



2011-26 - INVITATION FOR BIDS

N.A.R. MUSEUM FOUNDATION STABILIZATION

The City of Dawson Creek invites lump sum price Bids for foundation stabilization at the N.A.R. Museum located at 900 Alaska Avenue, Dawson Creek, B.C.

All documents are available through the City of Dawson Creek website at www.dawsoncreek.ca. The Proponent is solely responsible for ensuring any addenda are downloaded, reviewed, and included in their bid.

Inquiries regarding this Invitation for Bids may be directed to Mr. Duncan Redfearn, Deputy Director of Community Services, at 250.784.3683, or via email at dredfearn@dawsoncreek.ca. There will be a **mandatory** site visit taking place beginning at **2:00 pm on Tuesday, August 2, 2011** at 900 Alaska Avenue, Dawson Creek, B.C.

Bids sealed in an opaque envelope, clearly marked with the supplier's name and the project name will be accepted up to **2:00 pm (local time), Tuesday, August 9, 2011** and will be received by:

Brenda Ginter, Director of Corporate Administration
City of Dawson Creek
10105 – 12A Street
PO Box 150
Dawson Creek, BC V1G 4G4

It is the sole responsibility of the Bidder to ensure that its Bid is received at the above location and by the time stipulated. Bids received after the stipulated time will be rejected and returned to the Bidder unopened. Faxed Bids are not acceptable and will be rejected.

The City reserves the right to accept or reject all or any bids and to waive any informality, incompleteness or error in any bid.

Bids will be opened in public on the date and time specified in the Bid Documents.

Bidders must refer to the Contract Documents for the terms governing the Bid process.



CITY OF DAWSON CREEK

N.A.R. MUSEUM FOUNDATION STABILIZATION

INSTRUCTIONS TO BIDDERS

These Instructions to Bidders are contractual and they bind each Bidder and govern the consideration of each Bid by the City.

1. DEFINITIONS

1.1 In the Contract:

- (a) "Addendum" means a document issued under IT 4;
- (b) "Bid" means a Bid submitted to the City in accordance with the Instructions to Bidders;
- (c) "Bid Form" means the Bid form contained in the Contract Documents and any appendices to it that are expressly contemplated by the Contract Documents;
- (d) "Bidder" means anyone who submits a Bid;
- (e) "Closing Time" means the deadline specified for receipt of Bids by the City;
- (f) "Completion" means total and satisfactory completion of the Work in accordance with the Contract Documents, as determined by the City's Representative under the General Conditions;
- (g) "Completion Date" means the date for Completion of the Work set out in the Contract;
- (h) "Construction Schedule" means the schedule of performance of the Work submitted by the Bidder as part of its Bid;
- (i) "Contract" means the contract for performance of the Work to Completion that is entered into between the City and the Contractor, which contract is on the terms and conditions contained in the Contract Documents;
- (j) "Contract Documents" means
 - (i) Invitation for Bids;
 - (ii) Instructions to Bidders;
 - (iii) Bid Form;
 - (iv) Form of Contract;

- (v) Contractor Acknowledgement Form;
 - (vi) Code of Conduct;
 - (vii) General Conditions; and
 - (viii) Specifications;
- (k) "Contractor" means the Bidder to whom the Contract has been awarded in accordance with IT 9;
- (l) "Corporate Administrator" means the City's Director of Corporate Administration;
- (m) "Form of Contract" means the document with that name contained in the Contract Documents;
- (n) "GC" is, when used in conjunction with a numeral, a reference to the section of the General Conditions with the same numeral;
- (o) "General Conditions" means the Contract terms and conditions of that name that are contained in the Contract Documents;
- (p) "Invitation to Bid" means the notice published or communicated by the City by which the City invited Bids for the Contract;
- (q) "IT" is, when used in conjunction with a numeral, a reference to the article or section of the Instructions to Bidders with the same numeral;
- (r) "Notice of Award" means the notice of award of the Contract given in accordance with IT 9;
- (s) "City" means the City of Dawson Creek;
- (t) "Specifications" means the plans, drawings or specifications for the Work contained in the Contract Documents; and
- (u) "Work" means the project of work described in the Contract Documents, including the Specifications.

1.2 Any word or expression that is not defined in these Instructions to Bidders has the meaning given to it in the General Conditions.

2. SUBMISSION OF BIDS

2.1 Bids will be submitted on the Bid Form, every part of which will be completely filled out and will either be typewritten or printed legibly in ink.

2.2 Bids will be submitted in a sealed envelope addressed to the Corporate Administrator at the address set out on the Invitation for Bids, marked clearly on the front "Bid - Contract [BIDDER TO INSERT NAME AND NO. OF CONTRACT AS SET OUT ON P.1 OF INVITATION FOR BIDS]".

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- 2.3** Faxed Bids are not acceptable and will be rejected, but a Bid may be changed by a fax received by the Corporate Administrator not later than the Closing Time in accordance with IT 2.4. If a Bidder faxes a change to the Bid, the Bidder accepts all risk associated therewith, including, without limitation, the risk of:
- (a) an incomplete or lost Bid,
 - (b) a lack of confidentiality of the Bid;
 - (c) a failure or breakdown, or inadequacy, of any telecommunications equipment or service, including of the Bidder, City or any third party; and
 - (d) the inability of the Bid to be received by the Closing Time because the City's facsimile equipment or telephone line is busy.
- 2.4** Any faxed Bid change should disclose only price changes and any faxed change that discloses a lump sum price, a unit price, an extended total, or total Bid price will result in the entire Bid being rejected.
- 2.5** Bids will be received by the Corporate Administrator not later than the Closing Time. Bids received after the Closing Time will not be opened and will be rejected.
- 2.6** The City may extend the Closing Time in its sole discretion by notice given to Bidders.
- 2.7** The Bid is an offer by the Bidder to enter into the Contract with the City on the terms and conditions contained in the Contract Documents.
- 3. ENQUIRY AS TO WORK**
- 3.1** The Bidder will inform itself as to all aspects of the Work, including Work site conditions. The Bidder agrees that it is the sole responsibility and risk of the Bidder to examine the Work site and the actual Work site conditions, including soil conditions, before submitting a Bid and the Bidder shall make allowance in their Bid for all conditions at the site of the Work that might affect the Bid. The City is not liable for any expense, damage or loss incurred as a result of any misunderstanding or error by the Bidder regarding the Work or conditions affecting it, including Work site conditions.
- 4. ADDENDA AND COMMUNICATIONS**
- 4.1** The Contract Documents may only be changed by way of an Addendum issued in writing by the Corporate Administrator. Each Addendum becomes part of the Contract Documents.
- 4.2** The Bidder will indicate that it has received copies of all Addenda, and that its Bid has been completed in accordance with all Addenda, by completing the relevant part of the Bid Form.

4.3 If a Bidder is in doubt as to the correct meaning of any provision of the Contract Documents, the Bidder may request clarification from the Corporate Administrator. If the City considers it necessary, the City may issue, through the Corporate Administrator or designate, written addenda to provide clarification of the Contract Documents. Only the Corporate Administrator or designate is authorized to communicate with Bidders and the City is not responsible for or bound by any clarification or information given by anyone other than the Corporate Administrator.

5. PRICES

5.1 Prices will be given as and where indicated in the Bid Form. Failure to give a price for any item makes the Bid incomplete and the Bid will be rejected.

5.2 If, in the case of a lump sum price contract, the Bid contains an error in adding lump sums, the total Bid price is the total resulting from correct addition by the City of the lump sums.

5.3 In the case of a unit price contract:

- (a) if a unit price is given but the corresponding extended total has been omitted, then the extended total shall be calculated from the unit price and the estimated quantity and inserted as the extended total;
- (b) if an extended total is given but the corresponding unit price has been omitted, then the unit price shall be calculated from the extended total and the estimated quantity and inserted as the unit price;
- (c) subject to IT 5.3(d), if both the unit price and the corresponding extended total for a tender item have been omitted, then the total tender price may be used to calculate the missing extended total for that tender item and that extended total may then be utilized to calculate the unit price for that tender item in accordance with IT 5.3(b); and
- (d) if both the unit price and the corresponding extended total for a tender item have been omitted for more than one tender item, then the Bid shall be rejected.

5.4 Any quantities of Work set out in the Contract Documents are only estimates of quantity and the City does not represent, warrant or guarantee to the Bidder that actual quantities of Work will be as estimated.

6. EXECUTION OF BID AND CAPACITY

6.1 If the Bidder is an individual or partnership, the Bid Form will be executed by the individual or a partner, as the case may be, and will be witnessed. The individual signing will indicate the capacity in which he or she signs where indicated in the Bid Form.

6.2 If the Bidder is a corporation, the Bid Form will be executed by the authorized signatories of the corporation. The full and correct legal name of the corporation, its incorporation number or extra-provincial registration number and business address will be given in the Bid Form.

7. SECURITY

- 7.1** The Bid will be accompanied by any security for the Bid required by the Bid Form. A bid bond will be issued by a corporation licensed to carry on the business of surety in British Columbia. Only cash or clean, irrevocable bank letters of credit are considered cash equivalents to a bid bond.
- 7.2** The security required by IT 7.1 secures the Bidder's obligations under section 4 of the Bid Form. If the Bidder fails to perform that obligation, the security is forfeit to the City without affecting any other right or remedy the City may have against the Bidder.
- 7.3** The City will return any security deposited under IT 7.1 as soon as is practicable after the Bidder has performed its obligations under Section 7.2 of the Bid Form and the City has received any performance bond and labour and materials payment bond required by the Contract Documents to be given by the Contractor.

8. REJECTION OF BIDS

- 8.1** The City has the right, in its sole discretion, not to award a Contract and has the right to reject any or all Bids (including the lowest Bid) without giving any reason for doing so.
- 8.2** The City has the right, in its sole discretion, to evaluate any or all Bids on any basis it considers desirable, including the overall cost of the Bids in relation to the City's budget for the Work, the ability of the Bidder or Bidders to perform the Work, the finances or credit-worthiness of the Bidder or Bidders, and any experience of the Bidder or Bidders in performing work of a kind comparable to the Work.
- 8.3** Unless otherwise expressly provided in these Instructions to Bidders, the City is entitled, in its sole discretion, to waive any informality, incompleteness or error in any Bid.
- 8.4** Unless otherwise expressly provided in these Instructions to Bidders, and without limiting the generality of IT 8.1, 8.2 or 8.3, the City may, but is not required to, in its sole discretion, reject any Bid which
- (a) is conditional or obscure in any respect,
 - (b) does not conform strictly with the requirements of the Contract Documents, or
 - (c) is not accompanied by the Bid security required by IT 7.
- 8.5** Notwithstanding Section 8.4, if a Bid does not comply or conform in any way with the requirements of the Contract Documents, or if it contains any conditions, the City may, in its sole discretion, consider and accept such a Bid, including where such non-compliance, non-conformance or condition is material.

9. CONTRACT AWARD

- 9.1** The Contract is awarded and entered into without further act of either the City or the Bidder when the City delivers to the successful Bidder a Notice of Award. Notice of Award will be given in writing in accordance with the notice requirements set out in the General Conditions and is not effective unless and until given that manner. Before the Contractor begins the Work, and as a condition precedent to the right of the Contractor to begin the Work, the Contractor will execute and deliver the Form of Contract to the City. If the Form of Contract is not executed and delivered within ten days after the Notice of Award has been given the City is entitled in his sole discretion to give notice to the Contractor terminating the Contract upon delivery of that Notice.

10. INSURANCE AND BONDING

- 10.1** Not less than two days before the Contractor begins the Work, the Contractor will deliver to the City each of the following:

- (a) any performance security required by the General Conditions,
- (b) certificates of the insurance required by the General Conditions,
- (c) proof, satisfactory to the City, that the Contractor is registered with the Worker's Compensation Board of British Columbia and that all assessments and other amounts payable by the Contractor to that Board are fully paid up to the last required payment.

- 10.2** The Contractor agrees with the City that failure by the Contractor to perform its obligations under this IT 10, under IT 9, or under GC 2, regarding beginning the Work, is a repudiatory breach of the Contract that entitles, but does not oblige, the City to treat the Contract as terminated and, without affecting any other right or remedy the City may have against the Contractor, award the Contract to another Bidder.

11. NO PUBLIC LAW DUTY

- 11.1** The Bidder agrees that in conducting this Bid process, including in relation to any decision or exercise of discretion or other action by the City (including the Corporate Administrator) in respect of this Bid process, there is no public law duty of fairness or natural justice toward the Bidders.

12. GENERAL PROVISIONS

- 12.1** The Bid constitutes a contract between the Bidder and the City on the terms and conditions of these Instructions to Bidders and of the Bid Form, which terminates on either the award of the Contract or the rejection of the Bid or all Bids, as the case may be, but which does not merge with the Contract as against the Contractor.
- 12.2** The obligations of the Contractor are joint and several obligations of each of the persons who have submitted the Bid as the Bidder or as members of a joint venture or partnership comprising the Bidder.

- 12.3** In the Contract, any act, decision, consent or exercise of discretion by a party will be performed, made or exercised acting reasonably unless the Contract expressly provides that the act, decision, consent or exercise of discretion is in the "sole discretion" of that party, in which case that party is under no duty to act fairly, reasonably or in good faith and may act unreasonably, in its absolute unfettered discretion.

END OF INSTRUCTIONS TO BIDDERS



CITY OF DAWSON CREEK

N.A.R. MUSEUM FOUNDATION STABILIZATION

TENDER NO. 2011-26

BID FORM

Date: _____

Company: _____

Contact: _____

Address: _____

_____ **Postal Code:** _____

Phone: _____ **Cell Number:** _____

Fax: _____ **Email:** _____

Agrees with the Owner as follows:

1. CONTRACT DOCUMENTS

The Contract Documents for this Bid are this Bid Form, the Invitation for Bids, the Instructions to Bidders, Form of Contract, General Conditions and Specifications.

2. INTERPRETATION

Capitalized words and expressions used in this Bid Form have the meanings given in this Bid Form, in the Instructions to Bidders or the General Conditions, as the case may be.

3. OFFER

In accordance with the Instructions to Bidders, we hereby offer to the Owner, being the City of Dawson Creek,

- 3.1 to contract to perform and complete the Work, generally described above and particularly described in the Contract Documents, for the price set out in this Bid Form and on the terms and conditions of the Contract Documents; and
- 3.2 perform the obligations, under section 3(a) on or before the Completion Date of **October 31, 2011**.

4. AGREEMENT

We agree:

- 4.1 to complete the Work on or before the Completion Date,
- 4.2 that our offer to contract is made on the terms and conditions of the Contract Documents and, if we are awarded the Contract, the Contract contains those terms and conditions,
- 4.3 to provide the following security, and as may otherwise be directed in the Specifications;

<u>Bid Bond or Cash Equivalent</u>	<u>Performance Bond</u>	<u>Labour and Material Payment Bond</u>
10%	50%	50%

- 4.4 this Bid supersedes and cancels all communications, negotiations and agreements relating to the Work other than contained in this Bid and the Contract, if awarded to the Bidder,
- 4.5 this Bid is irrevocable and may not be withdrawn for a period of 30 days following the Closing Time,
- 4.6 if a Bid security deposit is provided with this Bid and the Contract is awarded to the Bidder, the security may, in the Owner's sole discretion, be forfeited if the Bidder refuses to execute the Form of Contract or fails to substantially begin the Work, as determined by the Owner's Representative in his or her sole discretion, within 10 days after Notice of Award is given to the Bidder, or within such greater period as the Owner's Representative may allow in his or her sole discretion,
- 4.7 if a Notice of Award is given to the Bidder by the Owner, a binding Contract between the Bidder and the Owner is created on the terms and conditions of the Contract Documents (see section 1 of this Bid Form),
- 4.8 any lump sum price bid in section 5 is in Canadian funds and includes Canadian customs duties, taxes, Province of B.C. social services tax, royalties, handling, transportation, overhead, profit, and all other costs and charges without limitation, **except Harmonized Sales Tax, which is extra**, and
- 4.9 any unit prices bid in section 6 are in Canadian funds and include Canadian customs duties, taxes, royalties, handling, transportation, overhead, profit, and all other costs and charges without limitation, including Province of B.C. Social Services Tax, **but not including Harmonized Sales Tax, which is extra**.

5. LUMP SUM PRICE

If the Invitation for Bids requires submission of a lump sum price, the Bidder agrees that the lump sum price for the Work is that set out in Appendix A to this Bid Form.

6. UNIT PRICES

If the Invitation for Bids requires submission of unit prices, the Bidder agrees that the unit prices for the Work are those set out in Appendix A to this Bid Form.

7. LIST OF SUBCONTRACTORS AND SUPPLIERS

The Bidder must list in Appendix B to this Bid Form all sub-contractors and material suppliers the Bidder will use for the Contract.

8. CONSTRUCTION SCHEDULE

The Bidder must, as Appendix C to this Bid Form, submit a Construction Schedule in written or graphic form, or any combination of those forms, clearly and comprehensively describing in detail the schedule for performance of the Work, including by indicating the sequence and timing of all the components of the Work, and demonstrating that the Work will reach Completion on or before the Completion Date.

9. ADDENDA

The Bidder acknowledges receipt of the following Addenda and agrees that this Bid has been completed in accordance with them:

Addenda Nos. _____

10. EXECUTION BY BIDDER

[EACH BIDDER THAT IS A CORPORATION MUST SIGN USING THE FOLLOWING FORM]

_____, BY ITS
AUTHORIZED SIGNATORIES:

Print Name: _____

Print Name: _____

Date executed: _____

[EACH BIDDER WHO IS AN INDIVIDUAL MUST SIGN USING THE FOLLOWING FORM AND HIS OR HER SIGNATURE MUST BE WITNESSED]

SIGNED, SEALED AND DELIVERED BY)
)
_____)
(Name of Bidder))

IN THE PRESENCE OF THE FOLLOWING)
WITNESS:)

_____)
Signature of Witness)

_____)
Name of Witness (please print))

_____)
Address of Witness (please print))

Signature of Bidder

Date executed: _____

APPENDIX A

Whereas it is acknowledged that the unit prices herein described below include all mobilization costs, permits, manhours and equipment required to demolish, place, erect and finish the building as specified, surveying and layout, and all ancillary costs.

Item	Description	Price
1.	Division 1 General Requirements (Including all Mobilize/Demobilize Overhead, Insurance, Permits)	\$ _____
2.	Phase 1 Foundation (Complete)	\$ _____

We assign a FIXED cost to the project in the amount of:

TOTAL COST	\$ _____
PLUS HARMONIZED SALES TAX	\$ _____
GRAND TOTAL OF TENDER	\$ _____

_____ Dollars
in lawful money of Canada

This amount includes all allowances, contingencies, taxes and duties in force at this time, except as otherwise provided in the tender documents

APPENDIX B

LIST OF SUPPLIERS AND SUBCONTRACTORS

TRADE	NAME OF SUBCONTRACTOR OR SUPPLIER	ADDRESS OF SUBCONTRACTOR OR SUPPLIER
Concrete Contractor		
Mechanical Contractor		
Electrical Contractor		
Building Mover		
Flooring Contractor		

(ADD A SCHEDULE IN THE ABOVE FORM IF MORE ROOM IS NEEDED AND PRINT "SEE SCHEDULE" IN THE ABOVE FORM.)

APPENDIX C

[Insert Construction Schedule]

END OF BID FORM



FORM OF CONTRACT

THIS AGREEMENT dated for reference _____ is
BETWEEN:

CITY OF DAWSON CREEK, 10105 - 12A Street Box 150
Dawson Creek BC V1G 4G4

(the "Owner")

AND: _____

(the "Contractor")

THIS AGREEMENT is evidence that in consideration of the promises exchanged below, the Owner and the Contractor agree with each other as follows:

- 10.1** In this Agreement, any word or expression with a capitalized first letter that is not defined in this Agreement has the meaning given to it in the General Conditions appended to this Agreement.
- 10.2** Subject to the terms and conditions of the Contract, the Contractor agrees to perform the Work in accordance with the Contract in consideration of the payments to be made by the Owner to the Contractor.
- 10.3** The Owner agrees to pay the Contractor for performance of the Work, subject to the terms and conditions of the Contract, in the amounts and in the manner specified by the Contract. As evidence of their agreement to be bound by the above terms and conditions, the parties have executed and delivered this Agreement on the dates set out below:

CITY OF DAWSON CREEK by its authorized signatories:

Mayor

C/S

Corporate Administrator

_____ by its
authorized signatories:

Name:

C/S

Name:

[EACH BIDDER WHO IS AN INDIVIDUAL MUST SIGN USING THE FOLLOWING FORM AND HIS OR HER SIGNATURE MUST BE WITNESSED]

SIGNED, SEALED AND DELIVERED BY)

)

(Name of Bidder)

)

)

)

IN THE PRESENCE OF THE FOLLOWING WITNESS:)

)

)

)

)

Signature of Witness

)

)

)

Name of Witness (please print)

)

)

)

Address of Witness (please print)

)

Signature of Bidder

Date executed: _____

END OF CONTRACT FORM

CONTRACTOR ACKNOWLEDGEMENT FORM

Company: _____
Contact: _____
Address: _____
_____ **Postal Code:** _____
Phone: _____ **Cell Number:** _____
Fax: _____ **Email:** _____

I acknowledge that all employees, subcontractors and representatives of the company will operate in compliance with all applicable federal, provincial and municipal occupational health and safety regulations, laws and bylaws.

Except as expressly and specifically permitted in these Instructions to Tenderers/Bidders, no Tenderer/Bidder shall have any claim for any compensation of any kind whatsoever, as a result of participating in the Tender, and by submitting a bid, each tenderer/bidder shall be deemed to have agreed that it has no claim.

The successful bidder must provide the required documents one week after bids are awarded. Failure to do so may result in contract being awarded to a bidder who can meet the requirements.

The undersigned has carefully examined the Contract Documents for the City of Dawson Creek RFQ 2011-26.

Company Representative (signature)

X _____

Name: _____

Title: _____

CITY OF DAWSON CREEK

CODE OF CONDUCT - CONTRACTORS

The relationship between City employees and representatives of contractors providing service to the City is critical to achieving the goals and objectives of the Corporation of the City of Dawson Creek.

In providing the highest level of service possible, it is essential that all representatives of the Contractor work together with City staff in a co-operative and congenial manner, always respecting established lines of authority.

The efficiency of City operations and the image the Corporation presents to the public may be influenced by any breakdown in the relationship between the Contractor's representatives and City employees. Therefore, the Contractor's representatives are expected to convey a friendly, approachable, positive and helpful attitude to City employees and to be honest, trustworthy, reliable, dependable and punctual in all workplace activities.

Contractors unable to demonstrate an ability to meet this standard may be disqualified from the bidding process. Successful bidders subsequently failing to meet this standard should expect termination of any contractual relationship with the City.

APPROVED BY COUNCIL:

DATE: August 23, 1999

REAFFIRMED BY COUNCIL:

DATE: April 30, 2001

I have read and agree to comply with the above Code of Conduct:

Company Representative (signature)

X _____

Name: _____

Title: _____



GENERAL CONDITIONS

**CITY OF DAWSON CREEK
10105 - 12A Street
Box 150
Dawson Creek BC V1G 4G4**

GENERAL CONDITIONS

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1. DEFINITION OF TERMS, DOCUMENT PRECEDENCE AND DISCRETION

1.1 In the Contract:

- (a) "Addendum" means a document issued under IT 4;
- (b) "Bid" means a bid submitted to the Owner in accordance with the Instructions to Bidders;
- (c) "Bid Documents" means the Instructions to Bidders, Bid Form, General Conditions, Special Conditions and Specifications;
- (d) "Bid Form" means the bid form contained in the Contract Documents and any appendices to it that are expressly contemplated by the Contract Documents;
- (e) "Bidder" means anyone who submits a Bid;
- (f) "Closing Time" means the deadline specified for receipt of Bids by the Owner;
- (g) "Certificate of Substantial Completion" means the Certificate of Substantial Completion issued under GC14;
- (h) "Certificate of Total Completion" means a certificate of Total Completion issued under GC20;
- (i) "Completion Date" means the date for Total Completion of the Work set out in the Contract;
- (j) "Construction Schedule" means the schedule of performance of the Work submitted by the Bidder as part of its Bid;
- (k) "Contract" means the contract for performance of the Work to Total Completion that is entered into between the Owner and the Contractor, which contract is on the terms and conditions contained in the Contract Documents;
- (l) "Contract Documents" means
 - (i) Invitation for Bids;
 - (ii) Specifications;
 - (iii) Instructions to Bidders;
 - (iv) Bid Form;
 - (v) Form of Contract;
 - (vi) Contractor Acknowledgement Form;
 - (vii) Code of Conduct; and
 - (viii) General Conditions
- (m) "Contractor" means the Bidder to whom the Contract has been awarded in accordance with IT 9;
- (n) "Form of Contract" means the document with that name contained in the Contract Documents;

- (o) "GC" is, when used in conjunction with a numeral, a reference to the section of the General Conditions with the same numeral;
- (p) "General Conditions" means the Contract terms and conditions of that name that are contained in the Contract Documents;
- (q) "Invitation for Bids" means the notice published or communicated by the Owner by which the Owner invited Bids for the Contract;
- (r) "IT" is, when used in conjunction with a numeral, a reference to the article or section of the Instructions to Bidders with the same numeral;
- (s) "Notice of Award" means the notice of award of the Contract given in accordance with IT 9;
- (t) "Owner" means the City of Dawson Creek;
- (u) "Owner's Representative" means, subject to GC1.2, the person designated by the Owner in the Notice of Award as the Owner's representative for the Contract, and includes any other person expressly authorized by that person to act on that person's behalf;
- (v) "Specifications" means any drawings or specifications, or both, for the Work contained in the Contract Documents;
- (w) "Total Completion" means total and satisfactory completion of the Work in accordance with the Contract Documents, as determined by the Owner's Representative under these General Conditions;
- (x) "Substantial Completion" means substantial performance of the Work as determined by the Owner's Representative determined by in accordance with the *Builders Lien Act* (British Columbia);
- (y) "Work" means the project of work described in the Contract Documents, including the Specifications; and
- (z) "Work Change" means a change in the Work ordered in writing by the Owner's Representative under the General Conditions, that is:
 - (i) a deletion from the Work; or
 - (ii) an addition to or revision of the Work which is within the general scope of the Contract

but does not, in either of the above cases, include a variation in quantity of unit price items.

1.2 If the Owner does not designate anyone in the Notice of Award as the Owner's Representative for the Contract, the Corporate Administrator of the Owner is the Owner's Representative.

1.3 If there is any conflict or inconsistency within or between any of the Contract Documents, the following order of priority among documents, proceeding from highest to lowest priority, applies, and a Contract Document with higher priority prevails over a Contract Document with lower priority to the extent of any conflict or inconsistency:

- (a) General Conditions;
- (b) specifications included within the Specifications;
- (c) drawings included within the Specifications;
- (d) drawings of larger scale prevail over drawings of smaller scale of the same date;
- (e) dimensions shown on drawings prevail over dimensions scaled from drawings;
- (f) later dated documents prevail over earlier documents of the same kind;
- (g) Bid Form;
- (h) Instructions to Bidders; and
- (i) Invitation for Bids.

1.4 In respect of the Contract, any act, decision, consent or exercise of discretion by a party must be performed, made or exercised acting reasonably unless the Contract expressly provides that the act, decision, consent or exercise of discretion is in the "sole discretion" of that party, in which case that party is under no duty to act fairly, reasonably or in good faith and may act unreasonably, in its absolute and unfettered discretion.

1.5 For clarity, the Contractor and the Owner agree that the terms and conditions of the Contract are as set out in these General Conditions and in the other Contract Documents.

2. CONTRACTOR'S GENERAL OBLIGATION

The Contractor at its risk and expense must perform the Work to Total Completion, including by doing everything, and supplying all personal property, necessary to do so, in accordance with the Contract Documents and on or before the Completion Date. Without limiting the generality of the foregoing, the Contractor must use only new materials in performance of the Work and must perform the Work applying generally accepted best standards and practices in the British Columbia construction industry for work such as the Work. The Contractor must begin the Work within 10 days after Notice of Award is given to the Contractor, or within such greater period as the Owner's Representative may allow in his or her sole discretion. Contractor must obtain a permit through CN (Canadian National Railway) as well as familiarizing themselves with CN's Contractor Safety Package, complete a Contractor Orientation Course and be registered on the Contractor Completion Database.

3. ASSIGNMENT AND SUBCONTRACTING

The Contract may not be assigned without the prior written consent of the Owner's Representative, and none of the Work may be sub-contracted by the Contractor without the prior written consent of the Owner's Representative, except to the extent, if any, the Contractor listed sub-contractors or suppliers in the Contractor's Bid and uses those sub-contractors or suppliers. Every sub-contract must incorporate all the terms and conditions of this Contract as far as reasonably applicable and with the necessary changes. Without limiting the generality of GC10, if the Contractor uses a sub-contractor or supplier

not listed in the Contractor's Bid, the Owner's Representative may in his or her sole discretion terminate the Contract in accordance with GC10.

4. CONTROL OF WORK AND SUPERVISION

- 4.1** The Contractor is solely responsible for proper performance of the Work to Total Completion in accordance with GC2 and the rest of the Contract Documents and must effectively direct and supervise the Work so as to ensure Total Completion. Without limiting the generality of the foregoing, the Contractor is solely responsible for construction means, methods, techniques, sequences, and procedures and for coordinating the various parts of the Work during its performance. The Contractor must keep a qualified competent and experienced superintendent on the site of the Work at all times during the performance of the Work, unless otherwise authorized in writing by the Owner's Representative. The superintendent must supervise and direct performance of the Work in accordance with the Contract Documents. The superintendent must be qualified, competent and experienced and be acceptable to the Owner's Representative and must have the authority to receive on behalf of the Contractor any communication in respect of the Contract. Any superintendent or worker not acceptable to the Owner's Representative because of incompetence, improper conduct or security risk must be removed from the site of the Work and replaced at once if the Owner's Representative so requires.
- 4.2** The Contractor must at all times monitor the progress of the Work in relation to the Construction Schedule and must update the Construction Schedule whenever required by the Owner's Representative in order to ensure that Total Completion will be reached on or before the Completion Date. The Contractor must at all times keep the Owner's Representative informed as to the progress of the Work, including in relation to the Construction Schedule, and must provide the Owner's Representative with all records and documentation the Owner's Representative from time to time requires be provided in relation to performance of the Work and the Construction Schedule.
- 4.3** The Contractor must at all times keep the Work site neat and clean and, without limiting the generality of the foregoing, must daily remove all waste material that originates from the Work and dispose of it in accordance with all applicable enactments. After Total Completion, the Contractor must promptly remove from and around the Work site any waste materials, personal property and equipment and must leave the Work site neat, clean and in a safe condition.

5. COOPERATION WITH OTHER CONTRACTORS

The Contractor must cooperate fully with other contractors or workers sent onto the site of the Work by the Owner's Representative. If presence on the Work site of other Contractors and works could not have been reasonably foreseen by the Contractor when entering into the Contract, and if, in the opinion of the Owner's Representative, the Contractor has incurred additional expense by such action, and the Contractor has given written notice of claim within 30 days of such action, the Owner must pay the additional expense to the Contractor calculated in accordance with GC18.1.

6. OWNER'S REPRESENTATIVE

The Owner's Representative has the Owner's authority to act on the Owner's behalf with respect to the Contract and, without limiting the generality of the foregoing, the Owner's Representative is entitled:

- (a) to have access to and inspect the site of the Work, and the Work, at all times and the Contractor must provide the Owner's Representative with full information and assistance so the Owner's Representative may ensure that the Work is performed in accordance with the Contract,
- (b) to decide whether anything has been done as required by the Contract or to decide what the Contractor is required by the Contract to do, including questions as to the acceptability of the quality and quantity of any labour, equipment or material used in the Work and the timing and scheduling of the Work,
- (c) in the Owner's Representative's sole discretion, to order additional Work or dispense with or change all or any part of the Work,
- (d) for the purposes of progress payments and final payment, to determine the actual quantities of the Work, where the Contract is a unit price contract, and certify the amounts payable to the Contractor, and
- (e) if the Owner's Representative determines that the Contractor is not performing the Work in accordance with the Construction Schedule, or is otherwise not performing the Work in a manner that will permit Total Completion on or before the Completion Date, to give notice to the Contractor directing the Contractor to do everything necessary, including as may be specified in that notice, to expedite performance of the Work in order to reach Total Completion on or before the Completion Date.

The Contractor must comply with any determination, decision or direction of the Owner's Representative given under this section.

7. DELAY, NON-COMPLIANCE OR BREACH BY THE CONTRACTOR

7.1 If the Contractor delays in the commencement, performance or completion of the Work, fails to comply with a direction or decision of the Owner's Representative, or is otherwise in breach of the Contract, then, subject to GC8.2, the Owner's Representative may, at the Contractor's expense, do such things as the Owner's Representative deems necessary to correct the Contractor's breach, including by causing the Work to be performed by the Owner's forces or by another party. The Contractor must reimburse the Owner for all costs, expenses and damage incurred or sustained by the Owner by reason of the Contractor's breach or in correcting the breach.

7.2 If the Contractor's delay, failure or Contract breach continues for 5 days after notice of it has been given to the Contractor by the Owner's Representative and the Contractor is not, in the sole opinion of the Owner's Representative, diligently proceeding with a cure of the breach to the Owner's Representative's satisfaction, the Owner's Representative may, without it constituting termination of the Contract, take all or any part of the Work out of the Contractor's hands and may employ such means as the Owner's Representative considers desirable to perform the Work or part of it. The cost of performing the Work, or part of it, taken out of the Contractor's hands must be deducted from any balance of the Contract Price not yet payable to the Contractor. If the cost of performing the Work, or part of it, taken out of the Contractor's hands exceeds any balance of the Contract Price not yet paid, the excess is a debt due and owing by the Contractor to the Owner.

7.3 Without limiting the generality of GC8.1, if the Owner's Representative at any time determines that the Contractor is not performing the Work in accordance with the Construction Schedule, so that Total Completion will not be reached on or before the Completion Date, GC8.1 applies.

8. CHANGES IN SOIL CONDITIONS AND DELAY BY THE OWNER

8.1 Subject to GC8.2(a)(i), the Contractor agrees that it is the sole responsibility and risk of the Contractor to examine the Work site and the actual Work site conditions, including soil conditions, before beginning performance of the Work and the Contractor represents and warrants to, and agrees with, the Owner that the Contractor is for all purposes conclusively to be considered to have conducted an examination of the Work site and to have informed itself as to the risks and contingencies, and all other data, matters and things, respecting the Work site and any other aspects of the Work necessary to properly perform the Work to Total Completion. Any failure by the Contractor to do any of the matters just described does not relieve the Contractor of the obligation to properly perform the Work to Total Completion. The Owner is not liable for any expense, damage or loss incurred as a result of any misunderstanding or error by the Contractor regarding the Work or conditions affecting it, including Work site conditions.

8.2 No payment is to be made to the Contractor for any expense, loss or damage incurred for any reason unless

- (a) the Owner's Representative certifies, in the Owner's Representative's sole discretion, that the expense, loss or damage is caused by
 - (i) a substantial difference between the actual Work site conditions, including soil conditions, and the Work site conditions indicated by the Specifications, and the Owner's Representative certifies that the difference could not, in light of GC8.1, reasonably have been identified or anticipated by the Contractor; or
 - (ii) neglect or delay by the Owner, occurring after the date of delivery of the Notice of Award, in providing any information or doing any act which is required expressly by the Contract; and
- (b) the Contractor has, within 5 days after that discovery or event, given written notice to the Owner's Representative of a claim for the expense, loss or damage.

The amount of any payment to be made under this GC is to be calculated in accordance with GC18.1.

8.3 If in the opinion of the Owner's Representative any difference in Work site conditions referred to in GC8.2(a)(i) results in a saving of expense to the Contractor, the Contract price is to be decreased commensurately and the amount of that saving is a debt due and owing by the Contractor to the Owner.

9. INSPECTION AND REPLACEMENT

- 9.1** The Owner's Representative may inspect or test the Work performed under the Contract at any time. The Contractor must give the Owner's Representative sufficient notice of any approaching stage of the Work that could prevent the Owner's Representative from inspecting or testing the Work, in order to enable the Owner's Representative to properly inspect or test the Work. Whenever required by the Owner's Representative, the Contractor must open up and expose any part of the Work for inspection or testing.
- 9.2** The Owner's Representative may require the Contractor to submit clearly marked samples and test specimens of equipment or materials intended to be incorporated, or incorporated in the Work in the quantity and size necessary to allow proper inspection and testing of the samples and specimens. The Contractor must whenever required by the Owner's Representative deliver the manufacturer's specifications and any other information respecting the equipment or materials the Contractor intends to incorporate in the Work.
- 9.3** The obligations of the Contractor under the Contract are not affected by any inspection, testing or acceptance of equipment or materials by the Owner's Representative or by the failure of the Owner's Representative to inspect or test equipment or materials.
- 9.4** Without affecting GC15, the Contractor must promptly, on the direction of the Owner's Representative:
- (a) remove and replace, or remove and modify, any part of the Work that the Owner's Representative determines is not in accordance with the Contract, in order to make it in accordance with the Contract;
 - (b) restore all Work, and the work of others, that is disturbed or damaged in the course of removal, replacement or modification of unsatisfactory Work; and
 - (c) bear all risks and expenses connected with performance by the Contractor of any acts under GC9.4(a) or (b), or both.
- 9.5** If the Owner's Representative determines that the Contractor has not performed its obligations under GC9.4 promptly, the Owner may perform those obligations at the expense of the Contractor and the Owner's costs of doing so shall be a debt due and owing by the Contractor to the Owner.

10. SUSPENSION OR TERMINATION OF CONTRACT

- 10.1** The Owner's Representative may upon notice to the Contractor suspend the Contract at any time for convenience and the Contractor must comply with that notice immediately by ceasing performance of the Work. Upon ceasing performance of the Work, the Contractor must take all steps reasonably necessary to protect all portions of the Work from damage or destruction by natural or human causes. If the Owner's Representative suspends the Work for 30 days or less, the Contractor must complete the Work when called upon to do so. If the Owner's Representative suspends the Work for a period in excess of 30 days, the Contractor may request the Owner to terminate the Contract and GC10.2 applies.

10.2 Despite the rest of the Contract, the Owner may terminate the Contract for convenience, in the Owner sole discretion, or the Owner may terminate the Contract for cause, because of any breach of the Contract by the Contractor, the insolvency of the Contractor, or the commission of an act of bankruptcy by the Contractor. If the Owner terminates the Contract for cause, the obligation of the Owner to make payments to the Contractor ceases and no further payment is due to the Contractor unless the Owner's Representative certifies that the payment is a progress payment due and owing to the Contractor in accordance with GC19, in which case that GC applies, but the Owner is still entitled to deduct from any such payment any damages or loss caused to the Owner by the Contractor's breach of the Contract, insolvency or bankruptcy. Termination under this GC does not relieve the Contractor of any Contract obligations other than the Contractor's obligation to complete the Work. If the Owner terminates the Contract for cause, the Owner may complete the Work as the Owner's Representative considers desirable and all costs and damages incurred by the Owner to complete the Work must be paid by the Contractor to the Owner at once on demand.

11. BOND NOTICE

11.1 If a labour and material payment bond is required under the Contract, the Contractor must post on the site of the Work a notice of the bond's existence, which must include the name and address of the surety, a definition of the persons protected by the bond and an outline of the procedure for submitting a claim.

12. RECORDS TO BE KEPT

12.1 The Contractor must throughout performance of the Work, and for a period of two years from the date of issuance of the Certificate of Total Completion, maintain and keep full documentation (including accounts) and information in respect of the performance of, and the Contractor's estimates of actual costs of, the Work and make them available for copy, audit or inspection by any persons acting on behalf of the Owner.

13. EXTENSION OF TIME

13.1 The Owner's Representative may, in the Owner's Representative's sole discretion, at the request of the Contractor before the Completion Date extend the time for Total Completion. Whether or not the Owner's Representative grants an extension, the Contractor must, except to the extent that the Owner's Representative determines that the need for an extension was due to causes beyond the reasonable control of the Contractor, pay to the Owner:

- (a) an amount equal to inspection costs relating to the Work incurred by the Owner after the original Completion Date; and
- (b) compensation for any cost, loss or damage to the Owner caused by failure of the Contractor to complete the Work by the original Completion Date.

14. CERTIFICATE OF SUBSTANTIAL COMPLETION

14.1 The Owner's Representative shall, not later than 10 days after a written application from the Contractor for a Certificate of Substantial Completion, inspect and assess the Work to verify the validity of the application and either:

- (a) issues the Certificate of Substantial Completion; or
- (b) if the Owner's Representative decides that Substantial Completion has not been achieved, consult with the Contractor and advise the Contractor of the Work required to achieve Substantial Completion.

14.2 The Contractor may, after performing the Work required under GC14.1(b), reapply for the Certificate of Substantial Completion and the provisions of GC14.1 shall apply to the reapplication.

14.3 Before applying for the Certificate of Substantial Completion, the Contractor, in consultation with the Owner's Representative, shall confirm the matters remaining to be completed and timing of them so as to achieve Total Completion.

15. WARRANTY AND RECTIFICATION OF DEFECTS

15.1 The Contractor warrants and guarantees to the Owner that the Work is free from all defects arising from faulty construction, manufacturing, installation, materials or workmanship which appear within 12 months after the date on which the Certificate of Total Completion is issued or such longer period, but not shorter, as may be specified in the Contract Documents. The Contractor must, promptly after notice from the Owner's Representative, and within such time as is specified in that notice, rectify at the Contractor's risk and expense any defects or faults which appear in the Work within 12 months after the date on which the Certificate of Total Completion is issued or such longer period, but not shorter, as may be specified in the Contract Documents. The Contractor warrants and guarantees that any remedial work performed under this section is free from all defects arising from faulty construction, manufacturing, installation, materials or workmanship and the rest of this GC applies, with the necessary changes, to remedial work.

16. WORK CHANGES

16.1 At any time after the Notice of Award, but before issuance of the Certificate of Substantial Completion, the Owner's Representative may give notice to the Contractor ordering the Contractor to perform a Work Change and the Contractor must promptly after the notice is given begin performance of that Work Change and prosecute it to Total Completion in accordance with the notice.

16.2 Any Work Change is, for all purposes of the Contract, considered to be part of the Work and all of the provisions of the Contract apply to that Work Change.

16.3 The Contractor is entitled to be paid for any Work Change that is an addition to or revision of the Work, but not any Work Change which is a deletion from the Work. The Contractor is entitled to be paid for any Work Change in accordance with the GC17.2(b).

17. PRICE CALCULATION AND ADJUSTMENTS

17.1 The Contractor acknowledges and agrees that quantities of the Work set out in the Contract Documents are estimates only and that the Owner has made no representation, and gives no warranty or covenant, that the actual quantities of Work performed by the Contractor will be the same as those estimated.

17.2 If the Contract is a unit price contract:

- (a) the amount payable to the Contractor for the Work is to be calculated by multiplying the unit prices set out in the Bid Form by the actual quantities of Work of such units as certified by the Owner's Representative in the certificate of measurement,
- (b) the Owner and the Contractor may, by agreement in writing,
 - (i) add to the unit price items in the Bid Form other items of Work, classes of labour, units of measure, estimated quantities or prices per unit, and
 - (ii) if the actual quantities certified by the Owner's Representative exceed or are less than the estimated quantities in respect of any unit price item shown in the Bid Form by more than 20%, amend the unit prices for such items, but if the actual quantities exceed or are less than the estimated quantities by more than 20%, any amendment to the unit prices applies only to the actual quantities in excess of or less than 120% of the estimated quantities,
- (c) where the Owner's Representative and the Contractor fail to agree on the amount of any adjustment as contemplated by this GC, the revised or new prices per unit must be determined in accordance with GC18,
- (d) the Contractor is entitled to be paid for any Work Change in accordance with unit prices set out in the Bid Form for the items of Work within the Work Change, with the Owner's Representative being responsible for certification of actual quantities of those unit prices performed in the Work Change as provided in GC14. If the unit price items in the Bid Form do not contain items of Work, classes of labour, or units of measure, contained in the Work Change, GC17.2(b) applies; and
- (e) the Contractor is entitled to be paid for excavation of any material only to neat lines of excavation as stipulated in the Specifications.

17.3 If the Contract is a lump sum contract:

- (a) the amount payable to the Contractor for the Work is the lump sum set out the Bid Form, and
- (b) if the Contractor is ordered to perform a Work Change, the amount payable to the Contractor for performance of the Work Change is to be the amount agreed upon by the Owner and the Contractor, but if the Owner and the Contractor cannot agree on that amount, the amount payable is to be the total of the reasonable and proper costs incurred, or legally payable, by the Contractor directly attributable to Completion of the Work Change, as certified by the Owner's Representative, plus 10% of those costs to cover profit and overhead, including finance and interest charges.

18. NO ADDITIONAL PAYMENTS

- 18.1** No amount in addition to the Contract price determined under GC17 is payable to the Contractor in respect of performance of the Work and the Contract unless these General Conditions expressly provide otherwise. If these General Conditions expressly provide otherwise, any such amount must, if the Contract is a unit price contract, be based on the unit prices set out in the Bid Form, with the amount not to exceed that calculated by multiplying the relevant unit prices by actual quantities of Work, as certified by the Owner's Representative. Where the amount is in respect of delay caused to the Contractor by neglect or delay by the Owner, the Owner's Representative and the Contractor may agree on the amount payable. Failing such agreement, the amount payable is to be the total reasonable and proper costs incurred, or legally payable, by the Contractor directly attributable to the matter in question, as certified by the Owner's Representative, plus 10% of those costs to cover profit and overhead, including finance and interest charges.
- 18.2** The amount payable to the Contractor under the Contract must not be increased or decreased because of any increase or decrease in the cost of the Work brought about by an increase or decrease in the cost of equipment, services, labour or materials, except if any tax or levy that affects the cost of any materials incorporated in or to be incorporated in the Work imposed under the *Excise Act (Canada)*, the *Excise Tax Act (Canada)*, the *Old Age Security Act (Canada)*, the *Customs Act (Canada)* Tariff, or the *Social Services Tax Act (British Columbia)* is made public after the Bid closing time an appropriate adjustment may be made in the Owner's sole discretion.

19. PAYMENTS

- 19.1** If the Contract price is \$5,000.00 or less, the Contractor is entitled to payment only after the Certificate of Substantial Completion has been issued.
- 19.2** If the Contract price exceeds \$5,000.00, the Contractor is entitled to receive progress payments by submitting progress claims at monthly intervals, which must be approved by progress payment certificates issued by the Owner's Representative at monthly intervals. The Owner's Representative must not issue a progress payment certificate unless the Contractor's progress claim is accompanied by a statutory declaration sworn by a knowledgeable person on behalf of the Contractor, and by any further proof the Owner's Representative may require in the Owner's Representative's sole discretion, that all financial obligations, debts and payments payable by the Contractor in respect of the part of the Work that has been performed to the date of the Contractor's progress claim have been fully paid and that the Contractor is not aware of any actual or possible claims of builder's lien or other claims in respect of that part of the Work. The Contractor's progress claim must also be accompanied by proof satisfactory to the Owner's Representative, in the Owner's Representative's sole discretion, that all assessments payable by the Contractor to the Workers' Compensation Board of British Columbia are fully paid up to the last required payment and that all remittances due to the Government of Canada under the *Income Tax Act (Canada)* are current up to the last required payment. The statutory declaration must be in the form set out in Appendix A to these GCs. If the statutory declaration is not provided, and in that form, the Contractor is not entitled to any payment.
- 19.3** The Owner shall deduct from each progress payment to be made to the Contractor a holdback pursuant to and in the amount required by the *Builders Lien Act (British Columbia)*.

- 19.4** The amount of a progress claim becomes due and payable to the Contractor 40 days after receipt by the Owner's Representative of the progress claim, but only if the Contractor has complied with GC19.2.
- 19.5** Despite the rest of the Contract, the holdback amounts under GC19.3, becomes due and payable to the Contractor 55 days after the date of the Certificate of Substantial Completion, but only if the Contractor has submitted to the Owner's Representative a statutory declaration sworn by a knowledgeable person on behalf of the Contractor, and any further proof the Owner's Representative may require in the Owner's Representative's sole discretion, that all financial obligations, debts and payments payable by the Contractor in respect of the part of the Work that has been performed to the date of the Contractor's claim have been fully paid and that the Contractor is not aware of any actual or possible claims of builder's lien or other claims in respect of that part of the Work. The Contractor's claim must also be accompanied by proof satisfactory to the Owner's Representative, in the Owner's Representative's sole discretion, that all assessments payable by the Contractor to the WorkSafe BC are fully paid up to the last required payment and that all remittances due to the Government of Canada under the *Income Tax Act* (Canada) are current up to the last required payment. The statutory declaration must be in the form set out in Appendix B to these GCs. If the statutory declaration is not provided, and in that form, the Contractor is not entitled to any payment.
- 19.6** Notwithstanding any other provisions of this Contract, no payment is payable to the Contractor under this GC19 if a claim of builder's lien has been made, or is in reasonable prospect, or proceedings have been commenced to enforce a lien against the holdback, before expiry of the 55 day holdback period under GC19.5, in which case the Contractor must do everything necessary, at the Contractor's expense, including by institution and prosecution of legal proceedings, to obtain the discharge of any claim of builder's lien, lis pendens or other encumbrance from title to any land upon which the Work is located and the provisions of the *Builders Lien Act* (British Columbia), and any successor legislation, apply with respect to the holdback.
- 19.7** The Owner may avail itself to all rights under the *Builders Lien Act* (British Columbia), including regarding the payment of the holdback or other monies retained by the Owner from the Contractor into Court in order to discharge any claim of lien or lien related certificate of pending litigation or judgment and the Contractor will pay the Owner's costs of doing so and such costs shall be a debt due and owing by the Contractor to the Owner.
- 19.8** Delay by the Owner in making a payment is not a breach of the Contract, but, subject to the rest of this GC19, if payment of any progress payment under this GC19 is not made when due, the Contractor is entitled to interest on the amount overdue and the Owner must, when making payment of the amount overdue, pay to the Contractor interest on the amount overdue, calculated for the period of the delay at the Royal Bank of Canada's prime commercial rate of interest then in effect.
- 19.9** Without affecting any other right or remedy the Owner may have against the Contractor, the Owner may set off and deduct from amounts payable or accruing due to the Contractor, including any holdback, an amount equivalent to:
- (a) any expense, loss or damage caused to the Owner by any breach of the Contract by the Contractor;

- (b) any expense, loss or damage caused to the Owner by any breach by the Contractor of another contract with the Owner or by any legal wrong of the Contractor;
- (c) any debt owed to the Owner by the Contractor, and the Contractor agrees that if, in accordance with the Contract, the Owner performs an obligation of the Contractor under the Contract, the expense to the Owner of doing so is considered for all purposes, including this GC, to be a debt owed to the Owner by the Contractor.

19.10 For the purposes of the Contract, the Owner's Representative is the "payment certifier", within the meaning of the *Builders Lien Act* (British Columbia).

20. CERTIFICATE OF TOTAL COMPLETION

20.1 The Contractor shall ensure that all Work is protected until the issuance of the Certificate of Total Completion and shall be responsible for the correction of defaults in the Work regardless of whether or not they were apparent when the Certificate of Substantial Completion was issued.

20.2 Total Completion shall not be attained until the Contractor has removed all products, materials, equipment and waste other than that caused by the Owner and leave the Work site clean and suitable for occupancy and use by the Owner, unless otherwise specified in the Contract Documents or directed by the Owner's Representative.

20.3 Upon achieving Total Completion, the Contractor may apply for a Certificate of Total Completion and the procedure and requirement for the issuance of the Certificate shall be as set out in the GC14.

21. INDEMNIFICATION

21.1 The Contractor must indemnify and hold harmless the Owner and CN (Canadian National Railway), its elected officials, officers, agents and employees (including the Owner's Representative), from and against all liabilities, losses, damages, personal injury, death, property loss or damage, actions, causes of action, costs (including legal fees and costs) or expenses in connection with loss of, or damage or injury (including death) to, any person or property that occurs in the course of the performance of the Contract, whether suffered, incurred or made by the Contractor or an employee of the Contractor or by a third person and whether or not caused through a wilful or negligent act or omission or other actionable wrong of the Contractor, its officers, agents, employees, or subcontractors, or any of their officers, agents or employees, and at its expense the Contractor must defend any and all actions and pay all damages and legal costs and other costs arising therefrom.

22. PROPERTY OF THE OWNER

22.1 The Contractor is responsible for any loss of or damage to, excluding reasonable wear and tear, any property of the Owner arising out of the performance of the Contract.

23. BYLAWS AND PERMITS

23.1 The Contractor must comply with all statutes, laws and regulations relating to, and obtain all permits and licences required for, the Work, whether federal, provincial or municipal.

24. WORKPLACE SAFETY AND ENVIRONMENTAL MATTERS

24.1 Without limiting the Contractor's obligations under GC23, the Contractor must:

- (a) comply with all applicable enactments respecting workplace health and safety, including the *Workers Compensation Act* (British Columbia) and regulations, policies and orders under it, and the Workplace Hazardous Materials Information System; and
- (b) perform the Work in accordance with all applicable enactments respecting environmental protection, including soils contamination and, without limiting the generality of the foregoing, the Contractor must do everything reasonably necessary to ensure that the Work is performed in such a way as to avoid and prevent any disturbance or damage to the environment.

24.2 If the Contractor is a “head contractor”, as defined in the *Builders Lien Act* (British Columbia), the Contractor will be the “prime contractor” for the Work site under the *Workers Compensation Act* (British Columbia) and must fulfill all obligations of the “prime contractor” under that Act, including by ensuring that the activities of any employers, workers and other persons at the Work site relating to occupational health and safety are coordinated and by doing everything that is reasonably practicable to establish and maintain the system or process that will ensure compliance with Part 3 of the *Workers Compensation Act* and the regulations under that Act applicable to the Work site.

25. INSURANCE

25.1 Without in any way limiting the obligations or liabilities of the Contractor under the Contract, the Contractor must maintain and keep in force throughout the Contract until issuance of the Certificate of Total Completion, with an insurance company or companies and under policies of insurance acceptable to the Owner, the following insurance:

- (a) The Contractor must maintain and keep in force throughout the Contract until the date of final payment, liability insurance on all motor vehicles and motorized equipment used in connection with the Work under this Contract, whether owned by the Contractor or subcontractor or not in an amount of not less than \$10,000,000.00. The per claim deductible under any insurance required under this section must not exceed \$5,000.00. The insurance must include any liability assumed under the Contract.
- (b) The Contractor must maintain and keep in force until the date of final payment public liability and property damage insurance, in an amount of not less than \$10,000,000.00 per claim, against liabilities or damages in respect of injuries to persons (including injuries resulting in death), and in respect of property loss or damage, arising out of the performance of the Work. The per claim deductible under any insurance required under this section must not exceed \$5,000.00. The insurance must include any liability assumed under the Contract.

- (c) The Contractor must maintain and keep in force until the date of final payment builder's risk insurance, including for loss of use, in addition to such insurance as the Contractor elects to carry for the Contractor's own protection against physical loss or damage to the Work in an amount of not less than \$5,000.00. The per claim deductible under any insurance required under this section must not exceed \$5,000.00. The insurance must include any liability assumed under the Contract.
- (d) If the Contractor proposes to use waterborne equipment to carry out the Work, the following insurance is also required:
 - (i) direct damage insurance on hulls and machinery for full value, subject to Canadian Hulls Pacific Clauses 1974, or equivalent, and
 - (ii) broad form protective and indemnity insurance (SP23 or equivalent) including full towers liability, pollution liability and collision liability in an amount of not less than \$10,000,000.00 any one accident or occurrence.
- (e) The Owner and its officials and employees must be named insured under all insurance policies. The insurance must preclude subrogation claims by the insurer against anyone insured under it. In addition, all insurance policies must include a waiver of cross liability as follows:

“The insurance afforded by this insurance shall apply in the same manner to each named insured as though separate policies were issued to each of them, including in respect of any action brought against any of the named insured by or on behalf of any other named insured”.
- (f) All insurance policies must contain an endorsement to provide all named insureds with prior notice of changes and cancellations. Such endorsement must be in the following form:

“It is understood and agreed that the coverage provided by this insurance will not be changed or amended in any way or cancelled until thirty (30) days after written notice of such change or cancellation shall have been given or sent by registered mail to all named insureds”.
- (g) The Contractor must, before beginning the Work, submit to the Owner certificates of the insurance required under this GC and must also provide to the Owner, from time to time if and when required by the Owner, satisfactory proof that all such insurance is still in full force and effect and that all premiums have been paid.
- (h) The Contractor must not do or permit anything to be done which would render any insurance void or voidable or which would cause an increase in the insurance premiums.

- (i) If the Contractor fails to keep and maintain insurance required by this GC, the Owner may, in its sole discretion, either terminate the Contract by notice to the Contractor or may perform the Contractor's obligation to keep and maintain that insurance, and the cost to the Owner of doing so is a debt due and owing by the Contractor to the Owner. The Owner may terminate the Contract by notice given to the Contractor if the Contractor fails to deliver any certificate of insurance, or any proof that insurance is still in full force and effect.

26. NOTICE

26.1 Any notice, direction, demand, approval, certificate or waiver which may be or is required to be given under the Contract must be in writing and be delivered or sent by facsimile transmission either to the address or facsimile number given for each party in the Bid Form or to the Contractor's superintendent of the Work.

26.2 Any notice, direction, demand, approval, certificate or waiver that is delivered is to be considered to have been given on the next business day after it is dispatched for delivery. Any notice, direction, demand, approval, certificate or waiver that is sent by fax transmission is to be considered to have been given on the day it is sent. If a party changes its address or facsimile number, or both, it must promptly give notice of its new address or facsimile number, or both, to the other party as provided in this GC26.

27. TIME

27.1 Time is of the essence of the Contract. In calculating time for the purposes of the Contract, the first day is to be excluded and the last day included.

28. DELAY

28.1 If, after performance of the Work has begun, war, insurrection, riot or other civil disturbance, act of God or force of nature, but no other event or circumstance, prevents the Contractor from performing the Contract, the Contractor may give notice to the Owner's Representative seeking an extension of the Completion Date. The Owner's Representative may, in the Owner's Representative's sole discretion, extend the Completion Date in response to that notice.

29. WAIVER

29.1 An alleged waiver of any breach of the Contract is effective only if it is an express waiver in writing of the breach. A waiver of a breach of the Contract does not operate as a waiver of any other breach of the Contract.

30. SUCCESSORS

30.1 The Contract binds the parties to it and their respective successors, heirs, executors, administrators and permitted assigns.

31. JOINT AND SEVERAL OBLIGATIONS

31.1 The obligations of the Contractor under the Contract are the joint and several obligations of each of the persons who have submitted the Bid as the Bidder or as members of a joint venture or partnership comprising the Bidder.

32. APPLICABLE LAW

- 32.1** The Owner and the Contractor agree that the Contract is to be interpreted in accordance with, and governed by, the law in force in British Columbia and the Contractor irrevocably submits to the jurisdiction of the courts of British Columbia.

APPENDIX A

Progress Payment Statutory Declaration

CANADA)	IN THE MATTER OF the <i>BUILDERS LIEN ACT</i> and IN THE MATTER
)	OF A CONTRACT BETWEEN THE CITY OF DAWSON CREEK AND
BRITISH COLUMBIA)	
)	TO: CITY OF DAWSON CREEK
)	IN THE MATTER OF: _____
)	_____
)	

I, _____, of _____, British Columbia, DO SOLEMNLY DECLARE THAT:

1. I am the _____ of _____, the contractor with respect to construction of _____ at _____.

2. All claims and obligations for wages, services, materials, and otherwise, with respect to the above contract to date have been fully paid and satisfied.

3. All assessments, penalties and any other amounts payable by the above contractor to the WorkSafe BC are fully paid up to the last required payment, all remittances due to the Government of Canada under the *Income Tax Act* (Canada) with respect to the withholding of income tax at source from employees of the above contractor are current up to the last required payment and all other statutory remittances to any government or government agency are current up to the last required payment.

4. There are no persons entitled at this time to file a claim of builder's lien in respect of the above contract or entitled to any such lien.

5. This declaration is made for the purpose of inducing the City of Dawson Creek to pay funds and I am aware that in making such payment the City of Dawson Creek will be relying on the statements herein contained.

6. I am authorized to, and do, make this declaration on behalf of the contractor named above.

7. By delivering this declaration to the City of Dawson Creek, the above contractor irrevocably and absolutely waives and releases any further remuneration, consideration, damages, losses or other payment by or from the City of Dawson Creek to the above contractor with respect to the Work under the above contract to the date hereof, unless otherwise expressly claimed in writing in an appendix hereto.

AND I make this solemn declaration, conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the *Evidence Act* (British Columbia).

DECLARED BEFORE ME AT _____ in the _____)
 Province of British Columbia this ____ day of _____)
 , 20____.)
)
 _____)

 A Commissioner for taking Affidavits in British Columbia

APPENDIX B

Final Payment Statutory Declaration

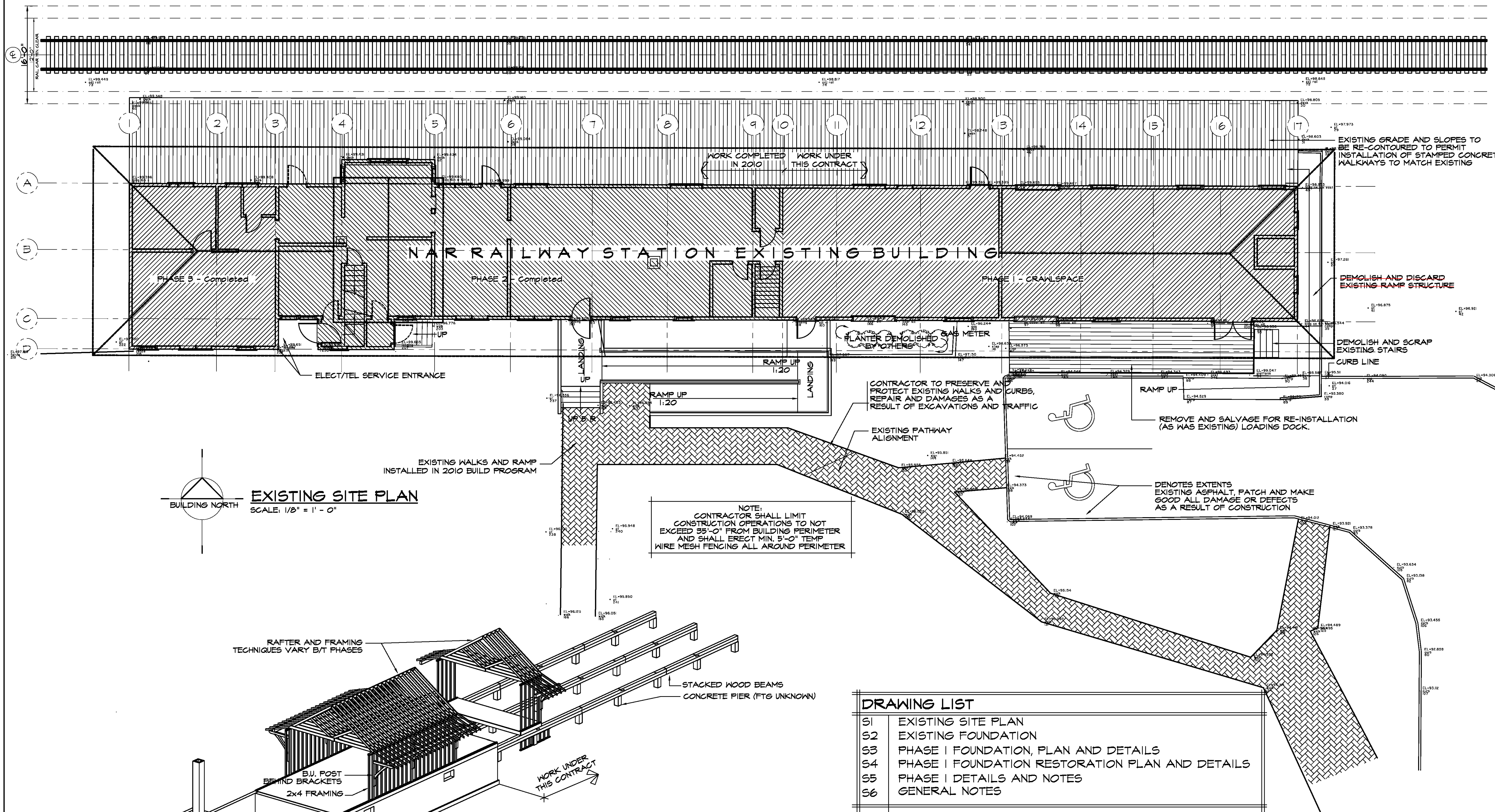
CANADA) IN THE MATTER OF the BUILDERS LIEN ACT and IN THE MATTER
) OF A CONTRACT BETWEEN THE CITY OF DAWSON CREEK AND
BRITISH COLUMBIA)
) TO: CITY OF DAWSON CREEK
) IN THE MATTER OF:
) _____
) _____

I, _____, of _____, British Columbia, DO SOLEMNLY DECLARE THAT:

- 1. I am the _____ of _____ the contractor with respect to construction of _____ at _____
2. All claims and obligations for wages, services, materials, and otherwise, with respect to the above contract to date have been fully paid and satisfied.
3. All assessments, penalties and any other amounts payable by the above contractor to the WorkSafe BC are fully paid up to the last required payment, all remittances due to the Government of Canada under the Income Tax Act (Canada) with respect to the withholding of income tax at source from employees of the above contractor are current up to the last required payment and all other statutory remittances to any government or government agency are current up to the last required payment.
4. There are no persons entitled at this time to file a claim of builder's lien in respect of the above contract or entitled to any such lien.
5. The construction of improvements under the above contract reached substantial completion, determined for the purposes of the Builders Lien Act (British Columbia), on _____.
6. By delivering this declaration to the City of Dawson Creek, the above contractor irrevocably and absolutely waives and releases any further remuneration, consideration, damages, losses or other payment by or from the City of Dawson Creek to the above contractor with respect to the Work under the above contract.
7. This declaration is made for the purpose of inducing the City of Dawson Creek to pay funds and I am aware that in making such payment the City of Dawson Creek will be relying on the statements herein contained.
8. I am authorized to, and do, make this declaration on behalf of the contractor named above.

AND I make this solemn declaration, conscientiously believing it to be true and knowing that it is of the same force and effect as if made under oath and by virtue of the Evidence Act (British Columbia).

DECLARED BEFORE ME AT _____, British Columbia, this ___ day of _____, 20___.
A Commissioner for taking Affidavits in British Columbia _____



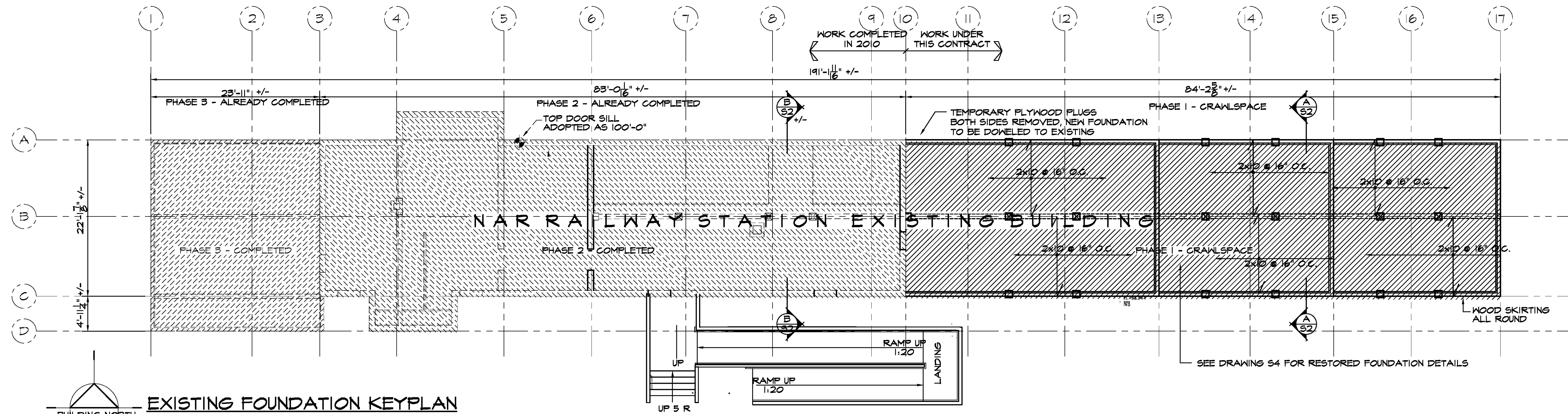
EXISTING SITE PLAN
SCALE: 1/8" = 1'-0"

DRAWING LIST	
S1	EXISTING SITE PLAN
S2	EXISTING FOUNDATION
S3	PHASE I FOUNDATION, PLAN AND DETAILS
S4	PHASE I FOUNDATION RESTORATION PLAN AND DETAILS
S5	PHASE I DETAILS AND NOTES
S6	GENERAL NOTES

FOUNDATION STABILIZATION N.A.R. MUSUEM 2011 FINAL PHASE DAWSON CREEK, BRITISH COLUMBIA

EXISTING FOUNDATION ISOMETRIC
SCALE: NOT TO SCALE

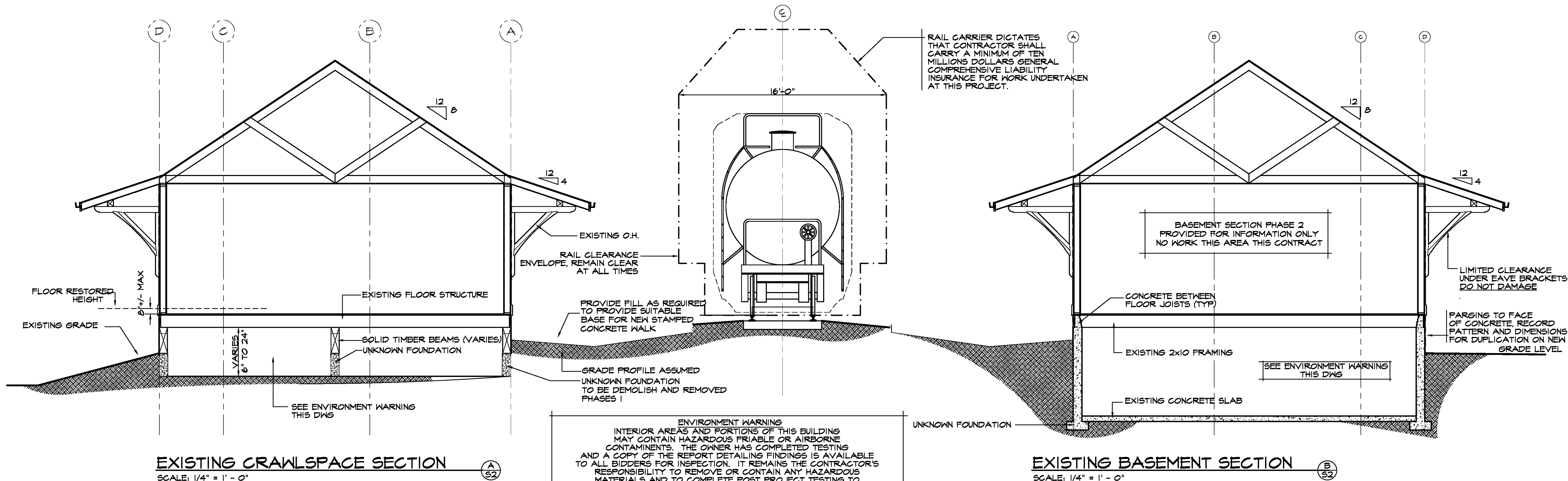
drawing issues / revisions	
FOR CLIENT REVIEW AND COMMENT	
no.	1/2/1
date	
consultant	
keyplan	
Dawson Creek, B.C. Ph. 250-782-4275 Fax. 250-782-4229 Fort St. John, B.C. Ph. 250-785-1855 Fax. 250-781-9714	
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project	FOUNDATION STABILIZATION NAR MUSEUM 2011 FINAL PHASE DAWSON CREEK BRITISH COLUMBIA
drawing title	EXISTING SITE PLAN
drawn by:	M.A. ZYGUN
checked by:	B. SHIPTON
sheet scale:	1/8" = 1'-0"
electronic file:	2886341
project number	28864
drawing number	S1
SHEET	1 OF 4



EXISTING FOUNDATION KEYPLAN
SCALE: 1/8" = 1' - 0"

CONTRACTOR MAY USE BUILDING HEATING AND PLUMBING SYSTEMS WHEN AVAILABLE. DURING ANY PERIOD WHERE THE SYSTEM IS RENDERED UNSERVICABLE DURING CONSTRUCTION THE CONTRACTOR SHALL PROVIDE TEMPORARY HEAT TO PREVENT DAMAGE TO BUILDING DUE TO FROST OR FREEZING

NOTE: CONTRACTOR SHALL LOCATE ALL BURIED UTILITIES AND MARK TO PREVENT INTERFERENCE FROM EXCAVATION OWNER WILL MARK AND LOCATE POSITION OF EXISTING LAWN IRRIGATION PIPING AND SPRINKLER HEADS



EXISTING CRAWLSPACE SECTION
SCALE: 1/4" = 1' - 0"

EXISTING BASEMENT SECTION
SCALE: 1/4" = 1' - 0"

ENVIRONMENT WARNING
INTERIOR AREAS AND PORTIONS OF THIS BUILDING MAY CONTAIN HAZARDOUS FRIABLE OR AIRBORNE CONTAMINENTS. THE OWNER HAS COMPLETED TESTING AND A COPY OF THE REPORT DETAILING FINDINGS IS AVAILABLE TO ALL BIDDERS FOR INSPECTION. IT REMAINS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE OR CONTAIN ANY HAZARDOUS MATERIALS AND TO COMPLETE POST PROJECT TESTING TO ENSURE A HEALTHY ENVIRONMENT. CONTRACTOR SHALL BE IN STRICT ADHERENCE WITH ALL GOVERNING LEGISLATION AND IACB REGMITS FOR WORKPLACE SAFETY INCLUDING CONFINED SPACE ENTRY PROCEDURES

RAIL CARRIER DICTATES THAT CONTRACTOR SHALL CARRY A MINIMUM OF TEN MILLIONS DOLLARS GENERAL COMPREHENSIVE LIABILITY INSURANCE FOR WORK UNDERTAKEN AT THIS PROJECT.

drawing issues / revisions	
FOR CLIENT REVIEW AND COMMENT	
ISSUED FOR TENDER	
no.	1 2
date	7/24 7/26/11

consultant

keyplan



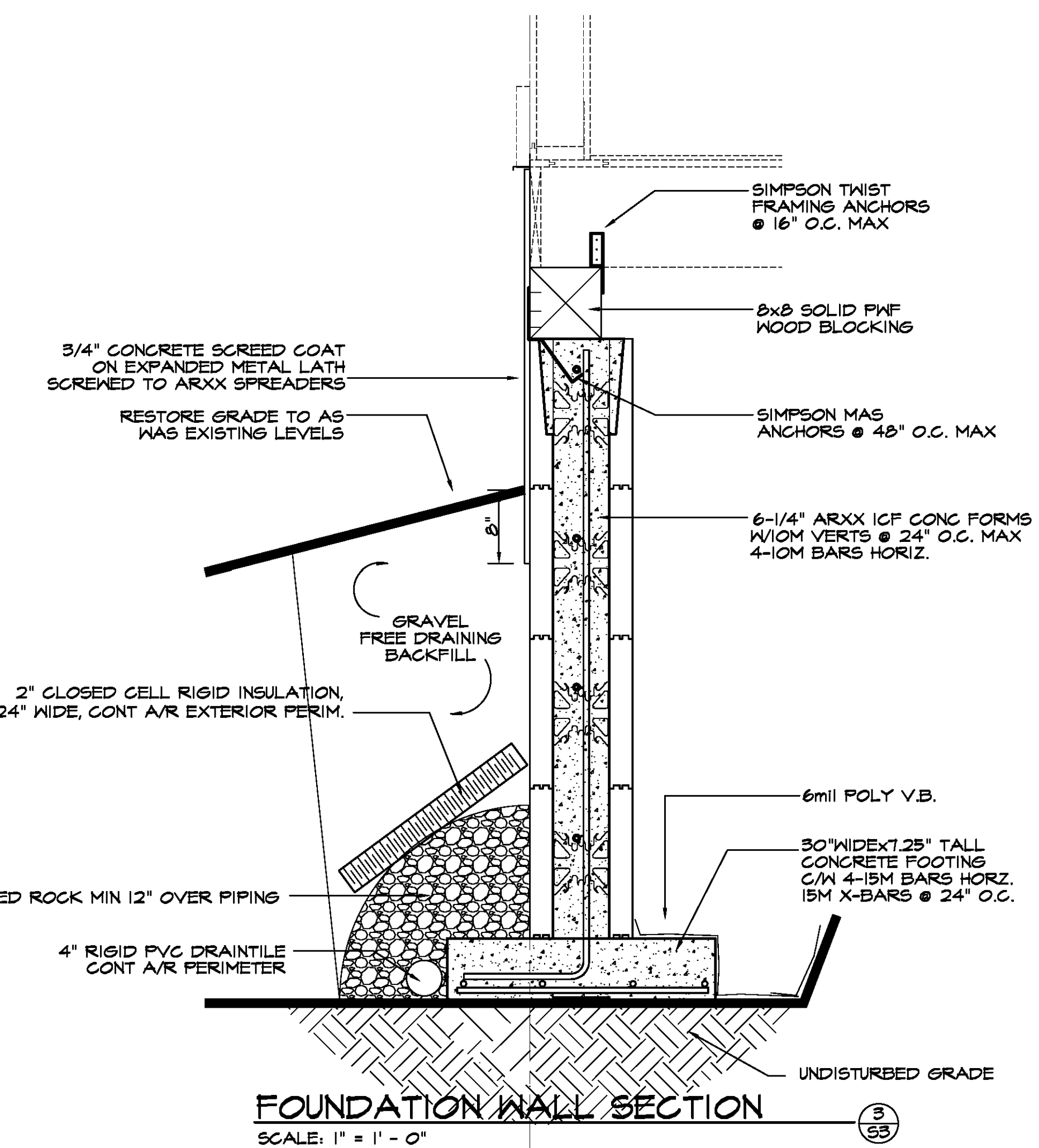
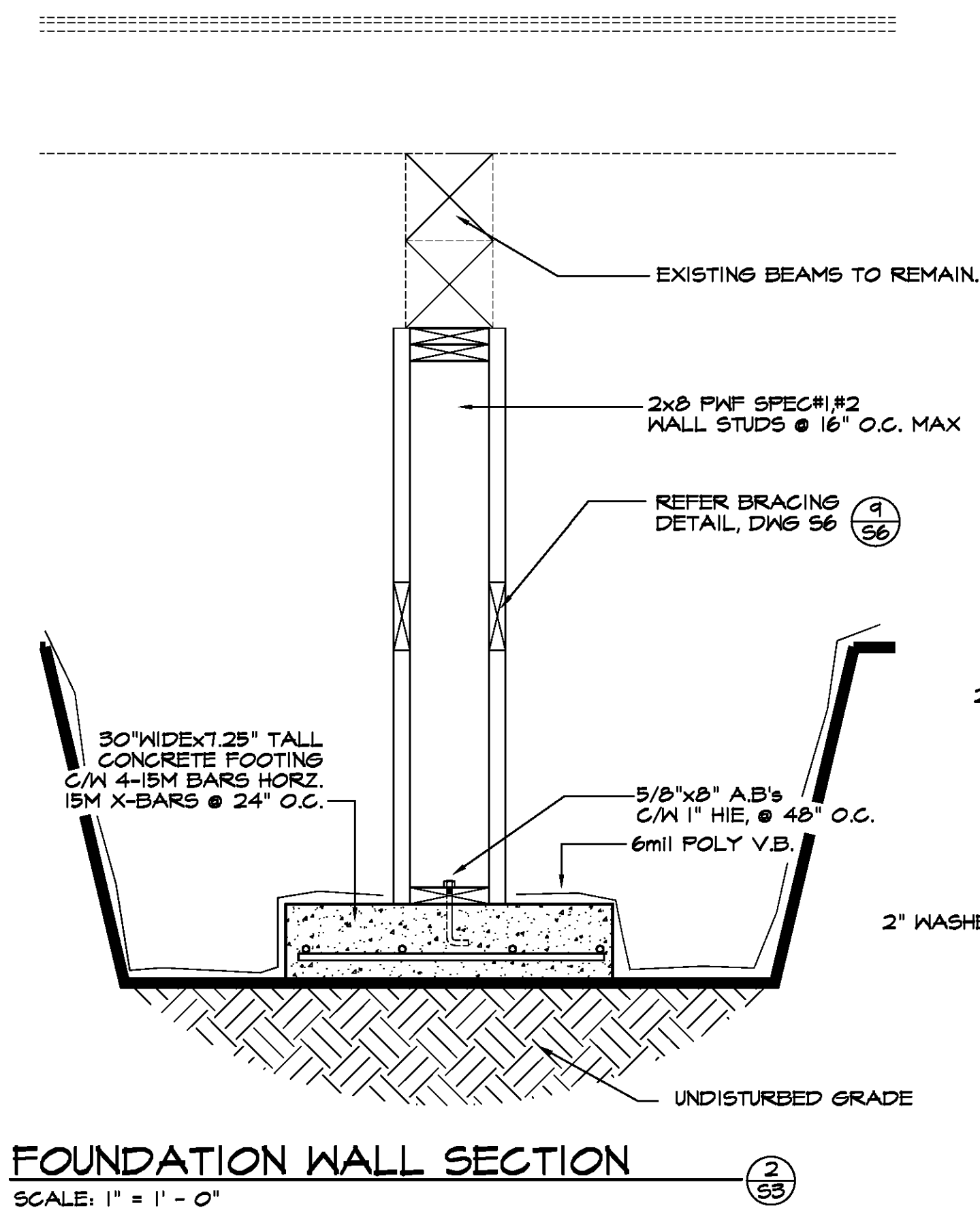
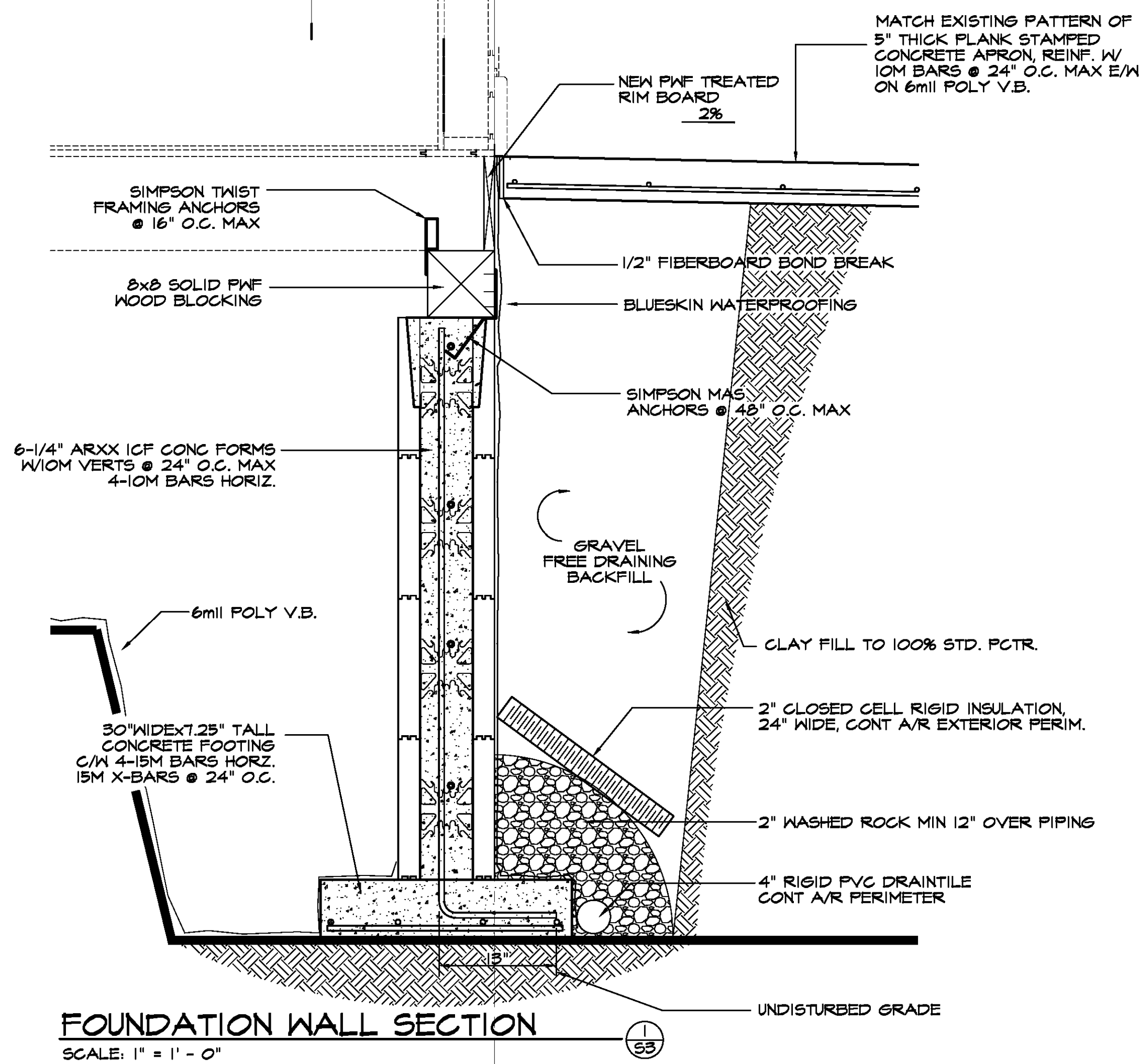
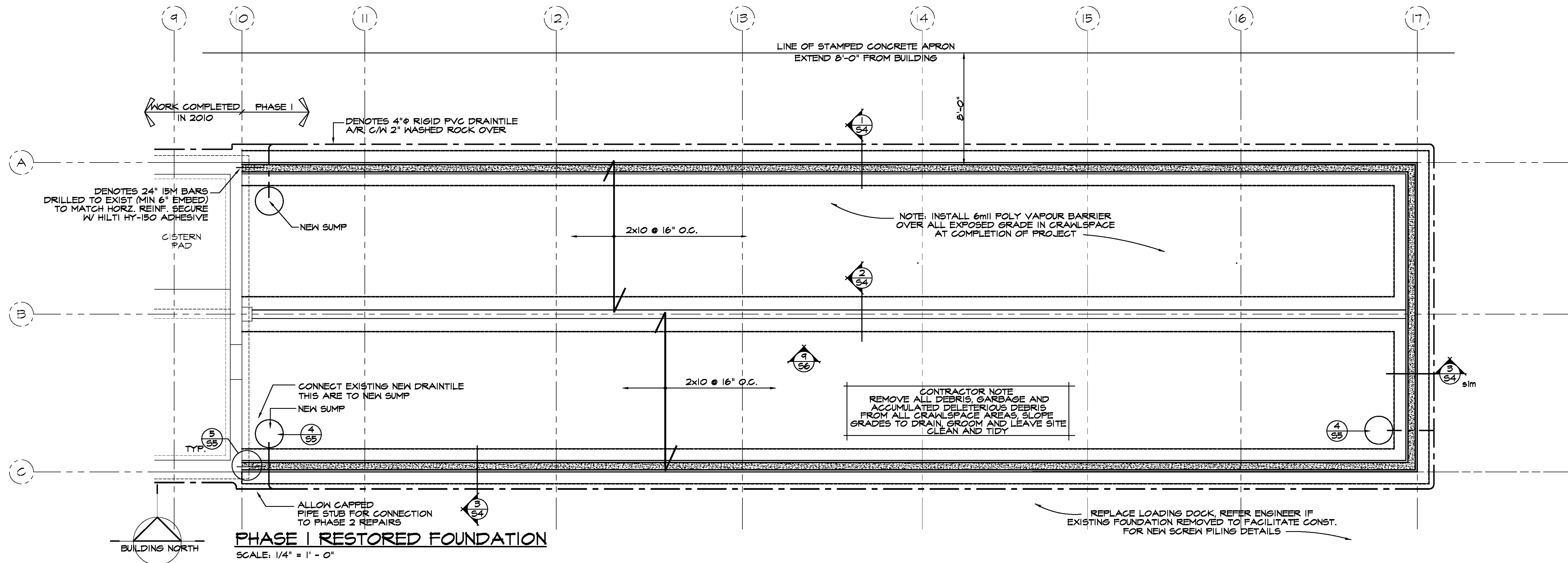
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project
FOUNDATION STABILIZATION NARRA MUSEUM 2011 FINAL PHASE DAWSON CREEK BRITISH COLUMBIA

drawing title
EXISTING FOUNDATION

drawn by:	M.A. ZYGUN
checked by:	B. SHIPTON
sheet scale:	1/8" = 1'-0"
electronic file:	28864S1
project number:	28864
drawing number:	S2



no.	revision	description
1	7/21	FOR CLIENT REVIEW AND COMMENT
2	7/26/11	ISSUED FOR TENDER

consultant

keyplan



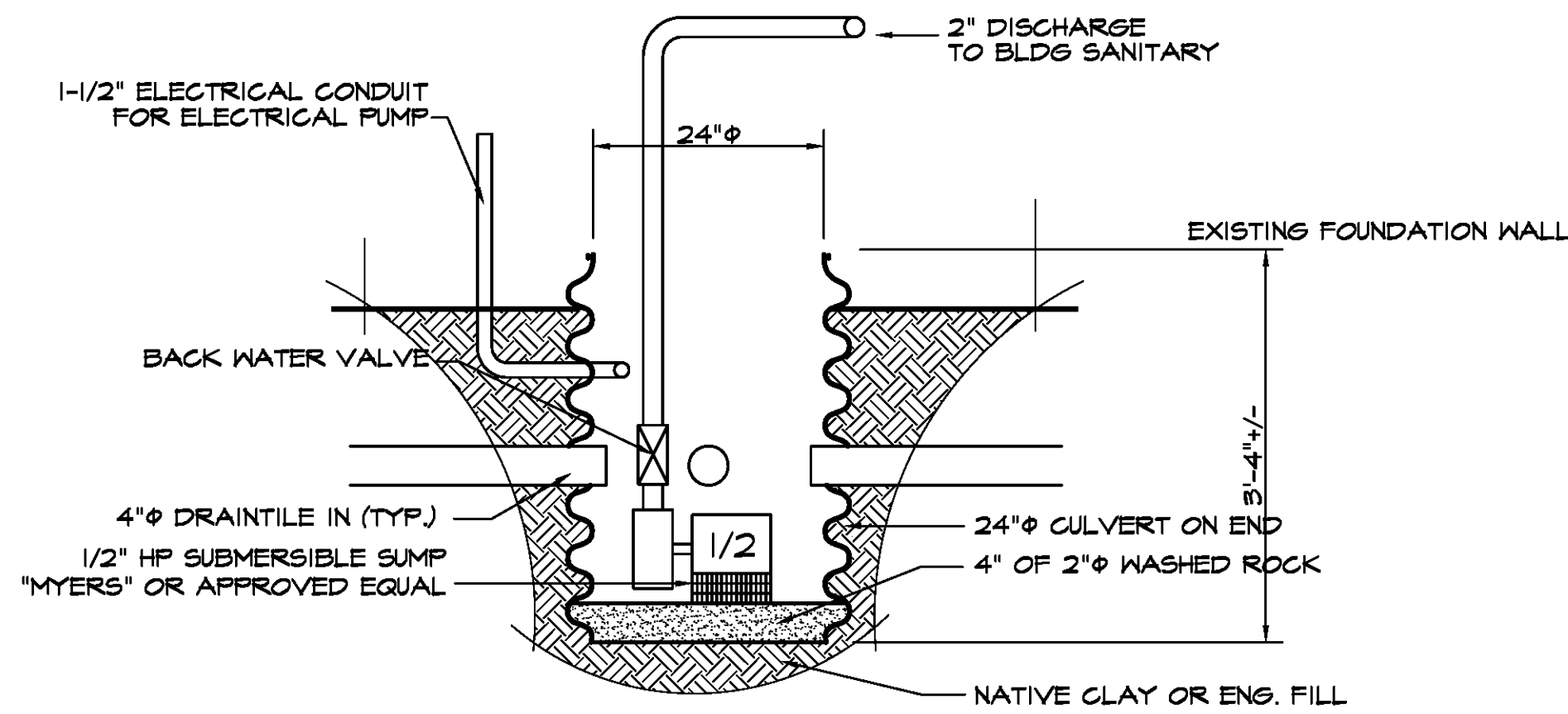
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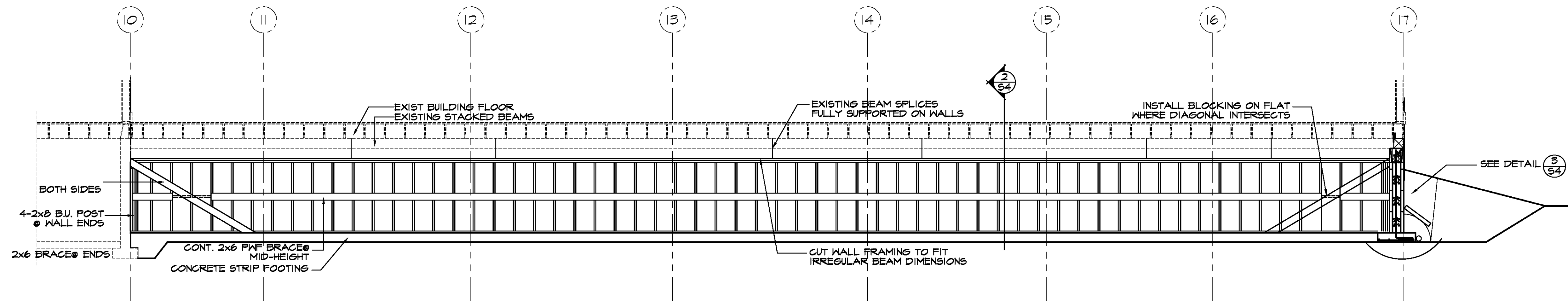
project
**FOUNDATION STABILIZATION
NAR MUSEUM
2011 FINAL PHASE
DAWSON CREEK
BRITISH COLUMBIA**

drawing title
**PHASE 1 FOUNDATION
RESTORATION AND
DETAILS**

drawn by: M.A. ZYGUN
checked by: B. SHIPTON
sheet scale: 1/8" = 1'-0"
electronic file: 28864S1
project number: 28864
drawing number: S4
SHEET 4 OF 6



TYPICAL SUMP SECTION (4/54)
SCALE: 3/4" = 1' - 0"



FOUNDATION INTERIOR BEARING WALL ELEVATION (9/54)
SCALE: 1" = 1' - 0"

MECHANICAL SYSTEMS GENERAL REQUIREMENTS
(M.S.C. - MECHANICAL SYSTEMS CONTRACTOR)

1. THE LAWS AND CODES OF THE PLACE OF BUILDING SHALL GOVERN THE CONSTRUCTION OF THIS PROJECT. WORK TO BE DONE NOTWITHSTANDING ALL APPLICABLE AND PROVINCIAL BUILDING CODES.
2. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS ARE GUIDELINES, AND ANY OMISSION IN THE DESCRIPTION OF WORKMANSHIP DO NOT RELIEVE THE CONTRACTOR OF DELIVERING A COMPLETED PROJECT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICE.
3. INSTALLATION OF ENTIRE HEATING SYSTEM, WHETHER ELECTRIC, FORCED AIR, OR HOT WATER MUST COMPLY WITH MANUFACTURER'S DIRECTIONS (WHERE APPLICABLE) AND CONFORM WITH LOCAL CODES AND REGULATIONS IN ALL RESPECTS.
4. M.S.C. IS RESPONSIBLE FOR SIZING, ROUTING, INSTALLATION, AND PROVIDING ALL REQUIRED PIPING, VENTS, VALVES, CLEANOUTS, PIPE INSULATION (WHERE APPLICABLE), ETC. AS NECESSARY TO MEET CURRENT PLUMBING, FIRE AND BUILDING CODE REQUIREMENTS WHETHER FOR POTABLE WATER, SANITARY, STORM, OR NATURAL/PROPANE GAS SERVICES IN ALL RESPECTS.
5. PIPING REQUIRED FOR MECHANICAL SYSTEMS ARE TO BE CONCEALED UNDER SLABS, IN WALLS, IN CEILING SPACES, AND PARTITIONS IN FINISHED AREAS. MAY BE EXPOSED IN STORAGE AND MECHANICAL/ELECTRICAL ROOMS.
6. M.S.C. IS RESPONSIBLE FOR VERIFYING THE LOCATION OF REQUIRED EXISTING SERVICE(S) PRIOR TO START OF WORK.
7. M.S.C. IS RESPONSIBLE FOR COORDINATING ELECTRICAL WIRING TO MECHANICAL SYSTEMS (IF APPLICABLE), WITH THE ELECTRICAL SYSTEMS CONTRACTOR.
8. M.S.C. IS TO (SUPPLY, INSTALL AND MAKE OPERATIONAL) COMPLETE SYSTEMS, USING NEW OR USED, AS PER OWNER'S SPECIFICATIONS, CSA APPROVED EQUIPMENT AND PROVEN INSTALLATION TECHNIQUES.
9. M.S.C. IS RESPONSIBLE FOR CHECKING, TESTING, COMMISSIONING AND VERIFYING THAT ALL SERVICE(S) ARE OPERATIONAL AFTER ALL CONNECTIONS HAVE BEEN COMPLETED.

ELECTRICAL SYSTEMS GENERAL REQUIREMENTS
(E.S.C. - ELECTRICAL SYSTEMS CONTRACTOR)

1. THE LAWS AND CODES OF THE PLACE OF BUILDING, SHALL GOVERN THE CONSTRUCTION OF THIS PROJECT. WORK TO BE DONE NOTWITHSTANDING ALL APPLICABLE AND PROVINCIAL BUILDING CODES.
2. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS ARE GUIDELINES, AND ANY OMISSION IN THE DESCRIPTION OF WORKMANSHIP DO NOT RELIEVE THE CONTRACTOR OF DELIVERING A COMPLETED PROJECT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH GENERALLY ACCEPTED PRACTICE.
3. INSTALLATION OF ENTIRE ELECTRICAL SYSTEM MUST COMPLY WITH MANUFACTURER'S DIRECTIONS (WHERE APPLICABLE) AND CONFORM WITH LOCAL CODES AND REGULATIONS IN ALL RESPECTS.
4. E.S.C. IS RESPONSIBLE FOR SIZING, ROUTING, INSTALLATION, AND PROVIDING ALL REQUIRED CONDUITS, WIRING, PANELS. AS NECESSARY TO MEET THE CURRENT EDITION OF THE CANADIAN ELECTRICAL CODE AND LOCAL SUPPLIER'S REQUIREMENTS IN ALL RESPECTS.
5. CONDUITS REQUIRED FOR ELECTRICAL SYSTEMS ARE TO BE CONCEALED UNDER SLABS, IN WALLS, IN CEILING SPACES, AND PARTITIONS IN FINISHED AREAS. MAY BE EXPOSED IN STORAGE AND MECHANICAL/ELECTRICAL ROOMS.
6. LOCATIONS OF OUTLET/FIXTURE SHOWN ON PLANS MAY BE ADJUSTED ACCORDING TO OWNER'S AND LOCAL AUTHORITIES REQUIREMENTS.
7. E.S.C. IS RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL REQUIRED EXISTING SERVICE(S) PRIOR TO START OF WORK.
8. E.S.C. IS TO COORDINATE ELECTRICAL WIRING TO MECHANICAL SYSTEMS (IF APPLICABLE), WITH THE MECHANICAL SYSTEMS CONTRACTOR.
9. E.S.C. IS TO (SUPPLY, INSTALL AND MAKE OPERATIONAL) COMPLETE SYSTEMS, USING NEW OR USED, AS PER OWNER'S SPECIFICATIONS, CSA APPROVED EQUIPMENT AND PROVEN INSTALLATION TECHNIQUES.
10. E.S.C. IS RESPONSIBLE FOR CHECKING, TESTING, COMMISSIONING AND VERIFYING THAT ALL SERVICE(S) ARE OPERATIONAL AFTER ALL CONNECTIONS HAVE BEEN COMPLETED.

no.	revision / description
1	FOR CLIENT REVIEW AND COMMENT
2	ISSUED FOR TENDER

consultant

keyplan



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project
**FOUNDATION STABILIZATION
NAR MUSEUM
2011 FINAL PHASE
DAWSON CREEK
BRITISH COLUMBIA**

drawing title
**PHASE 1 FOUNDATION
DETAILS**

drawn by:	M.A. ZYGUN
checked by:	B. SHIPTON
sheet scale:	1/8" = 1'-0"
electronic file:	28864S1
project number	28864
drawing number	S5

STRUCTURAL GENERAL NOTES AND SPECIFICATIONS:

DIVISION 01 - GENERAL REQUIREMENTS

- 1.1 BUILDING DESIGN AND CONSTRUCTION IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE NATIONAL BUILDING CODE OF CANADA 2005 AND BRITISH COLUMBIA BUILDING CODE 2006.
- 1.2 THE LAWS AND CODES OF THE PLACE OF BUILDING, SHALL GOVERN THE CONSTRUCTION OF THIS PROJECT. WORK TO BE DONE NOTWITHSTANDING ALL APPLICABLE AND PROVINCIAL BUILDING CODES.
- 1.3 USE OF THESE DRAWINGS IS FOR THE PURPOSES SPECIFICALLY NOTED ON THE DRAWINGS. DO NOT CONSTRUCT BY THESE DRAWINGS UNLESS THEY BEAR THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER FROM FORCE ENGINEERING GROUP INC. AND ARE STAMPED 'ISSUED FOR CONSTRUCTION'.
- 1.4 SPECIFIED DESIGN LOADS AND PARAMETERS:
ROOF -56.52.2 PSF; CB, 0.8; SF, 4.1 PSF; LIVE, 49.9 PSF; DEAD, 20.0 PSF
MAIN FLR SLAB -LIVE, SLAB ON GRADE VEHICLE LOADS
WIND -1650.0, 8.5 PSF; (10), 8.5 PSF
SEISMIC Sa(0.2) = 0.12; Sa(0.5) = 0.07; Sa(1.0) = 0.035; Sa(2.0) = 0.021; PGA 0.065
- 1.5 CONSTRUCTION LOADS NOT TO EXCEED THE SPECIFIED DESIGN LIVE LOADS FOR THE STRUCTURAL ELEMENTS MENTIONED ABOVE. CONTRACTORS MUST CONFORM WITH ENGINEER FROM FORCE ENGINEERING GROUP INC. LOADINGS REQUIRED FOR TEMPORARY CONDITIONS OF CONSTRUCTION.
- 1.6 CONTRACTOR TO INSPECT SITE PRIOR TO COMMENCEMENT OF WORK, TO FAMILIARIZE THEMSELVES WITH EXTENT & SCOPE OF WORK. NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES OR INCONGRUENCIES BETWEEN THE DRAWING & ACTUAL SITE CONDITIONS.
- 1.7 CONTRACTOR SHALL REVIEW ALL AVAILABLE INFORMATION FOR TENDER AND WHERE CONFLICT OCCURS BETWEEN ITEMS, INCLUDE THE MORE CONSERVATIVE, UNLESS OTHERWISE ISSUED WRITTEN ADDENDA.
- 1.8 CONTRACTORS' RESPONSIBILITY TO CHECK & VERIFY ALL DIMENSIONS, ERRORS, AND OMISSIONS AND REPORT SAME TO ENGINEER WITH FORCE ENGINEERING GROUP INC.
- 1.9 THE INTENT OF THE DRAWINGS AND SPECIFICATIONS ARE GUIDELINES, AND ANY ENGLISH IN THE DESCRIPTION OR WORKMANSHIP DO NOT RELIEVE THE CONTRACTOR OF DELIVERING A COMPLETED PROJECT IN A WORKMANLIKE MANNER. ALL WORKMANSHIP SHALL BE OF STANDARDS EQUAL IN ALL RESPECTS TO GOOD BUILDING PRACTICE. REQUIREMENTS WHETHER GENERAL OR SPECIFIC SHALL BE INTERPRETED IN CONJUNCTION WITH ALL OTHER INFORMATION APPEARING IN THE DRAWINGS AND SPECIFICATIONS.
- 1.10 DO NOT SCALE DRAWINGS. WRITTEN DIMENSIONS ALWAYS TAKE PRECEDENCE OVER SCALED MEASUREMENTS.
- 1.11 STRUCTURAL COMPONENTS ARE NOT TO BE MODIFIED IN ANY MANNER WITHOUT FIRST OBTAINING WRITTEN PERMISSION FROM ENGINEER WITH FORCE ENGINEERING GROUP INC.
- 1.12 SHOP DRAWINGS SHALL BE COMPLETE AT TIME OF SUBMISSION, AND SHALL BEAR THE SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER (REGISTERED IN THE PROVINCE OF BRITISH COLUMBIA) RESPONSIBLE FOR THE WORK. DRAWINGS NOT SEALED WILL BE RETURNED WITHOUT REVIEW. SHOP DRAWINGS TO BE SUBMITTED WITH A MINIMUM OF SEVEN (7) WORKING DAYS FOR REVIEW.
- 1.13 THE CONTRACTOR ALONE IS RESPONSIBLE FOR SAFETY WITHIN THE CONFINES OF THE WORK SITE. PROPER AND SAFE METHODS OF CONSTRUCTION SHALL BE USED AT ALL TIMES INCLUDING SHORING, CONTROLLING THE INTENSITY OF CONSTRUCTION LOADS UPON THE STRUCTURE. TEMPORARY SUPPORT REQUIRED PRIOR TO THE COMPLETION OF VERTICAL AND LATERAL LOAD SYSTEMS DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE CONTRACTOR.
- 1.14 IN ACCORDANCE WITH STANDARDS OF PRACTICE, THE CONTRACTOR PROVIDES AND IS RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, SEQUENCES, LABOUR, MATERIALS, SAFETY PRECAUTIONS AND EQUIPMENT FOR THE EXECUTION AND QUALITY OF THE WORK AS INDICATED IN THE DRAWINGS AND SPECIFICATIONS.
- 1.15 CONTRACTOR TO VERIFY LOCATION OF SANITARY, WATER, GAS AND ELECTRIC LINES ON SITE WITH AUTHORITY HAVING JURISDICTION PRIOR TO COMMENCING CONSTRUCTION.
- 1.16 STRUCTURAL DRAWINGS SHALL GOVERN OVER MECHANICAL AND ELECTRICAL DRAWINGS. SUBJECT TO THE FOREGOING, IF ANY SPECIFICATIONS OR DRAWINGS CONFLICT WITH ANY OTHER SPECIFICATIONS OR DRAWINGS, THE MORE STRINGENT SHALL GOVERN.
- 1.17 CONTRACTOR TO REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR LOCATION OF OPENINGS, EQUIPMENT BASES, SUMP PITS, AND TRENCHES NOT INDICATED ON STRUCTURAL DRAWINGS.
- 1.18 CLIENT/CONTRACTOR IS RESPONSIBLE TO RETAIN, PAY, COORDINATE, SCHEDULE AND PROVIDE A SURVEYORS CERTIFICATE TO THE AUTHORITY HAVING JURISDICTION, SHOWING THE LOCATION ON THE LOT AT THE TIME THE FORMS ARE IN PLACE, BUT PRIOR TO THE PLACEMENT OF CONCRETE WITHIN THE FORMS.
- 1.19 CLIENT/CONTRACTOR IS RESPONSIBLE TO ADVISE AND SCHEDULE ALL FIELD REVIEWS 48 HOURS PRIOR TO CONCEALING ANY COMPONENT(S) REQUIRING ENGINEER REVIEW OR TESTING AS INDICATED IN THE FOLLOWING SECTIONS.
- 1.20 CLIENT/CONTRACTOR IS RESPONSIBLE TO RETAIN, PAY, COORDINATE AND SCHEDULE A QUALIFIED MATERIALS CONSULTANT TO COMPLETE ALL GEOTECHNICAL ENGINEERING, MATERIALS TESTING AND FIELD REVIEWS INDICATED IN THE FOLLOWING SECTIONS. THE MATERIALS CONSULTANT IS RESPONSIBLE TO PROVIDE LETTERS OF ASSURANCE BCBC SCHEDULES B-1 & B-2 PRIOR TO BUILDING PERMIT APPLICATION AND BCBC SCHEDULE C-B AT PROJECT COMPLETION AS REQUIRED BY THE CURRENT EDITION OF THE BRITISH COLUMBIA BUILDING CODE. CLIENT/CONTRACTOR IS RESPONSIBLE TO PROVIDE COPIES OF LETTERS OF ASSURANCE TO FORCE ENGINEERING GROUP INC. WHEN REQUESTED.
- 1.21 DRAWINGS TO BE READ IN CONJUNCTION WITH VARCO-PRUDEN DRAWINGS JOB#08-25602 CONTRACTOR TO REVIEW ALL DRAWINGS BEFORE SETTING OUT THE WORK, AND REPORT ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF THE WORK.

DIVISION 02 - SITEWORK

- 2.1 SITE & BUILDING SLAB PREPARATION TO BE IN ACCORDANCE WITH RECOMMENDATIONS AS PER PART 4 OF THE BRITISH COLUMBIA BUILDING CODE
- 2.2 BUILDING AREA TO BE STRIPPED TO NATIVE UNDISTURBED SUBGRADE.
- 2.3 EXPOSED SUBGRADE TO BE SLOPED TO DRAIN.
- 2.4 OVEREXCAVATION TO OBTAIN AN UNDISTURBED SUBGRADE SHALL BE RESTORED TO GRADE UNDER SUPERVISION BY AN ENGINEER FROM GEOTECH ENGINEERING
- 2.5 CRUSHED GRAVEL TO WELL-GRADED 3/4" MINUS, CONTAIN 6-10% FINES, COMPACTED TO 100% STANDARD PROCTOR DENSITY (ASTM D698).
- 2.6 FOOTINGS
 - 2.6.1 SOIL CAPACITIES IN ACCORDANCE WITH ASSUMED GEOTECHNICAL PARAMETERS TO BE VERIFIED BY ENGINEER FROM FORCE ENGINEERING GROUP. DURING CONSTRUCTION STRUCTURAL COMPONENTS MAY BE MODIFIED TO SUIT AS FOUND SITUATION
 - 2.6.2 ENGINEER FIELD REVIEWS REQUIRED FOR ALL FOUNDATION ELEMENTS.
 - 2.6.3 ALLOWABLE BEARING PRESSURE FOR FOOTINGS 2000 psf
 - 2.6.4 MINIMUM BURIAL DEPTH OF FOOTINGS 6'-0", 4'-0" WHERE INSULATION OVER FOOTINGS PROVIDED

2.7 MATERIALS CONSULTANT REVIEW/TESTING

- 2.7.1 THE MATERIALS CONSULTANT SHALL PROVIDE GENERAL CONSULTING FIELD REVIEWS AND TESTING OF MATERIALS FOR THIS PROJECT.
- 2.7.2 THE MATERIALS CONSULTANT SHALL CONDUCT SUBGRADE REVIEW, PILE DRILLING OPERATIONS AND COMPLETE COMPACTION TESTING AS DEEMED NECESSARY TO ENSURE THAT CONSTRUCTION METHODS AND MATERIALS CONFORM WITH THE INTENT OF THE BUILDING DESIGN. CLIENT/CONTRACTOR IS RESPONSIBLE TO PROVIDE COPIES OF ALL TEST RESULTS AND FIELD REVIEW REPORTS TO FORCE ENGINEERING GROUP INC.
- 2.7.3 UPON COMPLETION OF THE WORK, THE MATERIALS CONSULTANT SHALL SUBMIT LETTERS OF ASSURANCE (BCBC SCHEDULES B-1, B-2 & C-B) INDICATING THAT ALL MATERIALS IN THE BUILDING, AND OTHER WORK REVIEWED BY THE MATERIAL CONSULTANT, CONFORMS WITH THE INTENT OF THE DRAWINGS AND SPECIFICATIONS.
- 2.7.4 SPECIAL CONSTRUCTION PROCEDURES FOR WORK PERFORMED DURING ADVERSE WEATHER CONDITIONS SHALL BE APPROVED BY THE MATERIALS CONSULTANT PRIOR TO COMMENCEMENT OF THE WORK.
- 2.7.5 THE MATERIAL TESTING CONSULTANT WILL BE ENGAGED BY THE OWNER FOR THE PURPOSE OF INSPECTING AND/OR TESTING PORTIONS OF WORK. COST OF SUCH SERVICES WILL BE BORNE BY THE OWNER. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE MATERIAL TESTING CONSULTANT.
- 2.7.6 THE GENERAL CONTRACTOR SHALL GIVE TIMELY NOTICE TO THE MATERIAL TESTING CONSULTANT IN ADVANCE OF THE REQUIREMENTS FOR TESTS, IN ORDER THAT ATTENDANCE ARRANGEMENTS CAN BE MADE.
- 2.7.7 IF DEFECTS ARE REVEALED DURING INSPECTION AND/OR TESTING, THE MATERIAL TESTING CONSULTANT WILL REQUEST ADDITIONAL INSPECTION AND/OR TESTING TO ASCERTAIN FULL DEGREE OF DEFECT. THE GENERAL CONTRACTOR SHALL CORRECT DEFECT & IRREGULARITIES AS ADVISED BY MATERIAL TESTING CONSULTANT AT NO COST TO THE OWNER. THE GENERAL CONTRACTOR SHALL PAY COSTS FOR RE-TESTING AND RE-INSPECTION.

DIVISION 03 - CONCRETE

- 3.1 CONCRETE TO BE IN ACCORDANCE WITH LATEST EDITION OF CAN5-A23.1 AND CAN5-A23.5 FOR MATERIAL AND METHODS OF CONSTRUCTION.
 - 3.2 CONCRETE TYPE, STRENGTH, AGGREGATE, SLUMP, W/C RATIO, ENTRAINED AIR AS FOLLOWS:
- | LOCATION / USE | CONC. | 28 DAY TYPE STRENGTH | W/C RATIO | MAXIMUM AGGREGATE | SLUMP | % AIR |
|--------------------------------------|-------|----------------------|-----------|-------------------|-------|-------|
| FOUNDATION WALLS, FOOTINGS AND SUMPS | 50 | 52 MPa | 0.45 | 3/4" | 3'-4" | 6%-8% |
| INTERIOR SLABS ON GRADE | 10 | 30 MPa | 0.45 | 3/4" | 2'-3" | N/A |
| TOPPING (3-DECK) | 10 | 25 MPa | 0.45 | 3/4" | 2'-3" | N/A |
| EXTERIOR APRONS & RAMPS | 10 | 32 MPa | 0.45 | 3/4" | 2'-3" | 6%-8% |
| EXTERIOR SIDEWALKS & CURBS | 10 | 30 MPa | 0.45 | 3/4" | 2'-3" | 6%-8% |

- 3.3 CONCRETE COVER TO CONFORM TO LATEST EDITION OF CAN5-A23.5 AND AS FOLLOWS:
- | LOCATION | BAR SIZE | COVER |
|---|----------|--------|
| CAST AGAINST EARTH | ALL | 3" |
| BARs - EXPOSED TO EARTH OR WEATHER | 10M-15M | 1-1/2" |
| BARs - EXPOSED TO EARTH OR WEATHER | 20M-35M | 2" |
| BARs NOT EXPOSED TO EARTH OR WEATHER | ALL | 1-1/2" |
| SLABS - EXPOSED TO DEICING CHEMICALS | ALL | 2-1/2" |
| SLABS - EXPOSED TO EARTH OR WEATHER | ALL | 1-1/2" |
| NOT EXPOSED DEICING CHEMICALS, EARTH OR WEATHER | ALL | 1/2" |
| TIES - EXPOSED TO EARTH OR WEATHER | ALL | 1-1/2" |
| TIES NOT EXPOSED TO EARTH OR WEATHER | 2'-3" | 3" |

- 3.4 INTERIOR CONCRETE SLABS AND STEPS SURFACES TO BE TREATED WITH HARDENER AND SEALER APPLIED IN ACCORDANCE WITH MANUFACTURE SPECIFICATIONS. EXTERIOR CONCRETE SLABS AND STEPS SURFACES TO BE TREATED WITH SEALER APPLIED IN ACCORDANCE WITH MANUFACTURE SPECIFICATIONS.
- 3.5 PROVIDE MASTIC SEALED 1" DEEP SANKUTS IN SLAB AT 20'-0" O.C. (OR AT LOCATIONS AS INDICATED ON THE DRAWINGS) WITHIN 24 HOURS. SLAB AT COLUMN SHALL BE SANKUT IN 36" x 36" DIAMOND PATTERN LINING UP WITH GRID. ADJACENT FOURS SHALL BE KEYS.
- 3.6 GROUT FOR BASE PLATES, ANCHOR BOLTS ETC. TO BE NON-SHRINK COMPOUND WITH A TWO (2) DAY COMPRESSIVE STRENGTH OF 20 MPA.
- 3.7 THE FOREGOING TOLERANCES AND SPECIFICATIONS DO NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO PROVIDE CLOSER TOLERANCES REQUIRED BY OTHER BUILDING COMPONENTS.
- 3.8 REINFORCING STEEL
 - 3.8.1 BARS TO BE IN ACCORDANCE WITH LATEST EDITION OF CSA 600.12, WITH GRADE 400 MPA DEFORMED BILLET STEEL.
 - 3.8.2 MESH TO BE IN ACCORDANCE WITH LATEST EDITION OF CSA 600.5, WITH 305 MPa YIELD STRENGTH.
 - 3.8.3 ALL REINFORCING TO BE DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI DETAILING MANUAL, UNLESS OTHERWISE SPECIFIED.
 - 3.8.4 PLACING OF REINFORCEMENT AND ALL CUTTING, LAPPING AND BENDING DETAILS TO BE IN ACCORDANCE WITH THE LATEST EDITION OF CAN5-A23.1.
 - 3.8.5 REINFORCEMENT MUST BE CLEAN AND FREE FROM ANY SUBSTANCE WHICH MAY REDUCE CONCRETE BOND. ANY QUESTIONABLE MATERIAL TO BE CLEANED OR REINFORCEMENT REPLACED TO THE SATISFACTION OF ENGINEER FROM FORCE ENGINEERING GROUP INC. AT THE CONTRACTOR'S EXPENSE.
 - 3.8.6 MINIMUM LAPS OF REINFORCEMENT UNLESS NOTED OTHERWISE TO BE AS FOLLOWS:

d _b	BAR SIZE					
	10M	15M	20M	25M	30M	35M
BAR LAP	15"	23"	30"	41"	4'-8"	6'-0"

ℓ_c = 25 MPa

- ◆ FOR EPOXY COATED REBAR, WHERE BAR SPACINGS ARE LESS THAN d_b OR COVER LESS THAN 7d_b, MULTIPLY STATED LAP LENGTHS BY 1.5
- ◆ FOR ALL OTHER EPOXY COATED REBAR MULTIPLY LAP LENGTHS BY 1.2

- 3.9.1 ALL REINFORCEMENT TO BE CONTINUOUS AND LAPPED AT CORNERS. CORNER BARS TO MATCH SPECIFIED REINFORCEMENT AND BE LAPPED A MINIMUM ACCORDING TO CHART ABOVE
- 3.9.2 ALL REINFORCING TO BE HELD IN PLACE AND TIED BY THE USE OF PROPER ACCESSORIES SUCH AS HI-CHAIRS, SPACERS ETC. TO BE SUPPLIED BY REINFORCING STEEL FABRICATOR. HI-CHAIRS TO HAVE 4 LEGS AND TO BE STAPLED OR NAILED TO THE FORMWORK.

- 3.9.9 IN LOCATIONS WHERE NEW CONCRETE IS ADJUTING EXISTING CONCRETE WORK, DRILL HOLES IN EXISTING CONCRETE. INSTALL STEEL DOWELS OF DEFORMED STEEL REINFORCING BARS TO MATCH SPECIFIED REINFORCEMENT AND PACK SOLIDLY WITH EPOXY GROUT TO ANCHOR AND HOLD DOWELS IN POSITIONS AS INDICATED. DOWELS TO BE EMBEDDED 6" INTO EXISTING CONCRETE WORK.

- 3.9.10 INSTALLATION OF REINFORCING STEEL TO BE 100% COMPLETE PRIOR TO REVIEW OF SAME. CONCRETE PLACEMENT NOT TO COMMENCE WITHOUT ENGINEER APPROVAL. ENGINEER RE-INSPECTIONS REQUIRED DUE TO INCOMPLETE WORK OR DEFICIENCIES BY THE CONTRACTOR, SHALL BE AT THE EXPENSE OF THE CONTRACTOR.

- 3.9.11 THE CLIENT/CONTRACTOR IS RESPONSIBLE TO ADVISE ENGINEER, AS STIPULATED IN THE GENERAL REQUIREMENTS, PRIOR TO CONCEALING ANY REINFORCING STEEL. ENGINEER WILL ADVISE OF REVIEW REQUIREMENTS AND AVAILABILITY.

3.10 MATERIALS TESTING

- 3.10.1 THE MATERIALS CONSULTANT SHALL PROVIDE GENERAL CONSULTING FIELD REVIEWS AND TESTING OF MATERIALS FOR THIS PROJECT.
- 3.10.2 THE MATERIALS CONSULTANT SHALL SUPERVISE THE CONCRETE WORK OF THE PROJECT INCLUDING TESTING OF MATERIALS AND CONCRETE DELIVERED TO THE SITE, REVIEW OF THE CONCRETE PLACING PROCEDURES AND SUCH OTHER WORK AS DEEMED NECESSARY TO ENSURE THAT THE CONCRETE IN THE COMPLETED STRUCTURE CONFORMS WITH THE INTENT OF THE BUILDING DESIGN. CLIENT/CONTRACTOR IS RESPONSIBLE TO PROVIDE COPIES OF ALL TEST RESULTS & FIELD REVIEW REPORTS TO FORCE ENGINEERING GROUP INC.
- 3.10.3 UPON COMPLETION OF THE CONCRETE WORK, THE MATERIALS CONSULTANT SHALL SUBMIT LETTERS OF ASSURANCE INDICATING THAT ALL CONCRETE IN THE BUILDING, AND OTHER WORK REVIEWED BY THE MATERIAL CONSULTANT, CONFORM WITH THE INTENT OF THE DESIGN DRAWINGS AND SPECIFICATIONS.
- 3.10.4 CONCRETE TEST CYLINDERS TO BE TAKEN IN ACCORDANCE WITH CAN5-A23.1.
- 3.10.5 SPECIAL CONSTRUCTION PROCEDURES FOR CONCRETE WORK PERFORMED DURING ADVERSE WEATHER CONDITIONS SHALL BE APPROVED BY THE MATERIALS CONSULTANT PRIOR TO COMMENCEMENT OF THE WORK.
- 3.10.6 THE GENERAL CONTRACTOR SHALL SUPERVISE AND BE RESPONSIBLE FOR PLACEMENT PROCEDURES DURING CONSTRUCTION. ENSURE THAT THE CONCRETE PLACEMENT DOES NOT DISPLACE THE REINFORCEMENT FROM THE INTENDED POSITION. ENSURE CONCRETE IS PROPERLY CONSOLIDATED IN ALL AREAS.
- 3.10.7 THE MATERIAL TESTING CONSULTANT WILL BE ENGAGED BY THE OWNER FOR THE PURPOSE OF INSPECTING AND/OR TESTING PORTIONS OF WORK. COST OF SUCH SERVICES WILL BE BORNE BY THE OWNER. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE MATERIAL TESTING CONSULTANT.
- 3.10.8 THE GENERAL CONTRACTOR SHALL GIVE TIMELY NOTICE TO THE MATERIAL TESTING CONSULTANT IN ADVANCE OF THE REQUIREMENTS FOR TESTS, IN ORDER THAT ATTENDANCE ARRANGEMENTS CAN BE MADE.
- 3.10.9 IF DEFECTS ARE REVEALED DURING INSPECTION AND/OR TESTING, THE MATERIAL TESTING CONSULTANT WILL REQUEST ADDITIONAL INSPECTION AND/OR TESTING TO ASCERTAIN FULL DEGREE OF DEFECT. THE GENERAL CONTRACTOR SHALL CORRECT DEFECT & IRREGULARITIES AS ADVISED BY MATERIAL TESTING CONSULTANT AT NO COST TO THE OWNER. THE GENERAL CONTRACTOR SHALL PAY COSTS FOR RE-TESTING AND RE-INSPECTION.

DIVISION 04 - MASONRY

- 4.1 BLOCK WORK
 - 4.1.1 CONSTRUCTION TO CONFORM TO WITH CAN5-A31.
 - 4.1.2 MASONRY UNITS TO CONFORM TO WITH CSA A165, H/7.5/B/M UNLESS NOTED OTHERWISE.
 - 4.1.3 UNITS TO BE LAID IN RUNNING BOND UNLESS OTHERWISE SPECIFIED AND REINFORCED HORIZONTALLY WITH #6 LADDER EVERY SECOND COURSE.
 - 4.1.4 MORTAR AND GROUT TO CONFORM TO CSA A174, TYPE S MORTAR, 20 MPA GROUT.
 - 4.1.5 METAL TIES, ANCHORS AND OTHER SUPPORTS TO CONFORM TO CAN5-A31.
 - 4.1.6 PROVIDE TWO COURSE DEPTH GROUTED LINTEL, REINFORCED WITH 2-10M TOP AND 2-25M BOTTOM c/w 10M STIRRUPS @ 6" O.C. AND MINIMUM 8" END BEARING OVER OPENINGS LESS THAN 10'-0" UNLESS OTHERWISE SPECIFIED.
 - 4.1.7 PROVIDE TWO COURSE DEPTH GROUTED LINTEL, REINFORCED WITH 2-10M TOP AND 2-20M BOTTOM c/w 10M STIRRUPS @ 6" O.C. AND MINIMUM 8" END BEARING OVER OPENINGS LESS THAN 8'-0" UNLESS OTHERWISE SPECIFIED.
 - 4.1.8 SHORE ALL LINTELS, SHORING SHALL REMAIN IN PLACE UNTIL GROUT HAS ATTAINED DESIGN STRENGTH.
 - 4.1.9 SINGLE COURSE BOND BEAM R/W 2-15M TO BE PROVIDED AT EACH 15TH COURSE AND AT TOP OF WALL UNLESS OTHERWISE SPECIFIED.
 - 4.1.10 PROVIDE 20M x 48" DOWELS AT 48" O.C. FROM GRADE BEAM (FOUNDATION WALL) UNLESS OTHERWISE SPECIFIED.
 - 4.1.11 PROVIDE 20M VERTS AT 48" O.C. TIED TO DOWELS FROM GRADE BEAM (FOUNDATION WALL) UNLESS OTHERWISE SPECIFIED.
 - 4.1.12 FILL REINFORCED CELLS, BEAMS AND LINTELS WITH GROUT. FOR SHEARWALLS GROUT ALL VOIDS.
 - 4.1.13 CENTER VERTICAL REINFORCEMENT IN THE CELL AND PROVIDE CLEANOUTS AT BASE OF VERTICALLY REINFORCED CORES WHERE LIFT EXCEEDS 5'-0".

DIVISION 05 - METALS

- 5.1 STRUCTURAL STEEL
 - 5.1.1 STRUCTURAL STEEL TO CONFORM TO CAN5-640.21 AND CAN5-640.20.
 - 5.1.2 ROLLED OR STEEL STRUCTURAL SECTIONS AND PLATES SHALL BE TO CAN5-640.21-44H. GENERAL-300M HOLLOW STRUCTURAL SECTIONS TO BE 350M CLASS C.
 - 5.1.3 DESIGN, WORKMANSHIP, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE PERFORMED IN ACCORDANCE WITH CAN5-516.1.
 - 5.1.4 WELDING SHALL CONFORM TO THE LATEST EDITION OF CSA-W84.1. FABRICATORS SHALL BE PROPERLY CERTIFIED IN ACCORDANCE WITH CSA-W41.1.
 - 5.1.5 ALL BOLTED CONNECTIONS TO USE A325 HIGH STRENGTH BOLTS, EXCEPT FOR ANCHOR BOLTS TO USE A307. MINIMUM CONNECTION CONSISTS OF 2 BOLTS.
 - 5.1.6 ADJUSTABLE STEEL COLUMNS IN ACCORDANCE WITH CG55-12-M.
 - 5.1.7 ALL STRUCTURAL STEEL IS TO RECEIVE ONE COAT OF CISCO/PMA 2-TS SHOP PRIMER FOR STEEL MEMBERS EXPOSED TO THE WEATHER ONE COAT OF RUST PREVENTATIVE PAINT SHALL BE APPLIED
 - 5.1.8 NO HOLES PERMITTED IN TOP FLANGE OF BEAMS AT COLUMNS WHERE BEAMS ARE CONTINUOUS OVER COLUMNS.
 - 5.1.9 ALL BEAMS CONTINUOUS OVER COLUMNS TO HAVE WEB STIFFENERS THE SAME SIZE AND ORIENTATION AS THE COLUMN BELOW, UNLESS OTHERWISE SPECIFIED.
 - 5.1.10 ANCHOR BOLTS TO BE PROVIDED BY STEEL SUPPLIER AND SET BY THE GENERAL CONTRACTOR.

- 5.1.11 FABRICATOR TO NOTIFY ENGINEER PRIOR TO FABRICATION OF ANY PROPOSED MEMBER SUBSTITUTIONS AND CHANGED CONNECTION DETAIL.

- 5.1.12 STRUCTURAL STEEL SUPPLIER SHALL BE RESPONSIBLE FOR ALL HOLES IN STEEL SECTIONS REQUIRED BY OTHER TRADES. SECTIONS SHALL BE STRENGTHENED WHERE REQUIRED TO GUARANTEE THE ORIGINAL STRENGTH OF THE BEAM. ANY CUTTING OF STEEL AT THE JOB SITE SHALL BE DONE ONLY AS DIRECTED BY AND APPROVED BY THE ENGINEER.

- 5.1.13 STRUCTURAL STEEL SUPPLIER SHALL BE RESPONSIBLE FOR SUPPLYING & ERECTING ALL TEMPORARY GUTTING AND BRACING TO PROVIDE STABILITY FOR THE STRUCTURE AS A WHOLE. THESE SHALL REMAIN IN PLACE UNTIL ALL STEEL DECKING IS ERECTED, WELDED IN PLACE.

- 5.1.14 ALL DUCTS LARGER THAN 18" x 18" THROUGH STEEL DECK TO BE FRAMED WITH MINIMUM 1" x 1" x 1/4" ANGLES ALL AROUND, UNLESS OTHERWISE SPECIFIED. SMALLER OPENINGS THROUGH STEEL DECK TO BE STIFFENED BY STEEL DECK SUPPLIER. WHERE STEEL DECK REVERSES ITS FRAMING DIRECTION, USE 1" x 2 1/2" x 2 1/2" x 1/4" ANGLE TO SUPPORT EDGE.

- 5.1.15 STRUCTURAL STEEL SUPPLIER TO SUBMIT ENGINEERING DRAWINGS BEARING THE SEAL OF A REGISTERED ENGINEER COVERING THE DESIGN CONNECTIONS, TO THE PROJECT ENGINEER FOR REVIEW PRIOR TO FABRICATION.

- 5.1.16 THE CLIENT/CONTRACTOR IS RESPONSIBLE TO ADVISE ENGINEER, AS STIPULATED IN THE GENERAL REQUIREMENTS, PRIOR TO CONCEALING ANY STRUCTURAL STEEL FOR ENGINEER'S REVIEW.

DIVISION 06 - WOOD (ROUGH CARPENTRY)

- 6.1 TIMBER (UNTREATED)
 - 6.1.1 DESIGN TO BE IN ACCORDANCE WITH LATEST EDITION OF CAN5-086.
 - 6.1.2 FRAMED CONSTRUCTION IN ACCORDANCE WITH SECTION 4.2.3 OF THE CURRENT EDITION OF THE NATIONAL BUILDING CODE OF CANADA AND BRITISH COLUMBIA BUILDING CODE.
 - 6.1.3 ALL STRUCTURAL LUMBER TO BE STAMPED BY MANUFACTURER INDICATING GRADE. LUMBER GRADE TO BE 5-4" No.2 OR BETTER UNLESS OTHERWISE SPECIFIED. REJECT ANY LUMBER WITH SPLITS OR CHECKS GREATER THAN 1/8", LOOSE KNOTS OR TIGHT KNOTS LARGER THAN 1/4 OF THE MEMBER DEPTH.
 - 6.1.4 LINTELS AND BEAMS TO BE CLEAR LUMBER FREE OF SPLITS AND KNOTS. PROVIDE ONE TOP PLATE MINIMUM CONTINUOUS OVER BEAM AND EXTEND 60" BEYOND. END OF BEAM TO LAP AND NAIL TO ADJACENT PLATES.
 - 6.1.5 BEAM: (2 - 2 x 12 MAX.); 5 ROWS OF 3" COMMON NAILS @ 12" O.C. ONE SIDE (2 - 2 x 12 MAX.); 5 ROWS OF 3" COMMON NAILS @ 12" O.C. EACH SIDE (4 - 2 x 12 MAX.); 5 ROWS OF 3" COMMON NAILS @ 12" O.C. EACH PREVIOUS PLY
 - 6.1.6 LAMINATE STUDS SOLID UNTER ALL LINTELS, BEAMS AND GIRDERS TO WIDTH OF MEMBER (MINIMUM NUMBER OF STUDS TO EQUAL NUMBER OF MEMBER LAMINATIONS NOT LESS THAN TWO STUDS). ENSURE THAT POSTS AND COLUMNS ARE CONTINUOUS TO FOUNDATIONS.
 - 6.1.6 INCLUDE GROUNDS, BLOCKING, STRAPPING, FRUINS, FIRE STOPPING, SLEEPERS, NAILERS AND OTHER MISCELLANEOUS ROUGH FRAMING LOCATED AND SECURED TO SUIT SITE CONDITIONS AND ADEQUATE FOR INTENDED SUPPORT. DO NOT ASSUME THE DRAWINGS SHOW REQUIRED NON-STRUCTURAL FRAMING WORK EXACTLY OR COMPLETELY. ENSURE THAT APPROPRIATE SUPPORTS IS INSTALLED FOR CABINET WORK, VALANCES, DRAPERY TRACK, ACCESSORIES, PLUMBING/ELECTRICAL FIXTURES, HANDICAPPED RAILINGS, GRAB BARS AND OTHER SIMILAR ITEMS REQUIRING ATTACHMENT.
 - 6.1.7 COORDINATE WORK OF OTHER SECTIONS TO ENSURE THAT ROUGH CARPENTRY FOR THEIR NEEDS IS PROMPTLY INSTALLED AND THAT FASTENINGS SET BY OTHERS ARE PROVIDED AND LOCATED.
 - 6.1.8 DRILL HOLES IN TRUE LINES SAME SIZE AS BOLT AND DRIVE BOLTS THROUGH, DRILL PROPER PILOT HOLES AND COUNTER BORE FOR LAG SCREWS AS SPECIFIED IN CSA 086.1. USE WASHERS AT BOLT AND LAG SCREW HEADS AND AT NUT. TIGHTEN WHEN INSTALLED AND AGAIN BEFORE CONCEALED OR PROJECT COMPLETION.
 - 6.1.9 INSTALL ALL WORK PLUMB, SQUARE LEVEL PERMANENTLY SECURED ACCURATELY AND CLOSELY FITTED AND ALIGNED IN LOCATIONS REQUIRED BY OTHER WORK.
 - 6.1.10 PLYWOOD TO BE IN ACCORDANCE WITH CSA-0121 OR CSA-0141, WATERBOARD OR OSB TO BE IN ACCORDANCE WITH CAN5-0180 FASTENED TO THE FRAMING MEMBERS WITH NAILS AT 6" O.C. ALONG SUPPORTED EDGES AND 12" O.C. AT INTERMEDIATE BEARINGS. SHEATHING TO BE PLACED WITH FACE GRAIN PERPENDICULAR TO FRAMING MEMBER AND WITH STAGGERED JOINTS. WALL SHEATHING MAY BE OSB PROVIDED IT IS ADEQUATELY PROTECTED FROM WEATHER THAT SWELLING AND DEGRADATION DO NOT OCCUR.
 - 6.1.11 STEEL MEMBERS USED IN FRAMING SHALL TIGHT FIT TO WOOD MEMBERS, BE SHOP PRIMED WITH RUST PREVENTATIVE PAINT, AND BE COORDINATED TO ENSURE NO ENCRAGEMENT UPON FINAL FINISHED SURFACES.
- 6.2 TIMBER (TREATED)
 - 6.2.1 CONSTRUCTION IN ACCORDANCE WITH CAN/CSA-5406-12. NOTWITHSTANDING ALL APPLICABLE LOCAL AND PROVINCIAL BUILDING CODES.
 - 6.2.2 LUMBER TO BE PRESSURE TREATED SPEC.1 No.2 OR BETTER.
 - 6.2.3 PLYWOOD TO BE GOFI EXTERIOR DFF-HEM FIR OR SIMILAR APPROVED.
 - 6.2.4 NAIL FASTENERS SHALL BE HOT-DIPPED GALVANIZED OR STAINLESS STEEL CONFORMING TO CSA STANDARD B111. NO STAPLES.
 - 6.2.5 WHERE CUTTING OR BORING AFTER TREATMENT IS UNAVOIDABLE, ALL CUTS, HOLES, AND INJURIES TO THE SURFACE OF TREATED MATERIALS SHALL BE PROTECTED BY TWO APPLICATIONS OF PRESERVATIVE IN ACCORDANCE WITH CSA-080.15. THIS APPLICATION SHALL BE BY BRUSHING, OR DIPPING ONLY.

7.0 FIELD REVIEWS & SHOP DRAWINGS

- 7.1.1 FORCE ENGINEERING GROUP INC. FIELD REVIEW ONLY FOR THE WORK SHOWN ON THESE STRUCTURAL DRAWINGS. THIS REVIEW IS NOT A "FULL TIME" REVIEW BUT IS A PERIODIC REVIEW AT THE SOLE DISCRETION OF FORCE ENGINEERING GROUP INC.'S ENGINEERS IN ORDER TO ASCERTAIN THAT THE WORK IS GENERAL CONFORMANCE WITH THE PLANS AND SUPPORTING DOCUMENTATION PREPARED BY FORCE ENGINEERING GROUP INC. FIELD REVIEW IS NOT CARRIED OUT FOR THE CONTRACTOR'S BENEFIT, NOR DOES IT MAKE FORCE ENGINEERING GROUP INC. GUARANTORS OF THE CONTRACTOR'S WORK IN CONFORMANCE WITH THE CONTRACT DOCUMENTS. FORCE ENGINEERING GROUP INC. SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING THE WORK, OR FOR THE FAILURE OF SAME TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 7.1.2 PROVIDE 48 HOURS ADVANCE NOTICE OF EACH REQUIRED FIELD REVIEW. FIELD REVIEWS SHALL BE SCHEDULED TO BE CARRIED OUT DURING NORMAL BUSINESS HOURS, UNLESS SPECIAL ARRANGEMENTS HAVE BEEN MADE.
- 7.1.3 ALL WORK REVIEWED DURING FIELD REVIEWS SHALL BE GENERALLY COMPLETE.
- 7.2.1 FORCE ENGINEERING GROUP INC. WILL REVIEW SHOP DRAWINGS PERTAINING TO THE WORK SHOWN ON FORCE ENGINEERING GROUP INC.'S DRAWINGS. THE EXTENT OF THIS REVIEW IS AT THE SOLE DISCRETION OF FORCE ENGINEERING GROUP INC.'S ENGINEER AND IS FOR THE SOLE PURPOSE OF ASCERTAINING GENERAL CONFORMANCE WITH THE STRUCTURAL DESIGN CONCEPT. THE REVIEW IS NOT AN APPROVAL OF THE DESIGN DETAILS OR DIMENSIONS INHERENT IN THE SHOP DRAWINGS, RESPONSIBILITY FOR WHICH SHALL REMAIN WITH THE CONTRACTOR OR SUB CONTRACTOR SUBMITTING THEM. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OR SUB-CONTRACTOR OF HIS OR HER RESPONSIBILITY FOR ERRORS OR OMISSIONS IN THE SHOP DRAWINGS OR FOR MEETING ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS AND APPLICABLE GOVERNING CODES.

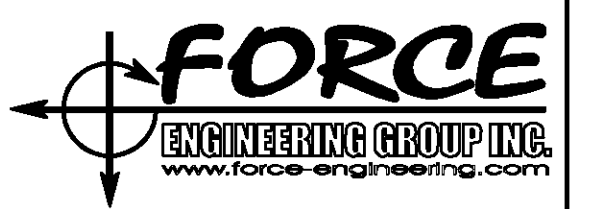
drawing issues / revisions

no.	date	description
1	7/6/11	FOR CLIENT REVIEW AND COMMENT ISSUED FOR TENDER

FOR CLIENT REVIEW AND COMMENT ISSUED FOR TENDER

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project
**FOUNDATION STABILIZATION
NAR MUSEUM
2011 FINAL PHOOTINGS**
**DAWSON CREEK
BRITISH COLUMBIA**

drawing title
GENERAL NOTES

drawn by: **M.A. ZYGUN**
checked by: **B. SHIPTON**
sheet scale: **1/8" = 1'-0"**
electronic file: **2886481**
project number: **28864** drawing number:
28864
SHEET 6 OF 6 **S6**