become due to the Contractor under the terms of the Contract.
- .4 The Contractor shall save harmless and indemnify the Owner in respect of all claims for damages arising out of or in relation to any such matters.

30. SANITARY ACCOMMODATION ON SITE:

The Contractor shall provide and properly maintain in clean and sanitary condition on a site approved by the Owner, suitable and convenient privy or toilet accommodation for his workers, and they shall be kept in such condition so that they shall not be a source of inconvenience, complaint or nuisance to the public or to residents in the vicinity of the Works.

31 QUALITY OF MATERIALS AND WORKMANSHIP:

- .I All materials, which shall be new unless otherwise specified, and workmanship shall be the best of the respective kinds described in the Contract and in accordance with the Owner's instructions and shall be subjected from time to time to such tests as the Owner may direct. The Contractor shall provide such assistance, instruments, machines, labour and materials as are normally required for examining, measuring, and testing any work and the quality, weight, or quantity of any material used and shall supply samples of materials for testing before incorporating in the Works.
- .2 The names of all Material Suppliers whose materials are to be incorporated into the Works, shall be provided in writing to the Owner by the Contractor prior to or at the time of delivery to the site.

32 ACCESS TO SITE:

The Owner and any person authorized by him shall at all times have access to the Works and to the site and to all workshops and places where work is being prepared or whence materials, manufactured articles, or machinery are being obtained for the Works and the Contractor shall afford every facility for and every assistance in obtaining the right to such access.

33. EXAMINATION OF WORK BEFORE COVERING UP:

- .I No work shall be covered up or put out of view without the approval of the Owner or the Owner's Representative and the Contractor shall afford full opportunity for the examination and measurement of any work which is about to be covered up and to examine foundations before permanent work is placed thereon. The Contractor shall give adequate advance notice to the Owner's Representative whenever any such work or foundation is ready for examination and such inspection shall be carried out promptly.
- .2 The Contractor shall uncover any part or parts of the Works as the Owner may direct and shall reinstate and make good such part or parts to the satisfaction of the Owner. If any such part or parts have been covered up after compliance with the first paragraph of this clause, and having been thus uncovered are found to be in accordance with the Contract, the expenses of reconstructing and reinstating shall be borne by the Owner but in any other case, all such expenses shall be borne by the Contractor.

34. TESTING, REJECTED WORK AND MATERIALS

The test and inspections required by the Contract Documents are for the Owner's benefit as part of the Owner's Quality Control and Quality Assurance program. Acceptable test and inspection results will not relieve the Contract of its obligations under the Contract to correct defects and deficiencies in the Work.

All Quality Control test results must be made available to the Owner within one Calendar Day.

The Contract shall promptly provide the Owner with two (2) copies of all certificates, inspections and testing reports required by the Contract Documents or ordered by the Owner.

All Quality Control testing is the responsibility of the Contractor. Quality Control for compaction testing frequencies specified as follows, are minimums:

- A. 10mm Cart Path one for each 1000 sq.m of compacted layers.
- B. 19mm Crushed Gravel one for each 1000 sq.m of compacted layers.
- C. Embankment one for each 1000 sq.m of compacted layers.
- D. Imported Fill one for each 1000 sq.m of compacted layers.
- E. Testing to be completed by a testing agency approved by the Owner.

The Contractor shall, as part of the Work, perform, or cause to be performed, all tests, inspections and approvals of the Works as required by the Contract Documents, and, if a test, inspection or approval requires a representative sample of materials or workmanship, the Contractor shall, at the Contractor's own cost, supply the labour and materials necessary to provide the sample.

The Contractor will comply with any orders or directions given by the Owner for inspection or testing that was not called for in the Contract Documents, and have such inspections or testing undertaken.

- If the Owner orders that such inspection or testing, that was not called for in the Contract Documents, be carried out in advance of the Work, then the order shall be treated as a change.
- If the Owner orders that such inspection or testing, that was not called for in the Contract Documents, be carried out on work that is completed then the following applies:
 - o If the inspection or testing determines that the Work is not in accordance with the requirements of the Contract Documents, then the Contractor shall correct such Work and pay the costs of the inspection and testing and all costs of the correction and the restoration. The Contractor shall also reimburse the Owner for any additional Engineering, inspection, testing, or Other Contractor's costs incurred in respect of rejected work or materials, whether such Work or materials are replaced or not or acceptable at a lower price.
 - If the inspection or testing determines that the Work is in accordance with the requirement of the Contract Documents then the Owner shall pay all costs of the inspection and testing and restoration required due to the testing.

When initial testing indicates that the Work does not comply with the Requirements of the Contract Documents, additional testing may be required by the Owner, and the Contractor shall pay the cost of the additional inspection and testing.

If, for any reason, including poor workmanship, defective products, or materials, and damage to completed Work, the Owner rejects work because it fails to conform to the Contract Documents, then the Contractor shall, at the Contractor's expense, promptly remove such work from the Place of the Work and replace or re-execute it in accordance with the requirements of the Contract Documents. Such remedial Work shall include any re-testing reasonably required to establish that the completed Work complies with the Contract Documents. This provision applies to all materials, products and portions of the Work whether or not incorporated in 0 the Work as a whole.

If in the opinion of the Owner it is not expedient to correct defective Work or Work not performed in accordance with the Contract Documents, then the Owner may direct that such work be left and the Owner may deduct from the moneys otherwise due to the Contractor the difference in value to the Owner, considering the Owners intended use of the Work, between the work as performed and as called for by the Contract Documents. The amount of such a deduction will be determined by the Owner.

35. SUSPENSION OF WORK:

- .1 The Contractor shall, on the written order of the Owner, suspend the progress of the Works or any part thereof for such time or times and in such manner as the Owner may consider necessary and shall during suspensions properly protect and secure the work so far as is necessary in the opinion of the Owner. The extra cost, if any, incurred by the Contractor in giving effect to the Owner's instructions under this clause shall be borne and paid by the Owner unless such suspension is:
 - A. otherwise provided for in the Contract or
 - B. necessary for the proper execution of the work or by reason of weather conditions or by some default on the part of the Contract or
 - C. necessary for the safety of the Works or any part thereof.
- .2 Provided that the Contractor shall not be entitled to recover any such work cost unless he gives notice in writing of his intention to claim to the Owner within 28 days of the Owner's order, the Owner shall settle and determine in such manner as he considers fair and reasonable, the extra payment to be made to the Contractor in respect of such claim.

36. MATERIALS SUPPLIED BY THE OWNER:

- The materials and permanent equipment when listed in the Instructions to Tenderers, as amended or as notified subsequently by the Owner in writing in respect of additional Works ordered under Clause 46 hereof, shall be supplied on reasonable notice by the Owner. The Contractor shall be responsible for loading and transporting materials from the Owner's store or for arranging delivery dates, taking delivery of, handling, unloading, transporting, storing, demurrage, erection and installing any such material and permanent equipment and any other costs or charges in connection with the supplied items, and all such costs shall be included in the tendered unit prices in the Schedule of Prices and Approximate Quantities.
- .2 In connection with any materials which the Owner may supply, the Contractor shall immediately notify in writing, the Owner and the Supplier of any materials which are not in accordance with the Specification or are damaged or otherwise unsatisfactory at the time of delivery. All material which is thus unacceptable for incorporation in the Works and of which the Owner has not been notified in writing as stated above, and all material which has been subsequently lost or damaged or for any other reason is un- satisfactory, shall be paid for by the Contractor. The total cost of such materials will be deducted from monies due or which may become due to the Contractor.
- Any materials furnished by the Owner which are surplus to requirements on completion of the Works, or which have not been incorporated in the Works, shall be returned by the Contractor to the Owner's yard or store, and the Contractor shall be responsible for any discrepancy, shortages or damaged items, the value of which may be deducted from any sums owing to the Contractor. If the Contractor calls forward materials which are unreasonably in excess of requirements, then he shall be responsible for any costs incurred in returning such surplus items to the supplier.

37. COMMENCEMENT OF WORK:

The Contractor shall commence the Works on site within the period named in the Instructions to Tenderers after the receipt by him of any order in writing to this effect from the Owner and shall proceed with the same with due expedition and without delay except as may be expressly sanctioned or ordered by the Owner.

38. RIGHT-OF-WAY AND RIGHT OF ACCESS:

.1 The Contractor shall bear all expenses and charges for special or temporary rights-of- way required by him in connection with the access to the site, and will be responsible for all costs so incurred.

39. TIME FOR COMPLETION:

Subject to any requirements as to completion of any portion of the Works before completion of the whole, the whole of the Works shall be completed within the period stated in the Contract.

40. EXTENSION OF TIME FOR COMPLETION:

- .1 Should the amount of extra or additional work of any kind or any other special circumstances whatsoever be such as fairly to entitle the Contractor to an extension of time for the completion of the work, the Owner shall determine the amount of such extension, provided that the Owner is not bound to take in to account any extra or additional work or other special circumstances unless the Contractor has, within 28 days after such work has been commenced or such circumstances have arisen or as soon thereafter as is practicable, delivered to the Owner's Representative full and detailed particulars of any claim to extension of time to which he may consider himself entitled in order that such claim may be investigated at the time.
- .2 It will be assumed that the Contractor has made adequate allowance in the prices bid for usual weather conditions at the place of the Work.

41. RATE OF PROGRESS:

The Contractor shall employ and furnish sufficient forces, Plant and Material and shall work such hours, including night shifts and lawful overtime, as may be necessary to ensure construction of the work and every part thereof by the respective dates provided in the Contract Documents for the completion of the Work and parts of the Work. If, in the opinion of the Owner, the rate of progress of the construction of the Work is insufficient to enable completion in due time in accordance with the Contract, the Contractor shall take whatever steps the Owner, in his discretion, may specify to expedite the progress of the Work. Failure of the Contractor to comply with the requirements of the Owner, except where prevented by circumstances beyond the control of the Contractor, shall be grounds for the Owner to declare the Contract forfeit in accordance with Clause 51 hereof.

42. CERTIFICATE OF SUBSTANTIAL PERFORMANCE:

As soon as, in the opinion of the Owner, the Works have been substantially completed and have satisfactorily passed any final test that has been prescribed by the Contract, the Owner, on receiving a written agreement from the Contractor to finish any minor outstanding work during the Period of Maintenance, shall issue a Certificate of Substantial Performance in respect of the Works and the Period of Maintenance of the works shall commence from the date of such certificate, provided that the Owner may at his sole discretion issue such Certificate with respect to any part of the Works which may be occupied or used by the Owner and which has been completed to the satisfaction of the Owner.

43. MAINTENANCE:

- .1 The Period of Maintenance shall mean a twelve-month period calculated from the date of the Certificate of Substantial Performance referred to in Clause 42 hereof. During this period, the Contractor shall execute all work of repair, amendment, reconstruction, rectification and making good of defects, imperfections, shrinkages, settlements or other faults as may be required of the Contractor in writing by the Owner during the Period of Maintenance always provided that fair wear and tear is excepted.
- .2 All such work shall be carried out by the Contractor at his own expense and if he shall fail to do any such work the Owner, after giving the Contractor ten (10) days' notice, or in emergencies, shall be entitled to make alternative arrangements for the execution of this work and to recover the cost from the Contract or may deduct the same from any monies due or that may become due to the Contractor.

44. CERTIFICATE OF MAINTENANCE:

- .1 Within 28 days of the expiration of the Period of Maintenance (or if different Periods of Maintenance shall become applicable to different parts of the Works, the expiration of the latest such period) or as soon thereafter as any Works ordered during such period pursuant to Clause 43 hereof shall have been completed to the satisfaction of the Owner, a Certificate of Maintenance will be signed by the Owner and delivered to the Contractor. The Contract will not be completed until this Certificate of Maintenance is signed notwithstanding any previous entry on the Works or the taking possession, working or using thereof or any part thereof by the Owner. Before this certificate is issued, the Contractor shall provide a statutory declaration described in Clause 50.4 hereof.
- .2 The Owner shall not be liable to the Contractor for any matter or thing arising out of or in connection with the Contract or the execution of the Works unless the Contractor shall have made a claim in writing in respect thereof before the signing of the Certificate of Maintenance.

45. ALTERATIONS AND DELETIONS:

- 1. The Owner shall have the right to vary the form, quality or quantity of the Works or any part thereof, and may increase or decrease the quantity of any work, delete any such work, change the character or quality of any work, change levels, lines, or dimensions of any such work and may order the execution of additional work of any kind and such variation shall not in any way vitiate or invalidate the Contract but the value of all such variations shall be taken into account in ascertaining the amount of the Contract Price.
- .2 No such variation shall be made by the Contractor without an order in writing from the Owner except that no order in writing shall be required for increase or decrease in the quantity of any work which results from the quantities exceeding or being less than those stated in the Schedule of Prices and Approximate Quantities.
- .3 Should the variation of the quantities be greater than twenty percent (20%) of the quantities stated in the Schedule of Prices and Approximate Quantities, the Owner or the Contractor may call for renegotiation of the unit prices and the other party will comply.

46. EXTRA WORKS:

- .1 Whenever it becomes necessary to carry out any work not covered by the plans or included in the Specifications or Special Specifications, the Owner shall order the Contractor to undertake such work by issuing in writing an Order for Extra Work.
- .2 The value of any change shall be determined in one or more of the following ways, as deemed most fairly applicable by the Owner:
 - A. By unit prices tendered and agreed upon.
 - B. By cost and percentage.
 - C. By quotation and acceptance in a lump sum.
- .3 If the Contract does not contain any rates applicable to Extra Work and such work is authorized to be done under B. above, then the Contractor's compensation subject to the approval of the Owner, shall be determined in accordance with the under-mentioned components of cost as follows:

A. Labour

"Cost of Labour" means the amount of wages, salary, and payroll burden paid or incurred directly by Contractor to or in respect of labour and supervision by fore-men actively and necessarily engaged on the extra work based on recorded time and hourly rates of such labour and supervision.

This shall not include any payment or costs incurred for general supervision, administration, or management time spent on the extra work.

"Payroll burden" means the payments in respect of workers' compensation, vacation pay, unemployment insurance, public liability and property damage insurance, sick-ness and accident insurance, pension funds or other emoluments but shall not include any cost or expense of food or lodging.

The Owner shall pay the Contractor for labour and supervision directly employed on the Extra Work at the rate of 110% of the cost of labour as defined above.

B. <u>Material</u>

"Cost of Material" means the cost of material purchased by the Contractor for the extra work as shown by itemized invoices and the cost of material from the Con- tractor's stock used on the force account work at current prices.

The Owner shall pay the Contractor for material used in extra work the sum of 110% of the cost of material, subject however that formwork material salvaged by the Contractor in re-usable condition shall be accepted by him and 50% of the cost of such material shall be deducted from the amount payable to the Contractor.

The Owner reserves the right to furnish such material as it deems advisable, and the Contractor shall have no claim for costs and mark-up on such material.

C. Equipment

The Contractor will be paid the current rental rates applicable for such equipment in the area of the work.

The applicable rates are all-found rates and include the cost of operator, fuel, oil, lubrication, supplies, small tools, repairs and maintenance of any kind, depreciation, storage and insurance.

D. Sub-Contractors

Where the Extra Work involves the use of an approved Sub-Contractor, the Owner will pay to the Contractor the Sub-Contractor's Cost of Labour plus 10% as outlined in A of this Clause plus an additional 5% to cover the Contractor's overhead and profit.

No additional markup will be allowed for Costs outlined in B, C, and D of this Clause.

- .4 This method of determining the value of work shall not apply to the performance of any work or the furnishing of any material which in the sole judgment of the Owner is susceptible to classification under the items for which prices are already established in this Contractor is required under the Contract to be performed or furnished without payment.
- .5 Whenever any extra work is in progress the Contractor shall each day report to the Owner in writing in detail the amount and cost of the labour and materials and equipment used in carrying out each piece of extra work on the preceding day and no claim for compensation for extra work or materials will be considered or allowed unless such report shall have been made.
- .6 The Owner will not pay nor allow any compensation for the cost of repairs or undue wear and tear to equipment of any kind or for damage to anything used in performance of the Contract including any such extra works or making any such alterations.

- .7 The Contractor shall provide the Owner with every facility for the compilation of cost records and if required, shall supply all data necessary for such purpose.
- .8 The Contractor's payrolls, time books, books of accounts, invoices, receipts and statements shall be at all times open for inspection and extract by the Owner or his representative who shall be assisted in every possible way by the Contractor.

47. QUANTITIES:

The quantities set out in the Schedule of Prices and Approximate Quantities are the estimated quantities of the work but they are not to be taken as the actual and correct quantities of the Works to be executed by the Contractor in fulfillment of his obligations under the Contract, as they may be varied in any way as referred to in Clause 45 hereof.

48. WORKS TO BE MEASURED:

- .1 The Owner shall, except as otherwise stated, ascertain and determine by measurement the value of work done in accordance with the Contract. He shall, when he requires any part or parts of the Works to be measured give notice to the Contractor's authorized representative who, if he so desires, shall forthwith attend or send a qualified agent to assist the Owner or the Owner's Representative in making such measurement and shall furnish all particulars required. Should the Contractor not attend or neglect or omit to send such agent, then the measurement made by the Owner or approved by him shall be taken to be the correct measurement of the work.
- .2 The Works shall be measured notwithstanding any general or local custom except where otherwise specifically described in the Contract.
- .3 In the event of any dispute regarding measurement, the record of the Owner shall be used as the basis for payment and the work shall proceed without delay. The Contractor shall, however, be entitled to have the dispute settled as provided for in Clause 54 of the General Conditions.
- .4 Where items have been tendered as a Lump Sum in the Schedule of Prices and Approximate Quantities, the Contractor shall, within a period of seven (7) calendar days after receiving notice that his Tender has been accepted, submit to the Owner a schedule of values of the various parts of the work aggregating the total shown for each Lump Sum, made out in such form, and supported by such evidence as to its correctness as the Owner may direct. This Schedule, when approved by the Owner, shall be used as a basis for applications for payment, unless it be found to be in error.
- .5 Progress claims shall include a statement based upon this Schedule and itemized in such form, and supported by such evidence as the Owner may direct, showing the basis of the Contractor's claim to the payment requested.

49. PROVISIONAL AND CONTINGENCY ITEMS:

All sums set out in the Schedule of Prices and Approximate Quantities which shall be stated to be provisional or for contingencies shall be used only on the written instructions and at the sole discretion of the Owner. All or any unused portion of these sums shall revert to the Owner and shall be deducted from the Contract Price before final payment is made.

50. PAYMENTS AND MONTHLY PROGRESS ESTIMATES:

- .1 Progress payments will be made monthly to the Contractor, on estimates prepared by the Owner. These shall be based on the approximate estimates of quantities of work completed, and computed at the unit prices contained in the Schedule of Prices and Approximate Quantities.
- .2 Within 30 days of the issue of each Progress Estimate, the Owner will pay to the Con- tractor the amount stated in such estimate less 10 percent thereof and less all previous payments made under the terms of this Contract.
- .3 The said monthly estimates prepared by the Owner shall not bind the Owner in any manner in the preparation of his final estimate of work done by the Contractor under this Contract but shall be construed and held to be approximate only and shall in no case be taken as an acceptance of the work or as a release of the Contractor from his responsibility under this Contract.
- After a period of 55 days from the date of issue of the Certificate of Substantial Performance referred to in Clause 42 hereof, and upon the production by the Contractor of a statutory declaration attesting that all monies owing to its workers, Subcontractors, material suppliers and governmental agencies have been paid and all monies owing by Subcontractors for all labour, materials and equipment supplied under the Contract has been paid, the 10 percent retention money shall be released and the Contractor shall be paid the total amount stated in the last monthly Progress Estimate less the Specific Retention called for in the Instructions to Tenderers. This Specific Retention, together with the Performance, and Labour and Material Payment Bonds shall remain valid throughout the Period of Maintenance shall not be released until the issuance of the Certificate of Maintenance referred to in Clause 44 hereof.
- .5 The Contract shall not be considered as fully completed nor the work fully performed until a Certificate of Maintenance shall have been signed by the Owner see Clause 44 hereof.

51. CANCELLATION OF CONTRACT:

- .1 If the Contractor makes any assignment for the benefit of creditors, or becoming bankrupt or insolvent takes the benefit of or becomes subject to any Statutes that may be in force relating to bankrupt or insolvent debtors, or if any order is made for the winding-up of dissolution of the Contractor, or if the Contractor assigns the Contract without the consent in writing of the Owner or if the Owner shall certify in writing that in his opinion the Contractor:
 - A. has abandoned the Contract, or

- B. without reasonable cause has failed to commence the Works or has suspended operations without authority, or
- C. has failed to proceed with the Works with due diligence, or
- D. has failed to remove condemned materials or replace condemned workmanship, or
- E. is not executing the Works in accordance with the Contract, or
- F. has sub-let the Works or part thereof in defiance of the Owner's instructions to contrary, or
- G. neglects or refuses to comply with the conditions of the contract,

then the Owner may, after giving 14 days' notice in writing to the Contractor, enter upon the site of the Works and expel the Contractor therefrom without in any way releasing the Contractor from his obligations or liabilities under the Contract, and may himself complete the Works or may employ any other Contractor to complete the Works and such other agency may use as much of the construction plant, temporary works and materials which have deemed to become the property of the Owner under the provisions of the Contract as he or they may think proper and the Owner may sell any of the said construction plant, temporary works and unused materials and apply the proceeds of sales in or toward the satisfaction of any sums due or which may become due to him from the Contractor under the Contract.

- .2 The Owner shall, exparte, as soon as practicable after any such entry and expulsion by the Owner fix and determine and certify what amount, if any, had at the time of such entry and expulsion been reasonably earned by the Contractor in respect of work then actually done by him under the Contract and what was the value of any unused or partially used materials, and constructional plant and any temporary works which have been deemed to become the property of the Owner under the provisions of the Contract.
- In event of expulsion of the Contractor from the site under this Clause, the Owner shall not be liable to pay to the Contractor any money on account of the Contract until the expiration of the Period of Maintenance until the costs of completion, maintenance, damages for delay in completion, if any, and all other expenses incurred by the Owner have been ascertained and certified by the Owner whichever date is the later. The Contractor shall then be entitled to receive only such sum as the Owner may certify would have been due to him upon completion by him after deducting the said amount. But if such amount should exceed the sum which would have been payable to the Contractor when the Work was fully completed by him then the Contractor shall upon demand pay to the Owner the amount of such excess and it shall be deemed a debt due by the Contractor to the Owner and shall be recoverable accordingly.

52. FRUSTRATION:

In the event of the Contract being frustrated whether by war or any other cause and being terminated other than under Clause 51 hereof, the sum payable by the Owner to the Contractor in respect of the work executed shall be as follows:

- A. The amounts payable in respect of any preliminary items, so far as the work or service comprised therein has been carried out or performed, as proportioned by the Owner.
- B. The cost of materials or goods reasonably ordered, and purchased by the Contractor for the Works delivered to the Contractor on the site.
- C. A sum to be certified by the Owner being the amount of any expenditure reasonably incurred by the Contractor in the expectation of completing the whole of the Works, in so far as no such expenditure is covered elsewhere in this Clause.
- D. The reasonable cost of removal of construction plant from the site.
- E. The reasonable cost of removal of all Contractor's staff and workmen employed on or in connection with the Works at the time of termination.
- F. The assessed value of all work executed to the date of determination at the rates and prices provided in the Contract, as determined by the Owner, less any pay-ments already paid on account to the Contractor.

53. BRIBERY AND CORRUPTION:

Should the Contractor or any of his agents or employees give or offer any gratuity, or hold out any reward or attempt in any way to bribe any employee or servant of the Owner, or of the Owner's representatives or agents, the Owner shall be at liberty to terminate and cancel the Contract forthwith, or to direct the Owner to take the whole or any part of the Works out of the hands of the Contractor in such manner as specified in Clause 51.

54. SETTLEMENT OF DISPUTES:

- .1 The Owner is, in the first instance, the interpreter of the Contract and the judge of its performance and shall decide on questions arising under the Contract Documents whether as to the performance of the work or the interpretation of the specifications and drawings, or as to the measurement of quantity or valuation of any work executed or to be executed under the Contract.
- .2 In all cases of misunderstanding and disputes, oral arrangements will not be considered and the Contractor must produce written authority in support of his contentions, and shall advance no claim in the absence of such written authority or use any conversation with any person in presenting any claim against the Owner.
- .3 In the event of the Contractor failing to agree with the Owner's decision, the Contractor shall act in accordance with such decision and any question of cost due to the aforesaid cause may be decided by arbitration in the manner hereinafter provided.

Any matter which, in the Contract, is left to be mutually agreed upon by the parties, and upon which they cannot agree, may be settled by arbitration under the Arbitration Act, R.S.B.C. 1979 C.18, as amended. The location for the arbitration shall be Victoria, British Columbia.

55. SALES TAX, ETC.:

The Contractor shall allow in his tender for the payment of Sales Taxes other than on materials or goods supplied by the Owner; Permit Fees, Licences and all or any Municipal, Provincial or Federal charges in connection with the Contract, and the Contractor agrees that the Owner shall not be liable in any manner therefore and hereby indemnifies and saves harmless at all times the Owner against any claims which may be made in respect there to.

56. LIENS:

The Contractor shall make payment and take all other steps which may be necessary, to ensure that all contract monies, and the said Works and every part thereof shall be and shall remain at all times free from and not liable to any lien or charge whatsoever, or any claim or liability or to any attachment for debt, garnishee process or otherwise, and the Contractor and his bondsmen or sureties as well as their respective executors, administrators, successors and assigns shall fully indemnify and save harmless the Owner and all his officers, servants and employees from any and all such liability and shall on demand immediately cause any such lien charge, claim, or attachment to be removed or released from the records of any Court or Registry Office in which the same may appear.

57. INSURANCE:

Without limiting the obligations contained under Clause 17 hereof, the Contractor shall provide, maintain and pay for the insurance coverage(s) listed hereunder unless otherwise stipulated:

(a) General Liability Insurance

General Liability insurance shall be in the joint names of the Contractor, the Owner and shall include a Liability Clause with limits of not less than,

\$5,000,000 inclusive per occurrence for bodily injury, death, damage to property including loss of use thereof, with a Property Damage deductible of \$500.

This insurance shall be maintained continuously from the commencement of the work until twelve (12) months following the date of issue of the Certificate of Substantial Performance of the Work.

If the Insurance Policy contains any exclusions pertaining to the under-mentioned operations and such operations are to be performed by the Contractor or anyone on his behalf; then such exclusions are to be deleted:

- (i) the use of explosives for blasting, or
- (ii) vibration from pile driving or caisson work, or
- (iii) the removal or weakening of support of any property, building or land whether such support be natural or otherwise, or
- (iv) excavations, or
- (v) demolitions.

The policy shall contain a clause stating that: This policy will not be cancelled or materially changed without the insurer giving at least thirty (30) days' notice by registered mail to the Owner. Certified copies of this policy shall be filed by the Contractor with the Owner prior to commencement of the work. Wherever the word "Owner" or "Contractor" is to appear in these policies, the legal name shall be inserted.

(b) Automobile Liability Insurance

The Contractor shall buy and keep in force until all conditions of the contract have been fully complied with, the standard automobile policy covering all licensed vehicles owned by him, registered in his name or leased to him. Such insurance shall include liability insurance for the folio wing minimum limits:

- Bodily Injury and Property Damage - \$5,000,000.00 inclusive.

The Contractor shall furnish proof of such insurance.

The Contractor shall buy and keep in force until all conditions of the contract have been fully complied with, a standard non-owned automobile policy. Such insurance shall be for the following limits:

- Bodily Injury and Property Damage - \$5,000,000.00 inclusive.

The Contractor shall furnish proof of such insurance, or by acceptable addition to the general liability policy.

58. NOTICES:

- .I Any notice to be given to the Contractor under the terms of the Contract shall be served by sending the same by post to, or leaving the same at, the Contractor's principal place of business (or in the event of the Contractor being a Company to or at its registered office).
- .2 Any notice to be given to the Owner under the terms of the Contract shall be served by sending the notice by post to, or leaving the same at, the Owner's last known address.

59. INTOXICATING LIQUOR; DRUGS:

The Contractor shall not bring nor permit any of his employees to bring onto the site any intoxicating liquor or drugs, and if any person employed by the Contractor on the Works is, in the opinion of the Owner, intemperate, disorderly or otherwise under the influence of alcohol or drugs, he shall, on the direction of the Owner, be forthwith discharged and the Contractor shall not again employ him on the site.

60. TESTING OF MACHINERY AND/OR EQUIPMENT:

.1 Following the erection and installation of any equipment, plant or machinery, the Owner may require the Contractor to carry out any tests to determine the mechanical efficiency of the equipment or machinery. For these tests the Contractor shall furnish all supplies, material, apparatus, instruments, labour and superintendence which may be required.

- .2 Should the test prove the existence of any fault or if they show that the mechanical efficiency is not up to that stipulated by the Contract then the Owner may direct the Contractor to remedy the defect or defects, or to repair, reconstruct or replace the faulty work, all at his own expense, and any subsequent testing which may be necessary shall be at the expense of the Contractor.
- .3 Should the Contractor fail to meet his obligations in any particular, the Owner shall have the right to remedy as provided for in Clause 26 hereof.

61. WAIVER:

No action nor lack of action on the part of the Owner at any time to exercise any rights or remedies conferred under this Contract shall be deemed to be a waiver on the part of the Owner of any of the said rights or remedies.

62. LIQUIDATED DAMAGES:

Failure of the Contractor to complete the work within the time specified in the Tender Form shall entitle the Owner, in addition to other damages recoverable, to recover from the Contractor all costs associated with the Owners services for the period between the specified time for completion and the actual completion of the Works. Such recovery of costs by the Owner may be effected by deduction from monies owed or may become due to the Contractor. The cost of extra on- site costs associated with Contract Administration and Inspection shall be \$1,000.00 per working day.

Delays caused by seasonal weather conditions have been provided for in establishing the specified completion date and shall not be considered sufficient reason for waiving of Liquidated Damages by the Owner.

If under Clause 39 an extension of time for completion is granted to the Contractor, the Contractor will not be liable for payment of Liquidated Damages during the period covered by the extension of time.

No bonus will be allowed by the Owner for completion of the works in less time than specified in the contract.

63. EMERGENCY PERSONNEL:

- .1 During periods when the Contractor's personnel are not at the job site (i.e. outside normal working hours, and during weekends and holidays), at least one of three emergency personnel shall be available by telephone contact.
- .2 The names, addresses and telephone numbers of the three representatives of the Contractor shall be filed with the Owner and Owner prior to commencement of construction.

64. CONTRACT ADMINISTRATION FORMS

.1 The following standard forms are included in the Contract for reference and shall be used according to the "Instructions for Use", where applicable, at the end of each form.

Form F-1 CONTRACTOR'S DECLARATION REGARDING CLAIMS FOR EXTRA WORK

To be completed by the Contractor and submitted on or before the date of Substantial Performance.

Form F-2 CERTIFICATE OF SUBSTANTIAL PERFORMANCE

Prepared by the Owner and submitted with the final Progress Certificate following the date of Substantial Performance in accordance with Clause 42 of the General Conditions.

Form F-3 CONTRACTOR'S CERTIFICATE OF COMPLETION

The Contractor shall complete this form and submit to the Owner after a period of 40 days from Substantial Performance in accordance with Clause 50 of the General Conditions.

Form F-4 RELEASE OF HOLDBACK CERTIFICATE

Issued by the Owner on receipt of Form F-3 from the Contractor, in accordance with Clause 50 of the General Conditions.

Form F-5 CERTIFICATE OF MAINTENANCE

Issued by the Owner at the expiry of the Period of Maintenance in accordance with Clause 50 of the General Conditions.

Form F-6 LETTER OF CREDIT

Form of Irrevocable Letter of Credit to be provided by Contractor in lieu of cash holdback Specified for Specific Retention for Maintenance.

CONTRACTOR'S DECLARATION REGARDING CLAIMS FOR EXTRA WORK

In the matte	r of Contract No P	roject No
between	(Owner)	
and	(Owner)	
anu	(Full name of Contractor)	
For:	(r an name of contractor)	
	(Contract Title)	
Dated:		
	(Date of Contract)	
I/We hereh	by certify that:	
1, 110100	y cormy man	
(Initial)	There are NO known outstanding claims for worthe contract which have NOT been communicated	
(Initial)	There are outstanding claims which have NOT been communicated to the Owner in writing as noted on the reverse side of this statement.	
(Initial)	There are outstanding claims which have been communicated to the Owner but for which Contract Change Orders have not yet been received, as noted on the reverse side of this statement.	
	Date	Signature
		Position
	Witnessed)	
(

Instructions for Use of This Form

1. This statement is to be signed by an officer of the Contractor and two copies are required to be submitted to the Owner on or before the date of the Certificate of Substantial Performance.

CERTIFICATE OF SUBSTANTIAL PERFORMANCE

OW	VNER	
PRO	OJECT	Project No.
CONTRACT Contract No		Contract No.
COI	ONTRACTOR	
<u>Des</u>	scription of Works Being Handed Over	
		Additional Sheets Attached
We_	e	_hereby certify:
1.	Deficiencies That the above-mentioned works were inspected by us are substantially complete in accordance with the contr deficiencies: 1. 2.	act requirements except for the following
	3.	
		Additional Sheets Attached
2.	Testing That all testing specified in the contract and all add Owner have been carried out satisfactorily.	itional testing, if any, required by the
	We hereby accept these Works for use and ope rectification of the above-noted deficiencies and deficiencies that may become apparent during the starting from the date of Substantial Performance esta	to the rectification of any further Period of Maintenance, calculated as
	Date of Substantial Performance:	20
NO ⁻	Two copies of this completed certificate shall be Copy #1 - to Owner Copy #2 - to Contractor	e prepared and distributed as follows:

CONTRACTOR'S CERTIFICATE OF COMPLETION

OWNER		
PROJECT		Project No.
CONTRA	CT	Contract No.
CONTRA	CTOR	
	ractor hereby agrees that Paymone	nt Nodated: nder this Contract.
The Cont	ractor hereby releases:	
		(Owner)
from all fu	urther claims under this contract.	Attached to this Certificate is the following:
(a)	Final Statutory Declaration For	m dated:
		ensation Board stating that all the requirements of the ve been fulfilled, dated:
(c)	Copies of letters from all Suhave been paid in full for their	b-Contractors and material suppliers indicating they sub-contract work.
Date:		
Signature	e of an Officer of the Contractor:	Witness:
	(Name)	
	(Title)	

Instructions Regarding Use of This Form

1. The Contractor shall submit this form in duplicate to the Owner after a period of 55 days from the date of the issue of the Certificate of Substantial Performance, prior to release of ten percent (10%) statutory holdback, in accordance with Clause 50 of the General Conditions of the Construction Contract.

RELEASE OF HOLDBACK CERTIFICATE

OW	NER	R	
PRC	JEC	CT	Project No
CON	NTRA	ACT	Contract No.
		ACTOR	
<u>Des</u>	<u>cripti</u>	tion of Works	
——Noti	fication	tion is hereby given that:	
1)	20_	eficiencies listed in the Certificate of Substantial Perform have been rectified except as provided for i described in the attached documents.	
2)	The	e following documents have been received and are forwa	arded herewith:
	a)	Contractor's Final Claim (See Instruction No. 3 Overlo	eaf).
	b)	"Contract Release", releasing the Owner from all f (See Instruction No. 4 Overleaf).	further claims by the Contractor
	c)	A Statutory Declaration re: Liens and Liabilities star in connection with this contract have been discharge all Liens and Encumbrances.	
	d)	A clearance certificate from the Workers' Compensat	ion Board.
	e)	Letters from all sub-contractors evidencing contract p	payments.
3)	con at	s shown on the Certificate of Substantial Performmeletion of the Work was and \$ 7% may now be released to the Contractor. This a erleaf.	plus G.S.T.

ŀ)	Final Contract Price	\$	
De	educt:		
1.	Total payments approved prior to this date:	\$	
2.	Sums which have been paid by the Owner on behalf of the Contractor:		
	a)	\$	
	b)	\$	
3.	Owner's estimate of cost of carrying out uncompleted work (See Instruction 2 below)	\$	
4.	Specific Retention (if applicable)	\$	
	Total Deductions	\$	\$
	Amount to be released to Contractor		\$
		G.S.T.	\$
		TOTAL	\$

Date:____

20____

Instructions for Use of This Form

- 1. Subject to Instruction 2 below, this certificate shall be issued after a period of 55 days from the date of issue of the Certificate of Substantial Performance in accordance with Clause 50 of the General Conditions of the Construction Contract.
- 2. The Owner may issue this certificate, if through no fault of the Contractor, certain items included in the contract remain to be done. The Owner shall provide documentation of any such deficiencies with this Certificate. The Owner shall, however, withhold payment of an amount which, in his opinion, is adequate and show same in (3) above.
- 3. In the case of a contract involving unit price items, the final Progress Estimate (Reference Section GC, Clause 50), accepted by the Contractor and approved by the Owner, may be taken as the "Contractor's Final Claim" referred to in (2)(a) hereof. In the case of a contract involving only lump sum prices, the "Contractor's Final Claim" should be a letter signed by the Contractor agreeing to the Final Contract Price.
- 4. If the Contractor has any qualifications to his Contract Release, this should be referred to in (2)(b) hereof.

CERTIFICATE OF MAINTENANCE

	_	(D	ate)	
(Owner)				
This is to notify that to the best of our knowledge and	judgement the v	vork cover	ed under:	
Contract				
With(Name of Cont	rootor)			
FOR THE WORK DESCRIBED AS				
nas been satisfactorily completed as of		20	and	the
Deficiencies set				
orth in the Certificate of Substantial Performance da	ted		,20	
nave been				
completed satisfactorily and the Specific Retention in	n the amount of	\$	may	now
Joinpleted Satisfactority and the Opecine Retention in				
pe released to the Contractor.				

 This form shall be prepared in duplicate at the expiry of the Period of Maintenance and distributed as follows: Copy #1 (Original) - to Owner Copy #2 - to Contractor

LETTER OF CREDIT

To:	Cowichan Valley Regional District	FROM:	
	175 Ingram Street Duncan, BC V9L 1N8		(Bank / Credit Union)
		_	
IRRI	EVOCABLE LETTER OF CREDIT NO:		AMOUNT:
INIT	IAL EXPIRY DATE:		
WE	HEREBY AUTHORIZE YOU TO DRAW or		
		(Ban	k / Credit Union)
for t	he account of(Customer)	up to an agg	regate amount of
), available
on c	demand.		
PUR	RSUANT TO THE REQUEST of our custor	ner,	we the
	here	hv establish and give	an Irrevocable Letter of
	Credit in your (Bank / Credit Union)	by establish and give	an inevocable Letter of
writt enqı suct	our in the amount which may be drawn of sen demand for payment made upon us uiring whether you have the right as be no demand, and without recognizing any ment by us.	by you, which demar tween yourself and th	nd we shall honour without he said customer to make
set	TER OF CREDIT, we understand, relates to out in an agreement in writing, between rict, and referred to as the		
	(Name or Des	cription of Project)	
as a	AMOUNT of this Letter of Credit may be readvised by notice, in writing to the undersional District.		
	S LETTER OF CREDIT will continue to be shall be subject to the conditions hereing)		(Initial Expiry
with unle writi	S A CONDITION of this Letter of Credit that out amendment from year to year from ess at least 30 days prior to the presening, by registered mail or courier, that we ewable for any additional period.	the present or any fut t or any future expirat	ure expiration date hereof, tion date, we notify you in

	LETTER OF CREDIT is subject to "Use (1994 Revision) International Chambe	Uniform Customs and Practices for Documentary er of Commerce Publication No. 500".
DATE	SIGNED:	
	Bank / Credit Union)	
PER:	(1)	
	(2)	
	(3)	



COWICHAN VALLEY REGIONAL DISTRICT

SECTION B

SUPPLEMENTAL CONDITIONS

TABLE OF CONTENTS

GENERAL	2
MINIMUM STANDARDS	2
SITE ACCESS	2
CONTRACTOR'S USE OF SITE	2
CONSTRUCTION AREA	2
SETTING OUT	3
SURVEY MONUMENTS	3
EXISTING SERVICES AND UTILITIES	3
BARRIERS, LIGHTS AND WATCHING	4
TRAFFIC CONTROL AND ROAD CLOSURES	4
DUST CONTROL, ROADWAY SAFETY & MAINTENANCE	
DISPOSAL OF MATERIAL	6
SANITARY AND ENVIRONMENTAL REQUIREMENTS	6
TESTING	6
SIEVE TESTING	8
SHOP DRAWINGS	8
COOPERATION AND COORDINATION	9

GENERAL

.1 Notify all trades of the provisions of the Standard and Supplementary General Conditions of the Construction Contract, and the General Requirements of this Specification.

MINIMUM STANDARDS

- .1 In the absence of other standards specified or referenced in the Contract Documents, all work is to conform to, or exceed, the minimum standards of the Canadian Government Specifications Boards, the Canadian Standards Association, the American Society for Testing of Materials, or the most current British Columbia Building Code, whichever is applicable, provided that in any case of conflict or discrepancy, the more stringent requirements shall apply.
- .2 All work to be done in accordance with Work Safe BC (Workers' Compensation Board) regulations and other Authorities having jurisdiction.
- .3 The minimum standards of the Master Municipal Construction Cocument (MMCD) Specifications and Standard Detail Drawings

SITE ACCESS

- .1 The Contractor shall make his own arrangements, subject to the approval of the Owner, for access to the site and for any areas required within the Owner's property for staging and temporary materials and equipment storage, if required, at his own expense.
- .2 The Contractor shall maintain routes of travel, the Owner being the sole judge as to what may be deemed reasonable, to and from existing on-site facilities and to and from adjacent property owners.

CONTRACTOR'S USE OF SITE

.1 The site shall not be unreasonably encumbered with materials or equipment, or interfere with operations of the Owner.

CONSTRUCTION AREA

.1 The Contractor shall confine his operations on the site to those areas actually required for the Work including routes and regulations approved by the Owner for haulage of materials.

SETTING OUT

- .1 The Contractor shall establish all grades and lines from the survey control points provided, from which all work shall be laid out as indicated on the Drawings. All survey work, reference lines and grades, and setting out of the Work shall be performed by the Contractor by persons experienced and competent in standard survey and construction layout practices and shall incorporate electronic data collection. All survey and layout shall be to UTM ground level coordinates, coordinated with the Cowichan Valley Regional District data.
- .3 The Contractor shall provide grade sheets to the Owner complete with survey data in digital form not less than 3 working days in advance of the work to be undertaken, and shall employ all necessary means of control to ensure accurate construction of the work.
- .4 The Contractor shall locate all other reference points and lines and take necessary action to prevent their destruction. He shall assume responsibility for all lines and elevations for work executed under the Contract. He shall verify figures shown on Drawings and assume responsibility for any error resulting from failure to exercise such precaution.

SURVEY MONUMENTS

.1 Existing survey monuments disturbed by the Contractor shall be re-established by a registered British Columbia Land Surveyor at the Contractor's expense and the appropriate authorities shall be duly advised with regard to revised elevation and coordinates.

EXISTING SERVICES AND UTILITIES

- .1 Size, depth and location of existing utilities, structures and surface features indicated on the Drawings are for guidance only based on best available information. Completeness and accuracy are not guaranteed. The Contractor shall make no claim for delay as a result of having to alter, support or protect any feature which has been incorrectly shown or omitted from the Drawings.
- .2 Before commencing work, establish location and extent of service lines in area of Work and notify Consultant of findings.
- .3 Notify Owner five (5) days in advance of commencing any work which may affect buried services, utilities and related structures. Establish exact location and state of these and any other buried items. Clearly mark such locations, prevent disturbance during work and notify the Owner of findings.
- .4 Notify the gas, telephone and power companies five (5) days in advance of commencing work in vicinity of gas, telephone and power utilities. The Contractor shall work closely with the Owner and utility company representatives and shall carefully excavate those areas where crossing of existing utilities is anticipated. The Contractor shall provide written confirmation that these agencies have been contacted and have marked lines at potential crossing conflicts. Protect existing trees and structures from any damage while work is in progress.
- .5 The Contractor shall take all reasonable steps to maintain existing utilities in

- service while constructing the works.
- .6 Where Work involves breaking into or connecting to existing services, carry out work at times directed by authorities having jurisdiction, with minimum of disturbance to pedestrian and vehicular traffic.
- .7 Where a temporary shut-down of services is necessary, the Contractor shall liaise with the appropriate utility companies, emergency services and the Owner. The Contractor shall give sufficient notice to all those affected by the interruption of the service.
- .8 The Contractor shall be held liable for all claims from failure to give such advance notice.
- .9 Where unknown services are encountered, immediately advise Owner and confirm findings in writing.
- .10 Remove abandoned service lines within 2 m of structures. Cap or otherwise seal lines at cut-off points as directed by the Owner.
- .11 Record locations of maintained, re-routed and abandoned service lines on record documents as required elsewhere in this Specification.
- .12 In all cases where new construction shall connect to existing underground utilities, and where any portion of the Works are to be constructed in the vicinity of existing underground services and conflict may occur, the existing underground utility shall be excavated by the Contractor in the presence of the Owner to verify the exact location of the existing utility.
- .13 Verification of existing underground utilities shall be proven before work commences, and not less than 72 hours in advance of anticipated new construction in order to permit adjustments to the new and/or existing utility as may be deemed necessary by the Owner.

BARRIERS, LIGHTS AND WATCHING

- .1 The Contractor shall erect and maintain all requisite barriers, fences, lights, warning devices, signs, and other protective devices as may be required for prevention of theft or damage of goods, and for protection of persons and property on or adjacent to the site.
- .2 The Contractor shall provide site storage facilities as necessary, including fencing as may be required to provide adequate security, protection and maintenance of all plant, equipment and materials.
- .3 Temporary fences or barricades with appropriate signage shall be erected at pedestrian crossings while work is underway in the area and at all other locations where deemed necessary for public safety.

TRAFFIC CONTROL AND ROAD CLOSURES

.1 The Contractor shall provide dedicated traffic control and pedestrian

- delineation for safety of motorists and pedestrians for all locations where roadways are affected by construction activities.
- .2 For any full or partial closure of an existing travelled roadway to facilitate construction of the Works, the Contractor shall make application to the Cowichan Valley Regional District or The Ministry of Transportation and Highways, for a permit as may be required. Issuance of a permit for full or partial road closure shall be at the sole discretion of the authorities having jurisdiction.

DUST CONTROL, ROADWAY SAFETY & MAINTENANCE

- .1 In addition to requirements for dust control, traffic control, traffic control, pedestrian delineation and safety, and maintenance of roadways specified elsewhere in the Contract Documents, the following shall apply:
 - .1 Dust Control: The Contractor shall employ construction methods that present and keep dust to a minimum. The contractor shall provide dust control by watering of the Works and roads, streets and other areas immediately adjacent to the Works. The Contractor shall maintain adequate dust control at all times including weekends and holidays. Minimum requirements for dust control during dry period shall include watering of the Works at least twice per day, preferably at 10:00 am and 3:00 pm, or as otherwise determined by the Owner.
 - .2 Traffic\Pedestrian Delineation: The Contractor shall maintain adequate traffic and pedestrian delineation to provide for the safety of all road users including pedestrians, cyclists, buses, and emergency vehicles at all times, including weekends and holidays.
 - .3 Roadway Maintenance: The Contractor shall maintain travelled roadways with respect to temporary grading, repair of potholes and\or rough surfaces during adverse weather conditions, and removal of mud and debris at all times including weekends and holidays.
 - .4 Should the Contractor fail to comply at the appropriate time, or within a reasonable time of receiving a request from the Owner to carry out ordered requirements; the Owner may take such steps as considered necessary to properly provide for dust control measures, safety and\or convenience of vehicular and pedestrian traffic, including the hiring of plant and the employment of labour. The cost of all such provision will be charged to the Contractor, and will be deducted from any payment due to the Contractor.

DISPOSAL OF MATERIAL

- .1 The Contractor shall dispose of surplus excavated material, on-site at locations approved by the Owner.
- .2 The Contractor shall dispose of all waste, and all material designated or specified by the Owner not suitable for on-site disposal, off-site at a location approved to handle such material. Off-site disposal shall be considered incidental to the Work, and no separate payment will be made unless specifically noted.

SANITARY AND ENVIRONMENTAL REQUIREMENTS

- .1 The Contractor shall strictly enforce all sanitary and environmental requirements to prevent unsanitary conditions or contamination of the site and environment.
- .2 Burning shall not be permitted at the site.
- .3 The Contractor shall fully comply with all requirements of the Environmental Management Plan as contained in Appendix F of the Tender Documents.
- .4 The Contractor shall engage and pay for the services of a Qualified Environmental Professional who shall complete and provide an Environmental Protection Plan (EPP), provide monitoring during construction of the Works, and complete bird nest surveys to meet the Wildlife Act and Migratory Birds Convention Act. The EPP is to be submitted prior to commencing construction on-site.
- .5 The Environmental Protection Plan shall follow Best Management Practices and include details and procedures relating to the following:
 - .1 Pollution Control;
 - .2 Fueling and Spill Response;
 - .3 Disposal of waste materials;
 - .4 Silt and Sediment Control;
 - .5 Spill Kits; and,
 - .6 Bird Nest Surveys.

TESTING

.1 The Contractor shall retain the services of an accredited independent testing agency for the purposes of testing of materials and testing of the Work to confirm compliance with the Specifications. All costs for testing shall be borne by the Contractor.

- .2 Testing shall include, but not be limited to, sieve analysis & moisture-density relationship (Proctor) testing and in-situ compaction (density) testing of granular bedding, granular pipe bedding, granular backfill materials for trenches and structures, and granular materials for construction of roadways and parking areas; testing of asphaltic concrete at time of placing and ultimate compaction density; and testing of Portland cement concrete at time of placing and ultimate compressive strength
- .3 Testing shall be conducted at such intervals and frequency as deemed reasonable by the Owner to confirm compliance of the Work with the Specifications.
- .4 Copies of all test report data shall be provided directly to the Owner by the designated testing firm.

SIEVE TESTING

10mm Minus Cart Path Material:

- i) Crusher fines are available in various stone types, colors, and particle sizes, but not all crusher fines are suitable for trails. Tradeoffs may need to be made between the surface smoothness and erosion resistance, between colors and rock types, and between choice and availability. The rock must be crushed into irregular and angular particles to allow interlocking into a tight matrix. The more angular the particles, the better. Rounded particles like pea gravel or decomposed granite never mechanically lock together. The crushed rock must have adequate fines and some natural binders in order to cement the particles together after the fines are moistened, compacted, and allowed to dry. The fines, when laid to a depth of 75mm, should bind to each other in a consolidated slab which is porous yet resistant to water falling on the surface.
- ii) Particle size for crusher fines on trails must be 10mm minus. Fines from granite or other suitable hard stone works best. The ideal particle size distribution is one where there are enough small particles to completely fill the voids between the larger ones. One good distribution to use is:

Particle Size	% of Passing
10mm	100%
4.75mm	85 - 100%
2.38mm	55 - 80%
1.19mm	40 - 70%
0.60mm	25 - 50%
0.075mm	6 - 15%

Sieve Size % Passing

- **iii)** The successful contractor must provide a sieve test that verifies that the cart path material meets specifications required. Any and all costs to remove and replace materials found unacceptable will be solely at the expense of the contractor.
- iv) Sieve testing costs to be borne by the Contractor.

SHOP DRAWINGS

1 The Contractor shall supply, when requested by the Owner, any Shop Drawings that are deemed necessary for the proper review of the Work.

COOPERATION AND COORDINATION

.1 The Contractor shall cooperate to the fullest extent with representatives of the Owner, other Contractors constructing building structures on the site, adjacent businesses and property owners, the various utility companies and any other contractors working in proximity of the Work.