



City of Coquitlam

Contract Documents 84311H

2019 & 2020 IC Installations & Water Service Renewals



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Contract No. 84311H
2019 & 2020 IC Installations & Water Service Renewals
Project Construction Documents

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2. **Standard Documents – not supplied**

i) (available in the “MMCD – General Conditions, Specifications and Standard Detail Drawings”)

- Instructions to Tenderers
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Invitation to Tenderers



INVITATION TO TENDER

DATE OF ISSUE: February 13, 2019

Tender No. 84311H

2019 & 2020 IC Installations & Water Service Renewals

The City of Coquitlam invites tenders for **Contract 84311H – 2019 & 2020 IC Installations & Water Service Renewals**, generally consisting of the following, but not limited to:

- Supply & Installation of approx. 61 sanitary service inspection chambers, 9 storm inspection chambers, 30 provisional storm inspection chambers, 1 provisional storm service, 17 water service renewals, 32 lm of 200mm CL50 DI water main, and 5 - C71P TC Hydrants c/w storz connection.
- **Other miscellaneous and incidental work as contained in the Contract Documents**

Tender Documents and Drawings are available for downloading from the City of Coquitlam website:

www.coquitlam.ca/BidOpportunities

Printing of Tender documents and drawings is the sole responsibility of the Tenderers.

Tenders submitted must be accompanied by a copy of the original specified 10% Bid Bond and will be received:

On or Before 2:00 pm local time

Thursday, February 28, 2019

("Closing Date and Time")

Instructions for Tender Submission

Tender submissions are to be uploaded through QFile, the City's file transfer service accessed at website: qfile.coquitlam.ca/bid

1. In the "Subject Field" enter: Tender Number and Name
2. Add **consolidated Tender files in PDF format, and Appendix 1 in XLS format** and Send (ensure your web browser remains open until you receive 2 emails from Qfile to confirm upload is complete)

Tenders will not be opened in public. The unevaluated Tender results will be forwarded to all participants by email.

Inquires

All inquiries are to be submitted in writing by email, no later than 3 full business days prior to Tender Closing Time quoting the Tender Name and Number sent to:

Email: bid@coquitlam.ca

Addenda

Tenderers are required to check the City's website for any updated information and Addenda issued before the Closing Date at: www.coquitlam.ca/BidOpportunities

Any changes to the Tender documentation will be issued by means of written Addenda and posted on the City's website and will form part of the Tender. No amendment of any kind to the Tender is effective unless it is posted in a formal written Addendum on the City website. Upon submitting a Tender, Tenderers will be deemed to have received notice of all Addenda that are posted on the City's website and deemed to have considered the information for inclusion in the Tender submitted.

The City does not retain a bidder's list or bidder's registry. Tenderers are encouraged to register as plan takers and may view the Tender Documents and Drawings by contacting the Vancouver Regional Construction Association (VRCA), website: www.my.vrca.ca, ph: 604-294-3766, or email vrca@vrca.ca, quoting the Coquitlam Tender Reference Number.

Should there be any discrepancy in the documentation provided, the City's original file copy shall prevail.

Tenders shall remain open for acceptance for 60 days following the submission Closing Date.

The City reserves the right to accept or reject any or all Tenders and the lowest or any Tender may not necessarily be accepted. The City also reserves the right to cancel any request for Tender at any time without recourse by the Tenderer.

The City, prior to award of any Tender, may negotiate with the Tenderer presenting the lowest price compliant Tender, for changes in the Work, materials, specifications or conditions without having any duty or obligation to advise any other Tenderers or to allow them to modify their Tenders, and the City will have no liability to any Tenderer as a result of such negotiations or modifications.

The City will not be responsible for any costs incurred by the Tenderer in preparing the Tender.

Procurement of goods and services is conducted in accordance with Chapter 5 of the Canadian Free Trade Agreement (CFTA) and the New West Partnership Trade Agreement (NWPTA).

D. Trudeau
Purchasing Manager

Instructions to Tenderers

Tender 84311H

2019 & 2020 IC Installations & Water Service Renewals

INSTRUCTIONS TO TENDERERS

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INSTRUCTIONS TO TENDERERS

(FOR USE WHEN UNIT PRICES FORM THE BASIS OF PAYMENT - TO BE USED ONLY WITH THE GENERAL CONDITIONS AND OTHER STANDARD DOCUMENTS OF THE UNIT PRICE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS.)

The City of Coquitlam

Contract: **2019 & 2020 IC Installations & Water Service Renewals**

Reference No. **84311H**

- | | | |
|------------|-------------------------|--|
| 1.0 | Introduction | <p>1.1 These Instructions apply to and govern the preparation of tenders for this <i>Contract</i>. The <i>Contract</i> is generally for the following work:</p> <ul style="list-style-type: none">• Supply & Installation of approx. 61 sanitary service inspection chambers, 9 storm inspection chambers, 30 provisional storm inspection chambers, 1 provisional storm service, 32m of 150mm CL50 ductile iron water main, 17 water service renewals, and 5 - C71P TC hydrants c/w storz connection. <p>1.2 All inquiries regarding this Tender are to be submitted in writing referencing the Tender Name and Number sent to:</p> <p>E-mail bid@coquitlam.ca</p> <p>All inquiries will be received a minimum of 3 full business days prior to Tender Closing Time.</p> <p>Inquiries received after that time may not receive a response.</p> |
| 2.0 | Tender Documents | <p>2.1 The Tender Documents which a Tenderer should review to prepare a Tender consist of all of the <i>Contract Documents</i> listed in Schedule 1 entitled "Schedule of Contract Documents". Schedule 1 is attached to the Agreement which is included as part of the Tender Package. The <i>Contract Documents</i> include the drawings listed in Schedule 2 to the Agreement, entitled "List of Contract Drawings".</p> <p>2.2 <u>A portion of the Contract Documents are included by reference. Copies of these documents have not been included with the tender package.</u> These documents are the General Conditions, Specifications and Standard Detail Drawings. They are those contained in the publication entitled "Master Municipal Construction Documents - General Conditions, Specifications and Standard Detail Drawings". Refer to Schedule 1 to the Agreement or, if not specified in Schedule 1, then the applicable edition shall be the most recent edition as of the date of the <i>Tender Closing Date</i>. <u>All sections of this publication are by reference included in the <i>Contract Documents</i>.</u></p> <p>2.3 Any additional information made available to Tenderers prior to the Tender Closing Time by the Owner or representative of the Owner, such as geotechnical reports or as-built plans, which is not expressly included in Schedule 1 or Schedule 2 to the Agreement, is not included in the Contract Documents. Such additional information is made available only for the assistance of Tenderers who must make their own judgments about its</p> |

reliability, accuracy, completeness and relevance to the *Contract*, and neither the Owner nor any representative of the Owner gives any guarantee or representation that the additional information is reliable, accurate, complete or relevant.

**3.0 Submission of
Tenders**

- 3.1 Tenders must be submitted on the Tender Form provided, accompanied by a copy of the original 10% Bid Bond quoting the Tender Name and Number, and be uploaded to the City's file transfer website.

Tenders must be received on or before:

***Tender Closing Time:* 2:00 p.m. local time**

***Tender Closing Date:* February 28, 2019**

For the purpose of the Tender submission, digital copies of original documents and signatures sent electronically are accepted. Original documents are required upon request by the City.

**Instructions for
Tender
Submission**

- 3.2 **Tender submissions are to be consolidated into one (1) PDF file and uploaded electronically through QFile, the City's file transfer service accessed at website: <http://qfile.coquitlam.ca/bid>**
- 1. In the "Subject Field" enter: Tender Number and Name**
 - 2. Add consolidated Tender file in PDF format and Appendix 1 in XLS format, and Send** (ensure your web browser remains open until you receive 2 emails from Qfile to confirm upload is complete and was sent to email: bid@coquitlam.ca)
- Tenderers are responsible to allow for ample time to complete the submission process. For assistance, phone 604-927-3060 or Fax 604-927-3035.**
- 3.3 Tenders submitted shall be deemed to be received when displayed as a new email in the in-box of the above email address. The City will not be responsible for any delay or for any Tenders not received for any reason, including technological delays or issues by either party's network or email program, and the City will not be liable for any damages associated with Tenders not received.
- 3.4 The City reserves the right to accept late Tenders to allow for technological delays. The City also reserves the right to accept Tenders received by fax (604-927-3035), email: bid@coquitlam.ca or hand delivered to Coquitlam City Hall, Main Floor Reception Desk, 3000 Guildford Way, Coquitlam BC, V3B 7N2.
- 3.5 Tenders will not be opened in public. The unevaluated results will be forwarded to participants by email.
- 3.6 Tender submissions are subject to the Freedom of Information and Protection of Privacy Act and contents may be disclosed if required to do so, pursuant to the Act.

**4.0 Additional
Instructions to
Tenderers**

**Obtaining
Documents**

- 4.1 The following documents which are referred to and form part of the Contract Document package may be obtained as follows:
- Copies of the Master Municipal Construction Documents Volume II (2009), General Conditions, Specifications and Standard Detail Drawings are available separately from:

Support Services Unlimited
Suite 302
1107 Homer Street
Vancouver BC V6B 2Y1
Tel: 604-681-0295
Fax: 604-681-4545
 - City of Coquitlam Supplementary Specifications and Detailed Drawings to the MMCD 2009 Edition.

City of Coquitlam Engineering & Public Works Department
3000 Guildford Way
Coquitlam, BC V3B 7N2
Tel: 604-927-3500
Fax: 604-927-3525

Copies of the City of Coquitlam Supplementary Specifications and Detailed Drawings to the MMCD 2009 Edition are available for viewing and downloading off the City of Coquitlam website:

[Supplementary Specifications and Detailed Drawings to MMCD](#)

**Test
Excavations**

- 4.2 Prior to the excavation of test holes on road allowances or privately owned property the Tenderer shall obtain permission from the Municipality or Owner of the property and comply with their requirements for restoration of disturbed surfaces and utilities. Failure to comply with Municipal by-laws restricting this practice may result in prosecution of the offending party.

**Business
License**

- 4.3 The successful Tenderer shall provide evidence of a City of Coquitlam Business License or Tri-Cities Intermunicipal Business License prior to commencement of work or supply of materials. For more information, contact Business Licence Division Ph: 604-927-3085 or apply online at website:
[City of Coquitlam Business License](#) .

No Claim

- 4.4 Except as expressly and specifically permitted in these Instructions to Tenderers, no Tenderer shall have any claim for any compensation of any kind whatsoever, as a result of participating in this Tender, including accepting a non-compliant bid and by submitting a Tender, each Tenderer shall be deemed to have agreed that it has no claim.

No Cost

- 4.5 The City will not under any circumstances be responsible for any costs

incurred by the Tenderer in preparing the Tender.

**Right to Accept
or Reject any
Tender**

- 4.6 The City reserves the right to accept or reject any or all Tenders and the lowest or any Tender may not necessarily be accepted. In its sole discretion, the City may reject or retain for its consideration, tenders which are nonconforming because they do not contain the content or form required by the instructions to tenderers or for failure to comply with the process for submission set out in these instructions to tenderers.

The City specifically reserves the right to reject all Tenders if none is considered to be satisfactory and, in that event, at its option, to call for additional Tenders.

Negotiation

- 4.7 The City, prior to award of any Tender, may negotiate with the Tenderer presenting the lowest price compliant Tender, for changes in the Work, materials, specifications or conditions without having any duty or obligation to advise any other Tenderers or to allow them to modify their Tenders, and the City will have no liability to any Tenderer as a result of such negotiations or modifications.

**Cancellation of
Tender**

- 4.8 The City reserves the right to cancel any request for Tender at any time without recourse by the Tenderer. The City has the right to not award this work for any reason including choosing to complete the work with the City's own forces.

**Conflict of
Interest**

- 4.9 Tenderers shall disclose any actual or potential conflicts of interest and existing business relationships it may have with the City, their elected or appointed officials or employees.

Collusion

- 4.10 Tenderers will not discuss or communicate with one another in regards to the preparation of their Tenders. Each Tenderer will ensure that its participation in the Tender process and that of its team members is conducted without collusion or fraud. Failure to comply with this requirement may lead to disqualification without further notice or warning.

**Instruction to
Tenderers –
Part II**

Delete Instructions to Tenderers – Part II Contained in the Edition of the Publication "Master Municipal Construction Documents 2009" and replace with the following:

5.0

**Tender
Requirements**

- 5.1 A tender should be on the Form of Tender as provided and be signed by the authorized signatory(s) as follows:
- 5.1.1 if the tenderer is a partnership or joint venture then the name of the partnership or joint venturer should be included, and each partner or joint venturer should sign personally; if a partner of joint venture is a corporation then such corporation should sign as indicated in paragraph 5.1.2 below; and
 - 5.1.2 if the tenderer is a corporation then the full name of the corporation should be included, together with the names and signatures of authorized signatories.

- 5.1.3 For the purpose of the Tender submission, digital copies of original documents and electronic signatures are accepted. Original documents are required upon request by the City.
 - 5.2 A tender must be accompanied by tender security ("*Bid Security*") in the form of:
 - 5.2.1 a copy of the original bid bond in an amount equal to 10% of the tender price, issued by a surety licensed to carry on the business of suretyship in British Columbia in a form reasonably satisfactory to the *Owner*;
 - 5.3 Tenderer should be competent and capable of performing the various items of work. Tenderer shall complete the following statement sheets appended to the Form of Tender:
 - 5.3.1 Appendix 1 – the Schedule of *Quantities and Prices*;
 - 5.3.2 Appendix 2 – a "*Preliminary Construction Schedule*", generally in the form attached as Appendix 2 to the Form of Tender, and showing *Substantial Performance* by the date or within the duration, shown in paragraph 2.2 of the Form of Tender.
 - 5.3.3 Appendix 3 – name and brief description of the previous experience of the *Superintendent* the tenderer will use for the *Work*;
 - 5.3.4 Appendix 4 – a list of previous comparable work, including a brief description of that work, approximate contract value, and references (with phone numbers); and
 - 5.3.5 Appendix 5 – a complete list of all subcontractors, if any, that the tenderer will use for the *Work* including full names.
 - 5.3.6 Appendix 7 – is provided for information only, to indicate the Contract Insurance is to be submitted by the successful Tenderer upon Notice of Award.
 - 5.4 The successful tenderer will, within 15 *Days* of receipt of the written *Notice of Award*, be required to deliver to the *Owner* the items listed in FT 5.1.1, including a Performance Bond and a Labour and Material Payment Bond as described in FT 5.1.1(a), failing which the provisions of FT 6.1 will apply.
- 6.0 **Qualifications, Modifications, Alternative Tenders**
 - 6.1 Tenders which contain qualifications, or omissions, so as to make comparison which other tenders difficult, may be rejected by the *Owner*.
 - 6.2 A tenderer may, at the tenderer's election, submit an alternative tender ("*Alternative Tender*") which varies the materials, products, designs or equipment by the *Owner as Approved Equals* as the case may be, but an *Alternative Tender* must be in addition to, and not in substitution for a tender which conforms to the requirements of the *Contract Documents*.
 - 6.3 The only *Alternative Tender* that the *Owner* may accept is an *Alternative Tender* submitted by that tenderer whose conforming tender, submitted as required by paragraph 6.2 of these Instructions to Tenderers, would have been accepted by the *Owners* in the preference to other conforming tenders, if no

Alternative Tenders had been invited.

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| 7.0 | Approved
Equals | <p>7.1 Prior to the <i>Tender Closing Time and Date</i> a tenderer may request the <i>Owner</i> to approve materials, products, or equipment ("<i>Approved Equal</i>") to be included in a tender in substitution for items indicated in the Contract Documents.</p> <p>7.2 Applications for an <i>Approved Equal</i> must be in writing, and supported by appropriate supporting information, data, specifications, and documentation.</p> <p>7.3 If the <i>Owner</i> decides in its discretion to accept an <i>Approved Equal</i>, then the <i>Owner</i> will issue an addendum to all tenderers.</p> <p>7.4 The <i>Owner</i> is not obligated to review or accept an application for an <i>Approved Equal</i>.</p> |
| 8.0 | Inspection of
the Place of the
Work | <p>8.1 All tenderers, either personally or through a representative, are responsible to examine the <i>Place of the Work</i> before submitting a tender. A tenderer has full responsibility to be familiar with and make allowance in the tender for all conditions at the <i>Place of the Work</i> that might affect the tender, including any information regarding subsurface soil conditions made available by the <i>Owner</i>, the location of the <i>Work</i>, local conditions, topographical soil conditions, weather and access. Unless otherwise specified in the <i>Contract Documents</i>, a tenderer is not required to do subsurface investigations. By submitting a tender, a tenderer represents that the tenderer has examined the <i>Place of the Work</i>, or specifically elected not to. No additional payments or time extensions shall be claimable or due because of difficulties relating to conditions at the <i>Place of the Work</i> which were reasonably foreseeable by a contractor qualified to undertake the <i>Work</i>.</p> <p>8.2 Tenderers are referred to GC 11.2.1 regarding Concealed or Unknown Conditions.</p> |
| 9.0 | Interpretation
of Contract
Documents | <p>9.1 If a tenderer is in doubt as to the correct meaning of any provision of the <i>Contract Documents</i>, the tenderer may request clarification as instructed in paragraph 1.2 of the Instructions to Tenderers.</p> <p>9.2 If a tenderer discovers any contradictions or inconsistencies in the <i>Contract Documents</i> or its provisions, or any discrepancies between a provision of the <i>Contract Documents</i> and conditions at the <u><i>Place of the Work as</i></u> observed in an examination under paragraph 8 of the person named in paragraph 1.2 of the Instructions to Tenderers.</p> <p>9.3 If the <i>Owner</i> considers it necessary, the <i>Owner</i> may issue written addenda to provide clarification (s) of the <i>Contract Documents</i>.</p> <p>9.4 <u>No oral interpretation or representations from the <i>Owner</i> or any representative of the <i>Owner</i> will affect, alter, or amend any provision of the <i>Contract Documents</i>.</u></p> |

10.0	Prices	10.1	The Tendered Price will represent the entire cost excluding <i>GST</i> to the <i>Owner</i> of the complete <i>Work</i> based on the estimated quantities in the <i>Schedule of Quantities and Prices</i> of the Form of Tender. Notwithstanding the generalities of the above, tenderers shall include in the tendered prices (including unit prices, lump sum prices, or other forms of pricing) sufficient amounts to cover:
		10.1.1	the costs of all labour, equipment and material included in or required for the <i>Work</i> , including all items which, whole not specifically listed in the <i>Schedule of Quantities and Prices</i> , are included in the <i>Work</i> specifically or by necessary inference from the <i>Contract Documents</i> ;
		10.1.2	all assessments payable with respect to labour as required by any statutory scheme such as unemployment insurance, holiday pay, insurance, CPP and all employee benefits and the Workers Compensation Act;
		10.1.3	all overhead costs, including head office and on-site overhead costs, and all amounts for the <i>Contractor's</i> profit.
		10.2	The tendered prices and all subcontracts must allow for compliance with all applicable laws regarding trade or other qualifications of employees performing the <i>Work</i> , and payment of appropriate wages for labour included in or required for the <i>Work</i> .
11.0	Taxes	11.1	The tendered prices shall cover all taxes and assessments of any kind payable with respect to the <i>Work</i> , but shall not include <i>GST</i> . <i>GST</i> shall be listed as a separate line item as required by GC 19.2.
12.0	Amendment of Tenders	12.1	A tenderer may amend or revoke a tender by giving written notice, delivered by hand, Email or fax, to the office referred to in paragraph 3.4 of the Instructions to Tenderers at any time up until the <i>Tender Closing Date and Time</i> . An amendment or revocation that is received after the <i>Tender Closing Date and Time</i> shall not be considered and shall not affect a tender as submitted.
		12.2	An amendment or revocation must be signed by an authorized signatory of the tenderer in the same manner as provided by paragraph 5.1 of these Instructions to Tenderers.
		12.3	Any amendment that expressly or by inference discloses the tenderer's <i>Tender Price</i> or other material element of the tender such that, in the opinion of the <i>Owner</i> , the confidentiality of the tender is breached, will invalidate the entire tender.
		12.4	An acceptable form of a tender amendment which tenderers may, but are not required to , use is as follows: "Contract: _____

Reference No. _____
(TITLE OF CONTRACT)
TO: _____
(OWNER'S CONTRACT REFERENCE NO.)

(NAME OF OWNER)

We the undersigned wish to amend our tender which we submitted for the above *Contract* by deleting the following tendered prices or items from our tender:

(TENDERED PRICES AND/OR TENDER ITEMS IN THE TENDER THAT ARE TO BE AMENDED)

and substituting the following revised tendered prices or items:

(REVISED TENDERED PRICES OR TENDER ITEMS)

The extensions in our tender should be adjusted accordingly, and our ***Tender Price*** as set out in Appendix 1 of our submitted ***Form of Tender***, and on the ***Schedule of Quantities and Prices***, increased / decreased by \$_____, excluding GST. We have not included our revised ***Tender Price*** in order to preserve the confidentiality of our tender.

Signed and delivered the ____ day of _____, 20____."

12.5 If a tender amendment or revocation is sent by fax, the tenderer assumes the entire risk that equipment and staff at the office referred to in paragraph 3.4 of the Instructions to Tenderers will properly receive the fax containing the amendment or revocation before the *Tender Closing Date and Time*. The *Owner* assumes no risk or responsibility whatsoever that any fax will be received as required by paragraph 12.1 of these Instructions to Tenderers, and shall not be liable to any tenderer if for any reason a fax is not properly received.

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|-------------|------------------------------------|------|---|
| 13.0 | Duration of Tenders | 13.1 | After the <i>Tender Closing Time</i> , a tender shall remain valid and revocable as set out in paragraph 5.1 of the Form of Tender. |
| 14.0 | Qualifications of Tenderers | 14.1 | By submitting a tender a tenderer is representing that it has the competence, qualifications and relevant experience required to do the <i>Work</i> . |
| 15.0 | Award | 15.1 | In exercising its discretion the <i>Owner</i> will have regard to the information provided in the Appendices to the Form of Tender as described under IT5.3 including the proven experience of the tenderer, and any listed subcontractors, to do the <i>Work</i> . |

Tenders received will be evaluated to provide the City with greatest value based on quality, service, price and experience. Evaluation Criteria will include but is not limited to:

1. Ability to meet specifications and required completion date

2. Contractor's past experience, references, reputation and compliance to specifications
3. Demonstrated successful experience on similar projects and specific equipment installation
4. Price: purchase price, maintenance costs, availability of parts and service, warranty and compatibility with existing equipment and/or conditions
5. Any other criteria, the City deems, at its sole discretion, necessary to evaluate Tenders;
6. Lowest price will not necessarily be accepted.

The City may, in its absolute discretion, not award to a Tenderer if the Tenderer, or any officer or director of a corporate Tenderer, is or has been engaged, either directly or indirectly through another corporation or legal entity, in a legal action against the City and its elected and appointed officers and employees or any of them in relation to:

- a) any other contract or services; or
- b) any matter arising from the City's exercise of its powers, duties or functions under the *Local Government Act*, the *Community Charter* or any other enactments; within five years of this Tender Offer.

For purposes of this section, the words "legal action" includes, without limitation, mediation, arbitration, hearing before an administrative tribunal or lawsuit filed in any court.

Without limiting the City's sole discretion, in determining whether or not to award to a Tenderer pursuant to this clause, the City will consider such factors as whether the legal action is likely to affect the Tenderer's ability to work with the City and its employees, agents, consultants and representatives or any of them and whether the City's past experience with the Tenderer in the matter that resulted in the legal action indicates that the City is likely to incur increased staff and legal costs or either of them in the administration of this contract if it is awarded to the Tenderer.

In the event that the lowest total Tender Price by two or more Tenderers is the same amount, the City will select a Tenderer with an overall satisfactory performance record in having completed work on previous relevant projects that are provided as references, and on City projects. Information obtained from references will not be disclosed or discussed with any Tenderer. If all references are equal, selection will be determined by a coin toss in a manner to be directed by the City.

- 15.2 The *Owner* will notify the successful tenderer in writing.

- 15.3 If there are any discrepancies in the *Schedule of Quantities and Prices* between the unit prices and the extended totals then the unit prices shall be deemed correct, and corresponding corrections shall be made to the extended totals. If a unit price or extended total has been omitted, the following shall apply:
- a) If an unit price is given but the corresponding extended total has been omitted, then the extended total shall be calculated from 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 estimated quantity, and inserted as the unit price;
 - c) If both the unit price and the corresponding extended total for a tender item have been omitted, then the following test shall be applied to determine whether the tender shall be rejected as incomplete:
 - (i) the highest of the unit prices tendered by other tenderers for that tender item shall be used as the test unit price, and the corresponding test extended total shall be calculated from the test unit price and the estimated quantity;
 - (ii) if the test extended total for the tender item exceeds 1% of the revised total *Tender Price*, including the test extended total, or if the revised total *Tender Price*, including the test extended total, alters the ranking of the tenderers according to the lowest *Tender Price*, then the omitted unit price for that tender item is deemed to materially affect the *Tender Price* relative to other tenders and the tender shall be rejected;
 - (iii) if the tender is not rejected under subparagraph (ii) of this IT 14.3 (c), then the unit price and the extended total for that tender item shall both be deemed to be, and the costs for that tender item shall be zero deemed to be included in other tender items prices;
 - d) In no event shall page totals in the *Schedule of Quantities and Prices* or the total *Tender Price* be used to calculate missing extended totals or unit prices.

16.0 Subcontractors

- 16.1 The *Owner* reserves the right to object to any of the subcontractors listed in a tender. If the *Owner* objects to any of the subcontractor(s) then the *Owner* will permit a tenderer to, within 5 days, propose a substitute subcontractor(s) acceptable to the *Owner* provided that there is not resulting adjustment in the *Tender Price* or the completion date set out in paragraph 2.2 of the Form of Tender. A tenderer will not be required to make such substitution and, if the *Owner* objects to a listed *Subcontractor(s)*, the tenderer may, rather than propose a substitute subcontractor(s), consider its tender rejected by the *Owner* and by written notice withdraw its tender. The *Owner* shall, in the event, return the tenderer's bid security.

- 17.0** **Optional Work**
- 17.1 If the *Schedule of Quantities and Prices* includes any tender prices for *Optional or Provisional Work*, as defined in GC 1.48, the tenderers must complete all the unit prices for such *Optional or Provisional Work*. Such tender prices shall not include any general overhead costs, or other costs, or profit, not directly related to the *Optional or Provisional Work*. Tenderers are directed to GC 9.4.2.
- 17.2 Notwithstanding that the *Owner* may elect not to proceed with the *Optional or Provisional Work*, the tender prices for any *Optional or Provisional Work*, including the extended totals for *Optional or Provisional Work* unit prices, shall be included in the *Tender Price* for the purpose of any price comparisons between tenders.

Form of Tender



FORM OF TENDER

Tender No. 84311H

2019 & 2020 IC Installations & Water Service Renewals

Summary

Name of **Contractor**: _____

Tender Price (exclude GST): \$ _____
(FROM APPENDIX 1 OF FORM OF TENDER)

Tender submitted must be accompanied by a copy of the original 10% Bid Bond and will be received:

On or before 2:00 pm (local time)
Thursday, February 28, 2019

Instructions for Tender Submission

Tender submissions are to be consolidated into one PDF file and uploaded electronically through QFile, the City's file transfer service accessed at website: qfile.coquitlam.ca/bid

1. In the "Subject Field" enter: Tender Number and Name
2. Add consolidated Tender file in PDF format, and Appendix 1 in XLS format, and Send (ensure your web browser remains open until you receive 2 emails from Qfile to confirm upload is complete and was sent to the correct email address: bid@coquitlam.ca)

Tenderers are responsible to allow ample time to complete the Tender submission process. If assistance is required, phone 604-927-3060 or fax 604-927-3035.

February 2019

THE CITY OF COQUITLAM
3000 Guildford Way
Coquitlam BC V3B 7N2

(FOR USE WHEN UNIT PRICES FORM THE BASIS OF PAYMENT - TO BE USED ONLY WITH THE GENERAL CONDITIONS AND OTHER STANDARD DOCUMENTS OF THE UNIT PRICE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS.)

Contract Name: 2019 & 2020 IC Installations & Water Service Renewals

Reference No. 84311H

TO OWNER:

1 WE, THE UNDERSIGNED:

- 1.1 have received and carefully reviewed all of the *Contract Documents*, including the Instructions to Tenderers, the City of Coquitlam Supplementary General Conditions, the City of Coquitlam Supplementary Contract Specifications, the specified edition of the "Master Municipal Construction Documents – - General Conditions, Specifications and Standard Detail Drawings" and the following Addenda:

_____;
(ADDENDA, IF ANY)

- 1.2 shall fully disclose any actual or potential conflicts of interest and existing business relationships we may have with the City, their elected or appointed officials or employees;

- 1.3 have full knowledge of the *Place of the Work*, and the *Work* required; and

- 1.4 have complied with the Instructions to Tenderers; and

2 ACCORDINGLY WE HEREBY OFFER:

- 2.1 to perform and complete all of the *Work* and to provide all the labour, equipment and material all as set out in the *Contract Documents*, in strict compliance with the *Contract Documents*; and
- 2.2 to achieve Substantial Performance of the Work on or before **May 31, 2019**; and.
- 2.3 to do the *Work* for the price, which is the sum of the products of the actual quantities incorporated into the *Work* and the appropriate unit prices set out in Appendix 1, the "*Schedule of Quantities and Prices*", plus any lump sums or specific prices and adjustment amounts as provided by the *Contract Documents*. For the purposes of tender comparison, our offer is to complete the *Work* for the "*Tender Price*" as set out on Appendix 1 of this Form of Tender. Our *Tender Price* is based on the estimated quantities listed in the *Schedule of Quantities and Prices*, and excludes *GST*.

3 WE CONFIRM:

- 3.1 that we understand and agree that the quantities as listed in the *Schedule of Quantities and Prices* are estimated, and that the actual quantities will vary.
- 3.2 that we understand and agree that the owner is in no way obliged to accept this Tender.

4 WE CONFIRM:

- 4.1 that the following Appendices are attached to and form a part of this tender:

- 4.1.1 the Appendices as required by paragraph 5.3 of the Instructions to Tenderers - Part II; and
- 4.1.2 the *Bid Security* as required by paragraph 5.2 of the Instructions to Tenderers - Part II.
- 4.1.3 the Certificate of Compliance on the form provided in Appendix 7 of this Form of Tender.

5 WE AGREE:

- 5.1 that this tender will be irrevocable and open for acceptance by the *Owner* for a period of **60** calendar days from the day following the *Tender Closing Date and Time*, even if the tender of another Tenderer is accepted by the *Owner*. If within this period the *Owner* delivers a written notice ("*Notice of Award*") by which the *Owner* accepts our tender we will:
 - 5.1.1 within **10 Days** of receipt of the written *Notice of Award* deliver to the *Owner*:
 - 5.1 a) a Performance Bond and a Labour and Material Payment Bond, each in the amount of 50% of the *Contract Price*, issued by a surety licensed to carry on the business of suretyship in the province of British Columbia, and in a form acceptable to the *Owner*;
 - 5.1 b) a "clearance letter" indicating that the Tenderer is in WCB compliance; and
 - 5.1 c) a copy of the insurance policies as specified in SGC 24 indicating that all such insurance coverage is in place and;
 - 5.1 d) a letter confirming the *Contractor* as "Prime Contractor" for the Contract as specified in SGC 4.2.2.
 - 5.1.2 within **2 Days** of receipt of written "*Notice to Proceed*", or such longer time as may be otherwise specified in the *Notice to Proceed*, commence the *Work*; and
 - 5.1.3 sign the Contract Documents as required by GC 2.1.

6 WE AGREE:

- 6.1 that, if we receive written *Notice of Award* of this *Contract* and, contrary to paragraph 5 of this Form of Tender, we:
 - 6.1.1 fail or refuse to deliver the documents as specified by paragraph 5.1.1 of this Form of Tender; or
 - 6.1.2 fail or refuse to commence the *Work* as required by the *Notice to Proceed*,

then such failure or refusal will be deemed to be a refusal by us to enter into the Contract and the *Owner* may, on written notice to us, award the *Contract* to another party. We further agree that, as full compensation on account of damages suffered by the *Owner* because of such failure or refusal, the *Bid Security* shall be forfeited to the *Owner*, in an amount equal to the lesser of:

- 6.1.3 the face value of the *Bid Security*; and
- 6.1.4 the amount by which our *Tender Price* is less than the amount for which the *Owner* contracts with another party to perform the *Work*.

7 OUR ADDRESS is as follows:

Phone: _____ - _____ - _____

Fax: _____ - _____ - _____

Email: _____

Attention: _____

This Tender is executed this _____ day of _____, 20____.

Contractor:

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY)

(AUTHORIZED SIGNATORY)

8 WE CONFIRM:

8.1 our Goods and Services Tax (GST) registration status is as follows:

8.1.1 for information purposes, our GST Registration Number is:

(GST REGISTRATION NUMBER)

or;

8.1.2 by signature hereunder, we certify we are **not required** to provide a registration number:

(AUTHORIZED SIGNATORY)

(AUTHORIZED SIGNATORY)

**APPENDIX 1
FORM OF TENDER**

**Contract 84311H
2019 & 2020 IC Installations & Water Service Renewals**

SCHEDULE OF QUANTITIES AND PRICES

(see paragraph 5.3.1 of the Instruction to Tenderers – Part II)

(All Tender and Contract Prices shall NOT include GST. GST will apply upon payment)
(Should there be any discrepancy in the information provided, the City's original file copy shall prevail)

ITEM NO.	MMCD Ref. / Supp. Specs	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED AMOUNT
Division 1 - GENERAL REQUIREMENTS						
1.0	01 55 00	TRAFFIC CONTROL, VEHICLE ACCESS AND PARKING				
1.01	SS - 1.5.1	Traffic Control and Management				Incidental to Contract
2.0	01 57 01	ENVIRONMENTAL PROTECTION				
2.01	1.6.1	Environmental Protection				Incidental to Contract
Division 3 - CONCRETE						
3.0	03 30 20	CONCRETE WALKS, CURBS AND GUTTERS				
3.01	SS - 1.4.4	Remove and replace concrete curb and gutter (MMCD C5) (Provisional)	l.m	50	\$	\$
3.02	SS - 1.4.5	Remove and replace monolithic concrete sidewalks including curb as per COQ-C8 (100mm thick, broom finished) (Provisional)	sq.m	10	\$	\$
3.03	SS - 1.4.5	Remove and replace concrete sidewalks (100mm thick, broom finished) (Provisional)	sq.m	50	\$	\$
3.04	SS - 1.4.5	Remove and replace monolithic concrete driveway letdown (190mm thick - COQ-C7C) (Provisional)	ea	2	\$	\$
3.05	SS - 1.4.5	Remove and replace concrete driveway (190mm thick) (Provisional)	sq.m	10	\$	\$
Division 31 - EARTHWORKS						
4.0	31 23 01	EXCAVATING, TRENCHING, & BACKFILLING				
4.01	SS - 1.10.3	Overexcavation (Provisional)	c.m	50	\$	\$
4.02	SS - 1.10.9	Import Trench Backfill, 25mm minus (Provisional)	tonne	1000	\$	\$
Division 32 - ROADS AND SITE IMPROVEMENTS						
5.0	32 11 16.1	GRANULAR SUBBASE				
5.01	SS - 1.4	200mm Subbase, 75mm minus (Provisional)	tonne	100	\$	\$

ITEM NO.	MMCD Ref. / Supp. Specs	DESCRIPTION		UNIT	QTY	UNIT PRICE	EXTENDED AMOUNT
Division 33 - UTILITIES							
6.0	33 11 01	WATERWORKS					
6.01	SS - 1.8.2.1	1299	Pinetree Way Water Service - 150mm Class 50 DI Watermain	l.m	32	\$	\$
6.02	(1.8.3)	1299	150mm Gate Valves	ea	2	\$	\$
6.03	1.8.13	1299	Pinetree Way - Watermain Tie-in including tapping tee and valve	ea	1	\$	\$
6.04	SS - 1.8.4	628 (NE Cottonwood Avenue - Terminal City C71P Crn) Hydrant installation c/w storz connection		ea	1	\$	\$
6.05	SS - 1.8.4	703 (SW Folsom Street - Terminal City C71P Hydrant Crn) installation c/w storz connection		ea	1	\$	\$
6.06	SS - 1.8.4	825 (East Smith Ave - Terminal City C71P Hydrant PL) installation c/w storz connection		ea	1	\$	\$
6.07	SS - 1.8.4	923 (East Smith Ave - Terminal City C71P Hydrant PL) installation c/w storz connection		ea	1	\$	\$
6.08	SS - 1.8.4	975 (SW Smith Ave - Terminal City C71P Hydrant Crn) installation c/w storz connection		ea	1	\$	\$
6.09	SS - 1.8.5.1	623 Cottonwood Ave water service renewal		l.m	15.5	\$	\$
6.10	SS - 1.8.5.1	631 Cottonwood Ave water service renewal		l.m	15.5	\$	\$
6.11	SS - 1.8.5.1	633 Cottonwood Ave water service renewal		l.m	15.5	\$	\$
6.12	SS - 1.8.5.1	683 Fairview Street water service renewal		l.m	12.0	\$	\$
6.13	SS - 1.8.5.1	681 Florence Street water service renewal		l.m	39.5	\$	\$
6.14	SS - 1.8.5.1	401 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.15	SS - 1.8.5.1	403 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.16	SS - 1.8.5.1	405 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.17	SS - 1.8.5.1	407 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.18	SS - 1.8.5.1	409 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.19	SS - 1.8.5.1	413 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.20	SS - 1.8.5.1	429 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.21	SS - 1.8.5.1	453 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.22	SS - 1.8.5.1	469 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.23	SS - 1.8.5.1	477 Laurentian Cresent water service renewal		l.m	20.0	\$	\$
6.24	SS - 1.8.5.1	1801	Madore Avenue (SVC off Laurentian) water service renewal	l.m	20.0	\$	\$

ITEM NO.	MMCD Ref. / Supp. Specs	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED AMOUNT
6.25	SS - 1.8.5.1	1035 Smith Avenue water service renewal	l.m	15.0	\$	\$
6.26	SS - 1.8.5.3	Supply and install Terminal City Nelson Type valve box c/w lid marked "water"; includes 150mm PVC Riser	ea	19	\$	\$
6.27	SS - 1.8.6	WTVA-07771 Vent installation on existing air valve - Near 2718 Mara Drive -	1	ea	\$	\$
6.28	SS - 1.8.6.1	WTVA-06071 Blow-off Handwheel to Nut Conversion Near 712 Folsom Street	1	ea	\$	\$
6.29	SS - 1.8.6.2	Install Blow-off after domestic service at 340 Laurentian	1	ea	\$	\$
7.0	33 30 01	SANITARY SEWERS				
7.01	SS - 1.6.3.1	Sanitary service lead repair (Provisional)	l.m	200	\$	\$
7.02	SS - 1.6.4	2700 Anchor Place IC Installation	l.s.	1	\$	\$
7.03	SS - 1.6.4	2705 Anchor Place IC Installation	l.s.	1	\$	\$
7.04	SS - 1.6.4	2709 Anchor Place IC Installation	l.s.	1	\$	\$
7.05	SS - 1.6.4	2712 Anchor Place IC Installation	l.s.	1	\$	\$
7.06	SS - 1.6.4	2716 Anchor Place IC Installation	l.s.	1	\$	\$
7.07	SS - 1.6.4	2720 Anchor Place IC Installation	l.s.	1	\$	\$
7.08	SS - 1.6.4	2732 Anchor Place IC Installation	l.s.	1	\$	\$
7.09	SS - 1.6.4	2500 Cable Crt IC Installation	l.s.	1	\$	\$
7.10	SS - 1.6.4	2507 Cable Crt IC Installation	l.s.	1	\$	\$
7.11	SS - 1.6.4	2510 Cable Crt IC Installation	l.s.	1	\$	\$
7.12	SS - 1.6.4	2511 Cable Crt IC Installation	l.s.	1	\$	\$
7.13	SS - 1.6.4	2512 Cable Crt IC Installation	l.s.	1	\$	\$
7.14	SS - 1.6.4	3137 Capstan IC Installation	l.s.	1	\$	\$
7.15	SS - 1.6.4	3145 Capstan IC Installation	l.s.	1	\$	\$
7.16	SS - 1.6.4	3153 Capstan IC Installation	l.s.	1	\$	\$
7.17	SS - 1.6.4	3175 Capstan IC Installation	l.s.	1	\$	\$
7.18	SS - 1.6.4	2500 Channel Crt IC Installation	l.s.	1	\$	\$
7.19	SS - 1.6.4	2508 Channel Crt IC Installation	l.s.	1	\$	\$
7.20	SS - 1.6.4	2512 Channel Crt IC Installation	l.s.	1	\$	\$
7.21	SS - 1.6.4	2707 Daybreak IC Installation	l.s.	1	\$	\$
7.22	SS - 1.6.4	2724 Daybreak IC Installation	l.s.	1	\$	\$

ITEM NO.	MMCD Ref. / Supp. Specs	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED AMOUNT
7.23	SS - 1.6.4	2760 Daybreak IC Installation	l.s.	1	\$	\$
7.24	SS - 1.6.4	2766 Daybreak IC Installation	l.s.	1	\$	\$
7.25	SS - 1.6.4	2790 Daybreak IC Installation	l.s.	1	\$	\$
7.26	SS - 1.6.4	2797 Daybreak IC Installation	l.s.	1	\$	\$
7.27	SS - 1.6.4	3103 Daybreak IC Installation	l.s.	1	\$	\$
7.28	SS - 1.6.4	3118 Daybreak IC Installation	l.s.	1	\$	\$
7.29	SS - 1.6.4	2700 Hawser IC Installation	l.s.	1	\$	\$
7.30	SS - 1.6.4	2710 Hawser IC Installation	l.s.	1	\$	\$
7.31	SS - 1.6.4	2556 Passage IC Installation	l.s.	1	\$	\$
7.32	SS - 1.6.4	2557 Passage IC Installation	l.s.	1	\$	\$
7.33	SS - 1.6.4	2558 Passage IC Installation	l.s.	1	\$	\$
7.34	SS - 1.6.4	2562 Passage IC Installation	l.s.	1	\$	\$
7.35	SS - 1.6.4	2563 Passage IC Installation	l.s.	1	\$	\$
7.36	SS - 1.6.4	2580 Passage IC Installation	l.s.	1	\$	\$
7.37	SS - 1.6.4	2582 Passage IC Installation	l.s.	1	\$	\$
7.38	SS - 1.6.4	2588 Passage IC Installation	l.s.	1	\$	\$
7.39	SS - 1.6.4	2591 Passage IC Installation	l.s.	1	\$	\$
7.40	SS - 1.6.4	2712 Pilot IC Installation	l.s.	1	\$	\$
7.41	SS - 1.6.4	2718 Pilot IC Installation	l.s.	1	\$	\$
7.42	SS - 1.6.4	2730 Pilot IC Installation	l.s.	1	\$	\$
7.43	SS - 1.6.4	2736 Pilot IC Installation	l.s.	1	\$	\$
7.44	SS - 1.6.4	2740 Pilot IC Installation	l.s.	1	\$	\$
7.45	SS - 1.6.4	2787 Pilot IC Installation	l.s.	1	\$	\$
7.46	SS - 1.6.4	2802 Pilot IC Installation	l.s.	1	\$	\$
7.47	SS - 1.6.4	2807 Pilot IC Installation	l.s.	1	\$	\$
7.48	SS - 1.6.4	3130 Plimsoll-svc to Pilot IC Installation	l.s.	1	\$	\$
7.49	SS - 1.6.4	3138 Plimsoll IC Installation	l.s.	1	\$	\$
7.50	SS - 1.6.4	3139 Plimsoll IC Installation	l.s.	1	\$	\$
7.51	SS - 1.6.4	3146 Plimsoll IC Installation	l.s.	1	\$	\$
7.52	SS - 1.6.4	3150 Plimsoll IC Installation	l.s.	1	\$	\$
7.53	SS - 1.6.4	3155 Plimsoll IC Installation	l.s.	1	\$	\$

ITEM NO.	MMCD Ref. / Supp. Specs	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED AMOUNT
7.54	SS - 1.6.4	3158 Plimsoll IC Installation	l.s.	1	\$	\$
7.55	SS - 1.6.4	1048 Spar IC Installation	l.s.	1	\$	\$
7.56	SS - 1.6.4	1049 Spar IC Installation	l.s.	1	\$	\$
7.57	SS - 1.6.4	1051 Spar IC Installation	l.s.	1	\$	\$
7.58	SS - 1.6.4	1057 Spar IC Installation	l.s.	1	\$	\$
7.59	SS - 1.6.4	1060 Spar IC Installation	l.s.	1	\$	\$
7.60	SS - 1.6.4	1073 Spar IC Installation	l.s.	1	\$	\$
7.61	SS - 1.6.4	1077 Spar IC Installation	l.s.	1	\$	\$
7.62	SS - 1.6.4	1079 Spar IC Installation	l.s.	1	\$	\$
7.63	SS - 1.6.4.2	IC installation on additional depth(Provisional)	m	20	\$	\$
7.64	SS - 1.6.7	Sanitary service connection tie in to sanitary main c/w pvc wye (Provisional)	ea	20	\$	\$
8.0	33 40 01	STORM SEWERS				
8.01	SS - 1.6.2	Storm main repair (Provisional)	l.m.	25	\$	\$
8.02	SS - 1.6.3	3140 Capstan new storm service connection (Provisional)	ea	1	\$	\$
8.03	SS - 1.6.3.1	Storm service lead repair (Provisional)	l.m.	30	\$	\$
8.04	SS - 1.6.4	2504 Cable Court IC Installation	l.s.	1	\$	\$
8.05	SS - 1.6.4	2514 Cable Court IC Installation	l.s.	1	\$	\$
8.06	SS - 1.6.4	2529 Cable Court IC Installation	l.s.	1	\$	\$
8.07	SS - 1.6.4	2500 Channel Court IC Installation	l.s.	1	\$	\$
8.08	SS - 1.6.4	2512 Channel Court IC Installation	l.s.	1	\$	\$
8.09	SS - 1.6.4	2519 Channel Court IC Installation	l.s.	1	\$	\$
8.10	SS - 1.6.4	1014 Dory Street IC Installation	l.s.	1	\$	\$
8.11	SS - 1.6.4	1020 Dory Street IC Installation	l.s.	1	\$	\$
8.12	SS - 1.6.4	2557 Passage Drive IC Installation	l.s.	1	\$	\$
8.13	SS - 1.6.4.A	2700 Anchor Place IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.14	SS - 1.6.4.A	2705 Anchor Place IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.15	SS - 1.6.4.A	2709 Anchor Place IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.16	SS - 1.6.4.A	2712 Anchor Place IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$

ITEM NO.	MMCD Ref. / Supp. Specs	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED AMOUNT
8.17	SS - 1.6.4.A	2716 Anchor Place IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.18	SS - 1.6.4.A	2732 Anchor Place IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.19	SS - 1.6.4.A	2511 Cable IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.20	SS - 1.6.4.A	3137 Capstan IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.21	SS - 1.6.4.A	3148 Capstan IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.22	SS - 1.6.4.A	3175 Capstan IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.23	SS - 1.6.4.A	2508 Channel IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.24	SS - 1.6.4.A	2766 Daybreak IC install (Provisional to common excavation w/ san IC)	l.s.	1	\$	\$
8.25	SS - 1.6.4.A	2707 Daybreak IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.26	SS - 1.6.4.A	2563 Passage IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.27	SS - 1.6.4.A	2580 Passage IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.28	SS - 1.6.4.A	2588 Passage IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.29	SS - 1.6.4.A	2591 Passage IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.30	SS - 1.6.4.A	2712 Pilot IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.31	SS - 1.6.4.A	2718 Pilot IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.32	SS - 1.6.4.A	2730 Pilot IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.33	SS - 1.6.4.A	2736 Pilot IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.34	SS - 1.6.4.A	2740 Pilot IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.35	SS - 1.6.4.A	2787 Pilot IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.36	SS - 1.6.4.A	3130 Plimsoll- svc to Pilot IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.37	SS - 1.6.4.A	3138 Plimsoll IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$

ITEM NO.	MMCD Ref. / Supp. Specs	DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED AMOUNT
8.38	SS - 1.6.4.A	3146 Plimsoll IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.39	SS - 1.6.4.A	3150 Plimsoll IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.40	SS - 1.6.4.A	1048 Spar IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.41	SS - 1.6.4.A	1060 Spar IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.42	SS - 1.6.4.A	1077 Spar IC install (Provisional to common excavation w/ sanitary IC)	l.s.	1	\$	\$
8.43	SS - 1.6.4.2	IC installation on additional depth(Provisional)	m	5	\$	\$
8.44	SS - 1.6.9	Storm service or CB lead connection tie into storm main c/w pvc wye (Provisional)	ea	5	\$	\$

Total Tendered Price (exclude GST): \$ _____
(Transfer the amount to Form of Tender Summary Page 1)

Name of Contractor: _____

**APPENDIX 2
FORM OF TENDER**

**Contract 84311H
2019 & 2020 IC Installations & Water Service Renewals**

**PRELIMINARY CONSTRUCTION SCHEDULE
(See paragraph 5.3.2 of the Instructions to Tenderers)**

INDICATE SCHEDULE WITH BAR CHART WITH CONSTRUCTION DURATIONS

CONSTRUCTION ACTIVITY	MARCH				APRIL					MAY			
	1	2	3	4	1	2	3	4	5	1	2	3	4

Completion Date: **May 31, 2019**

Proposed Disposal Site: _____

**APPENDIX 3
FORM OF TENDER**

**Contract 84311H
2019 & 2020 IC Installations & Water Service Renewals**

EXPERIENCE OF SUPERINTENDENT

(See paragraph 5.3.3 of the Instructions to Tenderers)

Proposed Project Superintendent _____

List of Project Experience

PROJECT:		Dates:	
Work Description:			
Responsibility:			
Owner/Reference:		Phone NO:	

PROJECT:		Dates:	
Work Description:			
Responsibility:			
Owner/Reference:		Phone NO:	

PROJECT:		Dates:	
Work Description:			
Responsibility:			
Owner/Reference:		Phone NO:	

**APPENDIX 4
FORM OF TENDER**

**Contract 84311H
2019 & 2020 IC Installations & Water Service Renewals**

CONTRACTOR'S COMPARABLE WORK EXPERIENCE
(See paragraph 5.3.4 of the Instructions to Tenderers)

PROJECT:		VALUE (\$):	
OWNER:		Phone Number:	
Work Description:			

PROJECT:		VALUE (\$):	
OWNER:		Phone Number:	
Work Description:			

PROJECT:		VALUE (\$):	
OWNER:		Phone Number:	
Work Description:			

PROJECT:		VALUE (\$):	
OWNER:		Phone Number:	
Work Description:			

**APPENDIX 5
FORM OF TENDER**

**Contract 84311H
2019 & 2020 IC Installations & Water Service Renewals**

SUBCONTRACTORS

(See paragraph 5.3.5 of the Instructions to Tenderers)

Trade:		Tender Item:	
Work Description:			
Subcontractor:		Phone No:	

Trade:		Tender Item:	
Work Description:			
Subcontractor:		Phone No:	

Trade:		Tender Item:	
Work Description:			
Subcontractor:		Phone No:	

Trade:		Tender Item:	
Work Description:			
Subcontractor:		Phone No:	

Trade:		Tender Item:	
Work Description:			
Subcontractor:		Phone No:	

**APPENDIX 6
FORM OF TENDER**

**Contract 84311H
2019 & 2020 IC Installations & Water Service Renewals**

BID BOND

NO. _____

\$ _____

KNOW ALL MEN BY THESE PRESENTS THAT

As Principal, hereinafter called the Principal, and

As Surety, hereinafter called the Surety, are held and firmly bound unto

As Oblige, hereinafter called the Oblige, in the amount of

_____ Dollars (\$_____) lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a written Tender to the Oblige, dated the _____ day of _____, 2019 for Contract _____.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the aforesaid Principal shall have the Tender accepted within sixty (60) days from the Closing Date of Tender and the said Principal will, within the time required, enter into a formal contract and give good and sufficient bonds to secure the performance of the terms and conditions of the Contract, then this obligation shall be null and void; otherwise the Principal and Surety will pay unto the Oblige the difference in money between the amount of the bid of the said Principal and the amount for which the Oblige legally contracts with another party to perform the work if the latter amount be in excess of the former.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

Any suit under this Bond must be instituted before the expiration of six (6) months from the date of this Bond.

IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its Attorney-In-Fact, this _____ day of _____, 2019.

SIGNED, SEALED AND DELIVERED
In the presence of:

_____)	_____
)	PRINCIPAL
)	
)	_____
)	SURETY

**APPENDIX 7
FORM OF TENDER**

**Contract 84311H
2019 & 2020 IC Installations & Water Service Renewals**

CERTIFICATE OF COMPLIANCE for CONTRACT INSURANCE

This appendix is provided for information only to certify that the Tenderer does hereby undertake and agree to supply to the City of Coquitlam, upon demand, contract insurance listed below for the project requirements indicated:

Contract Number: **84311H**

Contract Name: **2019 & 2020 IC Installations & Water Service Renewals**

Description of Work:

Supply & Installation of approx. 61 sanitary service inspection chambers, 9 storm inspection chambers, 30 provisional storm inspection chambers, 1 provisional storm service, 32m of 150mm CL50 ductile iron water main, 17 water service renewals, and 5 - C71P TC hydrants c/w storz connection.

Commercial General Liability: **\$5,000,000 limit**

Special Coverage Required: **YES** **NO** **Special Coverage Description**

() (x) Shoring and Underpinning Hazard
() (x) Pile Driving and Vibrations
(x) () Excavation Hazard
() (x) Demolition
() (x) Blasting

We also certify that the insurance coverage will meet the requirements of the Supplementary General Conditions Section 24. Insurance included as part of the Contract Documents and that the proof of insurance will be provided on the City of Coquitlam Certificate of Insurance form, without amendments, except for the exclusions noted above.

Name of Tenderer (printed)

Authorized Signature

Date

Agreement

AGREEMENT

Between Owner and Contractor

(FOR USE WHEN UNIT PRICES FORM THE BASIS OF PAYMENT - TO BE USED ONLY WITH THE GENERAL CONDITIONS AND OTHER STANDARD DOCUMENTS OF THE UNIT PRICE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS.)

THIS AGREEMENT made in duplicate this ____ day of _____, 2019.

Contract: 2019 & 2020 IC Installations & Water Service Renewals

Reference No. 84311H

BETWEEN:

The City of Coquitlam
3000 Guildford Way
Coquitlam BC V3B 7N2

(the "Owner")

AND:

(the "Contractor")

The *Owner* and the *Contractor* agree as follows:

1 THE WORK - START/COMPLETION DATES

- 1.1 The *Contractor* will perform all *Work* and provide all labour, equipment and material and do all things strictly as required by the *Contract Documents*.
- 1.2 The *Contractor* will commence the *Work* in accordance with the *Notice to Proceed*. The *Contractor* will proceed with the *Work* diligently, will perform the *Work* generally in accordance with the construction schedules as required by the *Contract Documents* and will achieve *Substantial Performance* of the *Work* on or before **May 31, 2019**, subject to the provisions of the *Contract Documents* for adjustments to the *Contract Time*.
- 1.3 Time shall be the essence of the Contract.

2 CONTRACT DOCUMENTS

- 2.1 The “*Contract Documents*” consist of the documents listed or referred to in Schedule 1, entitled “Schedule of Contract Documents”, which is attached and forms a part of this Agreement, and includes any and all additional and amending documents issued in accordance with the provisions of the *Contract Documents*. All of the *Contract Documents* shall constitute the entire *Contract* between the *Owner* and the *Contractor*.
- 2.2 The *Contract* supersedes all prior negotiations, representations or agreements, whether written or oral, and the *Contract* may be amended only in strict accordance with the provisions of the *Contract Documents*.

3 CONTRACT PRICE

- 3.1 The price for the *Work* (“*Contract Price*”) shall be the sum in Canadian dollars of the following:
- a) the product of the actual quantities of the items of *Work* listed in the *Schedule of Quantities and Prices* which are incorporated into or made necessary by the *Work* and the unit prices listed in the *Schedule of Quantities and Prices*; plus
 - b) all lump sums, if any, as listed in the *Schedule of Quantities and Prices*, for items relating to or incorporated into the *Work*; plus
 - c) any adjustments, including any payments owing on account of *Changes* and agreed to *Extra Work*, approved in accordance with the provisions of the *Contract Documents*.
- 3.2 The *Contract Price* shall be the entire compensation owing to the *Contractor* for the *Work* and this compensation shall cover and include all profit and all costs of supervision, labour, material, equipment, overhead, financing, and all other costs and expenses whatsoever incurred in performing the *Work*.

4 PAYMENT

- 4.1 Subject to applicable legislation and the provisions of the *Contract Documents*, the *Owner* shall make payments to the *Contractor*.
- 4.2 If the *Owner* fails to make payments to the *Contractor* as they become due in accordance with the terms of the *Contract Documents* then interest calculated at 2% per annum over the prime commercial lending rate of the Royal Bank of Canada on such unpaid amounts shall also become due and payable until payment. Such interest shall be calculated and added to any unpaid amounts monthly.

5 RIGHTS AND REMEDIES

- 5.1 The duties and obligations imposed by the *Contract Documents* and the rights and remedies available hereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.

- 5.2 Except as specifically set out in the *Contract Documents*, no action or failure to act by the *Owner*, *Contract Administrator* or *Contractor* shall constitute a waiver of any of the parties' rights or duties afforded under the *Contract*, nor shall any such action or failure to act constitute an approval of or acquiescence in any breach under the *Contract*.

6 NOTICES

Communications among the *Owner*, the *Contract Administrator* and the *Contractor*, including all written notices required by the *Contract Documents*, may be delivered by email, by hand, or by fax, or by pre-paid registered mail to the addresses as set out below:

The *Owner*:

The City of Coquitlam
3000 Guildford Way
Coquitlam, BC V3B 7N2

Tel: 604-927-3500
Fax: 604-927-3505

The *Contractor*:

Tel:
Fax:
Email:
Attention:

The *Contract Administrator*:

The City of Coquitlam
3000 Guildford Way
Coquitlam, BC V3B 7N2

Tel: 604-927-3519
Fax: 604-927-3505
Email: thughes@coquitlam.ca
Attention: Travis Hughes

- 6.2 A communication or notice that is addressed as above shall be considered to have been received:
- a) immediately upon delivery, if delivered by hand; or
 - b) immediately upon transmission if sent or received by email or fax; or
 - c) after 5 days from date of posting if sent by registered mail.
- 6.3 The *Owner* or the *Contractor* may, at any time, change its address for notice by giving written notice to the other at the address then applicable. Similarly if the *Contract Administrator* changes

its address for notice then the *Owner* will give or cause to be given written notice to the *Contractor*.

- 6.4 The sender of a notice by email or fax assumes all risk that the fax will be received properly, and the provisions of paragraph 12.5 of the Instructions to Tenderers Part II apply to the sender.

7 GENERAL

- 7.1 This *Contract* shall be construed according to the laws of British Columbia.
- 7.2 The *Contractor* shall not, without the express written consent of the *Owner*, assign this *Contract*, or any portion of this *Contract*.
- 7.3 The headings included in the *Contract Documents* are for convenience only and do not form part of this *Contract* and will not be used to interpret, define or limit the scope or intent of this *Contract* or any of the provisions of the *Contract Documents*.
- 7.4 A word in the *Contract Documents* in the singular includes the plural and, in each case, vice versa.
- 7.5 This agreement shall enure to the benefit of and be binding upon the parties and their successors, executors, administrators and assigns.

IN WITNESS WHEREOF the parties hereto have executed this Agreement the day and year first written above.

Contractor:

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)
SEAL WHERE APPROPRIATE

(AUTHORIZED SIGNATORY)

(AUTHORIZED SIGNATORY AND POSITION - PRINT)

Owner:

The City of Coquitlam

(MAYOR)

(MUNICIPAL CLERK)

Schedule 1

Schedule of Contract Documents

(INCLUDE IN LIST ALL DOCUMENTS INCLUDING, IF ANY, SUPPLEMENTARY GENERAL CONDITIONS, SUPPLEMENTARY SPECIFICATIONS, SUPPLEMENTARY STANDARD DETAIL DRAWINGS)

The following is an exact and complete list of the *Contract Documents*, as referred to in Article 2.1 of the Agreement.

NOTE: The documents noted with “*” are contained in the “Master Municipal Construction Documents – General Conditions, Specifications and Standard Detail Drawings”, edition dated 2009. All sections of this publication are included in the *Contract Documents*.

1. Agreement, including all Schedules;
2. Supplementary General Conditions, if any;
3. General Conditions*;
4. Supplementary Contract Specifications, if any;
5. Detail Specifications, if any;
6. Specifications*;
7. Supplementary Detail Drawing, if any;
8. Standard Detail Drawings*;
9. Executed Form of Tender, including all Appendices;
10. Drawings listed in Schedule 2 to the Agreement – “List of Drawings”, if any;
11. Instructions to Tenderers;
12. The following Addenda:
 - As issued
13. COQUITLAM “Supplementary Specifications Master Municipal Construction Documents” March 2016

Schedule 2

LIST OF DRAWINGS AND APPENDICES

(Complete Listing of all Drawings, Plans, Sketches and Appendices that are part of the Contract Documents)

Bound in this Document:

Appendix A: Traffic Management Detail Specifications

Appendix B: Inspection Chamber and Water Service Record Sheet

Appendix C: Standard Detailed Drawings

NOT Bound in this Document: Supplementary Contract Documents

TITLE	SHEET NO.	DRAWING NO.
Utility Connection Cards	n/a	UCC1 to UCC187
Location and As-Built Reference Maps	n/a	LM1to LM8
Communication As-Builts	n/a	C1 to C3
Electrical As-Builts	n/a	E1 to E21
Road Works As-Builts	n/a	R1 to R5
Sanitary As-Builts	n/a	S1 to S 65
Storm As-Builts	n/a	D1 to D106
Water Main As-Builts	n/a	W1 to W69

Supplementary General Conditions

These Supplementary General Conditions must be read in conjunction with the General Conditions contained in
the Master Municipal Construction Documents, Volume II, Printed 2009

File #: 11-5330-20/84311/1 Doc #: 3184275.v1

SUPPLEMENTARY GENERAL CONDITIONS

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These Supplementary General Conditions must be read in conjunction with the General Conditions contained in
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1.0	DEFINITIONS	1.0	
	Abnormal Weather	1.1.1	<p>(Replace clause 1.1.1 as follows):</p> <p>“Abnormal Weather” means temperature, precipitation, wind or other weather conditions which, in any two week period, differs from the statistical average for that condition in that period by more than one standard deviation, calculated based on relevant data available from Environment Canada.</p>
3.0	CONTRACT ADMINISTRATOR		
3.1	Appointment	3.1.3	<p>(Add new clause 3.1.3 as follows):</p> <p>The Contractor shall promptly and efficiently comply with any reasonable instruction issued by the Contract Administrator.</p>
3.3	Contract Administration	3.3.10	<p>(Add new clause 3.3.10 as follows):</p> <p>The Contractor is responsible for all survey layout for the construction of the Work to the design specifications and/or elevations as shown on the contract drawings or as amended on site by the Contract Administrator.</p>
4.0	CONTRACTOR		
4.1	Control of the Work	4.1.2	<p>(Add to clause 4.1.2 as follows):</p> <p>During all phases of the operation the Contractor shall take precautions to abate nuisance caused by mud or dust by clean-up, sweeping, sprinkling with water, or other means as necessary to accomplish results satisfactory to the Contract Administrator.</p> <p>The Contractor shall take care to prevent spillage on streets over which hauling is done and the Contractor shall immediately clean up any such spillage or debris deposited on streets due to his operations.</p> <p>The Contractor shall not deposit any material upon any street, sidewalk, boulevard or other property, without the Contract Administrator’s or the Owner’s permission, nor shall he allow the same to remain longer than necessary. All surplus spoil and rubbish and other waste material shall be removed from the site so that the area of work is cleaned up and restored to as clean a condition as it was before the Contract started, within four days of the Contract Administrator’s written request to do so, failing which the Owner may carry out the work or have the work carried out by others and recover the costs from the Contractor or may deduct the cost from any monies due or that may become due to the Contractor.</p>
		4.1.3	<p>(Add new clause 4.1.3 as follows):</p> <p>Work can be performed during the normal weekday working hours of 0700h to 1900h, unless specified otherwise in Appendix A – Traffic Management Detail Specifications. Written permission from the Contract Administrator will be required for any works to be performed outside of the normal working days of Monday to Friday.</p>

No Sunday work will be permitted, except in case of emergency and then only with the written permission of the Contract Administrator and to such extent as he deems necessary.

In case the Contractor decides to work on a day which is a Statutory Holiday, he shall provide the Contract Administrator in writing at least (4) days in advance of such holiday, stating those places where said work is to be conducted. In case the Contractor fails to give such notice in advance of any Statutory Holiday, no work within the terms of the contract shall be done on such holiday.

The Contractor shall not schedule work that will require inspection beyond the Owner's normal office hours and working days without prior approval from the Contract Administrator. Any extra cost incurred by the Owner for work done outside of normal office hours and working days will be deducted from the Contractor's monthly payments unless pre-approved by the Contract Administrator. The cost of inspections on a Sunday or on a Statutory Holiday by City staff/s will be at Contractor's expense. No greater quantity of work shall be undertaken at any one time than can be properly conducted with due regard to the rights and interests of the public, as may be determined by the Contract Administrator.

The Contractor will be charged for the costs of inspection required during overtime hours, during weekends and during statutory holidays. Overtime hours will be determined in accordance with the Employment Standards as set by the Province of B.C.

If Road and Sidewalk Closure Permits are issued, the work will be restricted to the time limits indicated on the permit.

4.1.4 ***(Add new clause 4.1.4 as follows):***

The Contractor shall ensure safe passage of vehicles and pedestrian through the work zone and have a traffic management plan, approved by Contract Administrator, and an approved Road and Sidewalk Closure Permit in place prior to start of work. The Contractor shall follow City's Construction Traffic Management Requirements.

Refer to Contract's Supplementary Specifications - Appendix A: Construction and Traffic Management Requirements (CTMR).

4.2 Safety

4.2.2 ***(Add new clause 4.2.2 as follows):***

For the purposes of Occupational Health and Safety, the *Contractor* is the "Prime Contractor" as detailed in the Workers Compensation Act, Section 118. The *Contractor* shall have and maintain an Occupational Health and Safety Program that meets the requirements of the WCB and the WCB OH&S Regulations.

- 4.2.3 ***(Add new clause 4.2.3 as follows):***
In an emergency, gas pipeline rupture or leak, Contact FortisBC's 24 Hour Emergency Line (1-800-663-9911) and Coquitlam Fire (911) immediately and then City Coquitlam Utility Control Centre (604-927-6287).
- 4.3 **Protection of Work, Property and the Public**
- 4.3.4 ***(Replace clause 4.3.4 as follows):***
Before commencing any *Work* at the *Place of the Work*, the *Contractor* shall be responsible to locate in three dimensions all underground utilities and structures indicated on the *Contract Documents* as being the *Place of the Work*. The *Contractor* shall also be responsible to consult with all the utility corporations that provide electricity, communications, gas or other utility services in the area of the *Place of Work*, to locate all underground utilities for which they have records. The *Contractor* shall also locate in three dimensions any other utilities or underground structures that are reasonably apparent in an inspection of the *Place of the Work*. Costs to do the locates will be incidental to the contract.
- 4.3.7 ***(Add new clause 4.3.7 as follows):***
Any lands other than those upon which the work is to be performed, which may be required for temporary facilities, storage purposes or access to the work site, other than those provided by the *Owner*, shall be provided by the *Contractor* at his own cost, with no liability to the *Owner*.
- 4.3.8 ***(Add new clause 4.3.8 as follows):***
The *Contractor* shall conduct his operations so as to cause the minimum obstruction and inconvenience to traffic and to places of business and residences adjacent to the *Place of Work*. No greater quantity of work shall be undertaken at any one time than can be properly conducted with due regard to the rights and interests of the public as may be determined by the *Contract Administrator*.
- The *Contractor* is to provide at all times safe and convenient means of approach and entrance to adjoining lanes, driveways, buildings and property both for vehicles and pedestrians to the satisfaction of the *Contract Administrator*. For this purpose he shall construct and maintain suitable and safe platforms, approaches, structures, bridges, diversions or other works.
- Where traffic must cross open trenches, the *Contractor* shall provide suitable bridges. Where trenches have been backfilled or where road improvements are incomplete the *Contractor* shall take any steps necessary to prevent potholes or other traffic hazards. Where the *Contract Administrator* so instructs or where *Contract Specifications* so require, the *Contractor* shall provide temporary asphalt patching of such hazards.

- | | | | |
|------------|------------------------------|-------|--|
| 4.6 | Construction Schedule | 4.6.1 | <p><i>(Replace clause 4.6.1 as follows):</i></p> <p>The Contractor shall within the time set out in the Form of Tender prepare and submit to the Contract Administrator for his approval a construction schedule (the Baseline Construction Schedule) indicating the planned start and completion dates of major activities of the Work. The Baseline Construction Schedule shall be in more detail than the Preliminary Construction Schedule and shall indicate completion of the Work in compliance with any specified Milestone Dates, including Substantial Performance.</p> |
| | | 4.6.6 | <p><i>(Replace clause 4.6.6 as follows):</i></p> <p>The time for the performance of the Work shall commence on the date specified in the Notice to Proceed, or if not so specified, on the date the Notice to Proceed is issued. The Notice to Proceed will not be issued until the documentation required under paragraph 5.1.1 of the Form of Tender has been submitted and the construction schedule has been approved.</p> |
| | | 4.6.8 | <p><i>(Add new clause 4.6.8 as follows):</i></p> <p>Any requests to lengthen the work schedule shall be made in writing by the Contractor within five working days of knowledge of the reason for the extension. The Contract Administrator will adjust the schedule at his discretion upon receipt of a written request.</p> |
| 4.7 | Superintendent | 4.7.2 | <p><i>(Add new clause 4.7.2 as follows):</i></p> <p>The Superintendent shall be in attendance at all times at the Place(s) of the Work unless permitted otherwise by the Contract Administrator.</p> |
| | | 4.7.3 | <p><i>(Add new clause 4.7.3 as follows):</i></p> <p>The Superintendent shall represent the Contractor at the Place of Work and instructions given to the Superintendent by the Contract Administrator shall be considered to be given to the Contractor.</p> |
| 4.8 | Workers | 4.8.2 | <p><i>(Add new clause 4.8.2 as follows):</i></p> <p>The Contractor shall, upon the request of the Contract Administrator, remove any person employed by him for the purposes of the Contract who, in the opinion of the Contract Administrator, is incompetent or has conducted himself improperly, and the Contractor shall not permit a person who has been removed to return to the Place of Work.</p> |
| 4.9 | Materials | 4.9.3 | <p><i>(Add new clause 4.9.3 as follows):</i></p> <p>The Contractor shall, at his cost,</p> <ul style="list-style-type: none">a) Be responsible for storing all of the materials supplied for the Work either by himself or the Owner, until it has been incorporated into the completed Work;b) Store all materials in a manner which will prevent damage from the weather, dirt, foreign matter, vandalism and |

theft;

- c) Arrange for and/or verify the time of delivery of all materials to be supplied by himself or the Owner to ensure that delivery will coincide with his work schedules.
- d) Examine with the Contract Administrator the quantities and details of all materials supplied by the Owner at the time and place of delivery or those materials already at the Place of Work, and prepare and sign a Statement of Materials Acceptance, specifically noting and rejecting any defective material;
- e) Replace all materials supplied by himself or the Owner which are found to be stolen, missing or damaged while under his care;
- f) Assume responsibility, upon signing of the Contract, for all materials supplied by the Owner and already at the Place of Work.
- g) Replace all materials found to be defective in manufacture which have been supplied by himself.

4.11 Subcontractors

4.11.3

(Delete clause 4.11.3 and replace with):

The Contractor shall, upon notice of the Contract Administrator, remove any Subcontractor employed by him for the purposes of the Contract who, in the opinion of the Contract Administrator, is incompetent or has conducted himself improperly, and the Contractor shall not permit the Subcontractor who has been removed to return to the Place of Work. The removal of a Subcontractor under this clause shall not be considered a Change and the Contract Price and the Contract Time shall not be adjusted.

4.12 Test and Inspections

4.12.1

(Delete clause 4.12.1 and replace with):

The Contractor shall perform or cause to be performed all tests, inspections and approvals of the Work as described in the Contract Documents or as required by the Contract Administrator as part of Quality Control. The Contractor shall complete all the necessary testing at the frequencies described in the Contract Document unless otherwise approved by the Contract Administrator.

(Delete clause 4.12.5(1) and replace with):

The Owner is to perform or arrange for all the tests, inspections and approvals of the Work as part of Quality Assurance. If test results indicate a non-conformance to the Contract, all testing subsequent to initial testing, will be performed by the Owner, at the expense of the Contractor, and those costs will be deducted from payments to the Contractor.

4.12.11

(Add clause 4.12.11 as follows):

The Contractor shall give the Contract Administrator two (2) full working days' notice to arrange and witness any testing required by the Contract.

		4.12.12	<i>(Add clause 4.12.12 as follows):</i> Failure to follow DFO/MOE BMPs for Instream Works or as instructed by Contract Administrator will result in shut-down of the work. Failure to comply on what is stated on the approved permit will result in shut-down of the work. The Contractor must take all steps to mitigate impacts to aquatic resources, environment and habitats before work can re-start on site. No claim will be accepted by the Owner for costs associated with this work shut-down.
4.14	Final Clean-up	4.14.3	<i>(Add new clause 4.14.3 as follows):</i> The Contractor will be responsible for the complete clean-up of the work site at the end of construction and prior to the Substantial Performance review. The clean-up is considered incidental to the Contract. The work will include cleaning of all catch basins within the work area, or nearby location as affected by the Work, regardless of the condition of the catch basins prior to starting the Work and all manholes and/or sewers affected by work done under this contract. All cleaning is to be performed by <u>vacuum truck to the satisfaction of the Contract Administrator</u> and will include off-site disposal of waste material.
4.16	Notice of Disruption	4.16.2	<i>(Add new clause 4.16.2 as follows):</i> Written notice must be provided to all properties which may be physically affected by the construction not less than one week and not more than two weeks prior to construction. Notify occupants directly affected by the work 48 hours in advance of commencement of construction. Cost of notifying area occupants of ensuing construction and delivery of the notices is incidental to the Contract. Cost of obtaining releases from area occupants affected by construction is incidental to the Contract.
6.0	OTHER CONTRACTORS		
6.2	Coordination and Connection	6.2.1	<i>(Delete clause 6.2.1 and replace with):</i> <i>The Contractor shall, in accordance with usual construction practice, coordinate the Work with the Other Work and connect to Other Work as specified or shown in the Contract Documents. The Contractor shall not be entitled to additional payment or an extension of contract time for delays where connections to works were specified in the Contract.</i>
7.0	CHANGES		
7.4	Optional Work	7.4.2	<i>(Add new clause 7.4.2 as follows):</i> If there are Optional items or Provisional items included in the <i>Schedule of Quantities and Prices</i> , those items shall be used only as directed and at the sole discretion of the Contract Administrator through the issue of a Change Order. These items

will be paid at the contract unit price as part of regular progress payments. Only quantities used will be eligible for payment. No claim will be accepted for unused Optional or Provisional quantities. Clause 9.4 Quantity Variations will not be applicable for these items.

9.0 VALUATION OF CHANGES AND EXTRA WORK

9.2 Valuation Method 9.2.4

(Replace clause 9.2.4 as follows):

Once a quotation is accepted by the Contract Administrator, or other agreement reached between the Contract Administrator and the Contractor regarding adjustments to the Contract Price or Contract Time on account of a Change or Extra Work, the Contractor shall not be entitled to claim or receive additional payment, or adjustment to the Contract Time on account of a Change or Extra Work.

10.0 FORCE ACCOUNTS

10.1 Force Account Costs 10.1.1(1)

(Add to clause 10.1.1 (1) as follows):

Costs for the Contractor's Superintendent, Project Managers, Health and Safety Personnel, and Office/Administration Staff are not eligible for labour costs as those costs are considered incidental to the mark up owing for overhead and labour.

13.0 DELAYS

13.1 Delay by Owner or Contract Administrator 13.1.2

(Add new clause 13.1.2 as follows):

The Owner may at any time suspend the work or any portion thereof provided he gives the Contractor five (5) days' written notice of delay. The Contractor shall resume work upon written notice from the Owner, The Contractor shall be entitled to:

- a) An extension of the Contract time equivalent to the length of suspension of work.
- b) Reimbursement by the Owner for directly related out-of-pocket additional costs, reasonably and necessarily incurred by the Contractor as a result of such suspension. No additional payment will be made to the Contractor for any loss of profits or overhead.

13.8 Direction to Stop or Delay 13.8.3

(Add new clause 13.8.3 as follows):

The Contract Administrator may order the Contractor to stop work if at any time the Contract Administrator is of the opinion that there exists a danger to life or property.

13.9 Liquidated Damages for Late Completion 13.9.1

(Delete clause 13.9.1 (1) and replace as follows):

An amount of \$1000.00 per calendar day for each day, or portion, that *Substantial Performance* is achieved after the date established for *Substantial Performance* in the *Contract*.

(Add clause 13.9.1 (3) and replace as follows)s:

Any loss to the Owner of third party funding which the Owner was to receive if the Work, or a particular portion thereof, was

not completed before a Milestone Date.

18.0 PAYMENT

**18.1 Preparation of
Payment Certificate**

18.1.1

(Delete clause 18.1.1 and replace as follows):

The Contract Administrator shall prepare and issue a certificate for the period ending the last calendar day of the month.

**18.6 Substantial
Performance**

18.6.5

(Delete clause 18.6.5 and replace as follows):

The Owner may release any builders lien holdback on the 56th day following the date of Substantial Performance, or other date as required by law, but the Owner may hold back the amounts for any deficiencies or filed builders liens as provided in GC 18.4.2, GC 18.4.3 and 18.4.4.

18.6.6

(Replace clause 18.6.6 as follows):

The *Contract Administrator*, as defined herein, shall be the *Payment Certifier* responsible under Section 7 of the *Builders Lien Act* for certifying *Substantial Performance* of the *Work* of the *Contractor*, but not the *Work* of *Subcontractors*. The *Contractor* shall cooperate with and assist the *Contract Administrator* by providing information and assistance in as timely manner as the *Contract Administrator* considers necessary to carry out the duties of the *Payment Certifier* for the *Contract*.

The *Contractor* shall be the *Payment Certifier* responsible under Section 7 of the *Builders Lien Act* for certifying *Substantial Performance* of the *Work* of each *Subcontractor*. Prior to certifying completion for a *Subcontractor*, the *Contractor* shall consult the *Contract Administrator* and obtain the *Contract Administrator's* comments on the status of completion by the *Subcontractor*, including any deficiencies or defects in the *Subcontractor's Work* noted by the *Contract Administrator*. The *Contractor* will indemnify and save the *Owner* harmless from any and all liability the *Owner* may have to anyone arising out of the certification by the *Contractor* of *Substantial Performance* for that *Subcontractor*.

Notwithstanding any other provision of the *Contract*, no payments will be due or owing to the *Contractor* so long as a Lien filed by anyone claiming under or through the *Contractor* remains registered against the Project of any lands, or interest therein, on which *Work* for the project was performed. Failure of the *Contractor* to remove all Liens promptly will entitle the *Owner* to damages.

**20.0 LAWS, NOTICES,
PERMITS AND FEES**

20.4 Environmental Laws

20.4.2

(Add new clause 20.4.2 as follows):

The successful tenderer will be required to observe and achieve all terms and conditions required under the Fisheries Act. The following is a partial list of conditions that the Contractor shall allow for in its tendered prices:

All work must be undertaken and completed in such a manner as to prevent the release of silt, sediment or sediment-laden water, raw concrete, concrete leachate, or other deleterious substance into any water courses;

Silt fences must be erected and maintained around all construction areas;

All work must be undertaken and completed in isolation of all flowing water to maintain downstream water quality, and unrestricted flows;

The guidelines for sediment and erosion control outlined in the jointly published BC Environment/Fisheries and Oceans Canada document "Land Development Guidelines For the Protection of Aquatic Habitat" must be adhered to;

All work must be carried out during favorable and low water conditions;

All equipment and machinery must be in good working condition (power washed), free of leaks or excess oil and grease. No equipment refueling or servicing shall be undertaken within a minimum of 30 metres of any water course or surface water drainage;

A spill containment kit must be readily accessible on site. Any spill of reportable quantities must be immediately reported to the Provincial Emergency Program's 24 hour phone line at 1-800-663-3456;

Machinery must not enter the watercourses without approval of the Contract Administrator;

Any fill used on this project shall be certified inert and from a source which is confirmed to be free of contaminants.

**21.0 WORKERS
COMPENSATION
REGULATIONS**

**21.4 Workers
Compensation OHS
Regulation**

21.4.1

(Add new clause 21.4.1 as follows):

All works shall be in strict compliance with WorkSafe BC OHS Regulation Part 19 when working near or under any overhead power lines.

The Contractor must be fully aware of the danger to workers and shall take all necessary safety precautions when working near to existing utilities, such as high pressure gas, water line and BC Hydro lines.

21.4.2 ***(Add new clause 21.4.2 as follows):***

All works shall be in strict compliance with WorkSafe BC OHS Regulations.

24.0 INSURANCE

24.1 Introduction

(Delete clause 24.0 and replace as follows):

24.1.1 **Importance of Prompt Attention to Insurance and Bond Requirements:**

The City Council has directed that the apparently successful Contractor, after being so informed, shall complete the "Supplementary General Conditions Regarding Contract Insurance and Bond Specifications". Contractors are advised, however, to make themselves familiar with the Specifications as undue delay may result if advance investigations are not carried out.

24.1.2 **Format of the Supplementary General Conditions:**

Section 24 deals generally with insurance and bonding with respect to the Contract. Certain documents must be provided at the time of tendering. These requirements are set out in Section 24.3.

Before any work may commence, and no exceptions will be allowed to this rule, certain other documentation will be required and this is set out in Sections 24.4 and 24.5.

24.2 General

24.2.1 **Supplementary General Conditions Forming Part of the Contract:**

The Supplementary General Conditions regarding Contract insurance and bond specifications set out herein shall be attached to and form part of the Contract Documents.

24.2.2 **Acceptable Insurance Carriers:**

The insurer issuing any policy, or other document which is evidence of insurance to the Contractor, shall be an insurer licensed by the Superintendent of Insurance in the Province of British Columbia and registered with the Department of Insurance for Canada in Ottawa, except the Insurance Corporation of British Columbia, which is not subject to this condition.

24.2.3 **Owner's Right to Change Terms:**

Notwithstanding anything contained in the Contract Documents, the Owner will have the right to request a change to the specified terms and conditions respecting insurance at the sole option of the Owner. The Contractor will be notified in writing of any changes required by the Owner and will provide a quotation for such work.

	24.2.4	Delivery of Insurance Documents: All insurance policies or other acceptable specified documents shall be delivered to, and accepted by, the Owner before the Contract Documents are signed. <u>No work shall be commenced by the Contractor or by anyone acting on the instructions of the Contractor, until the required Insurance Documents have been accepted by the Owner and the Contract Documents have been duly signed by the Owner and the Contractor.</u>
	24.2.5	Owner's Right to Insure: Should the Contractor for any reason not comply with the specified requirements with respect to the insurance, the Owner will, at the Owner's option, have the right to purchase all or any part of such insurance which, in the opinion of the Owner, may be required to provide the specified insurance, and, in the event of so doing, the Owner will have the right to pay the premiums for such insurance and to withhold the amount of premiums so paid from any amount due and payable to the Contractor under the Contract.
24.3	Procedure Respecting Tendering	<div>24.3.1</div> <div>Security Deposit: Each tender must be accompanied by a Bid Bond on the form included as Appendix 6 in the Form of Tender, said Bid Bond to be issued by a surety company licensed to conduct business in the Province of British Columbia and shall be in the amount of ten percent (10%) of the Tender Price</div> <div>24.3.2</div> <div>Certificate of Compliance: The Contractor shall submit the Certificate(s) of Compliance for Contract Insurance included as Appendix 7 of the Form of Tender with respect to the insurance required to be provided by the successful Tenderer.</div>
24.4	Procedure Respecting Contract Insurance and Bonding	<div>24.4.1</div> <div>General Conditions: Damage to work (excluding Building Contracts where Section 24.5, Paragraph 24.5.1, Further Responsibilities of Contractor, applies). The Contractor shall be responsible for any and all loss, or damage, whatsoever which may occur on or to the works, completed or otherwise, until such time as the entire works have been completed and the Notice of Acceptance has been issued by the Owner, except that loss or damage caused solely by an act of the Owner. In the event of any loss or damage occurring, the Contractor shall, on notice from the Contract Administrator, immediately put the works into the condition it was immediately prior to such loss or damage, all at the Contractor's expense, except where such loss or damage was caused solely by an act of the Owner.</div>

The Contractor shall be responsible for any and all loss or damage whatsoever which may occur on or to the works, completed or otherwise, arising out of the negligence of the Contractor, any subcontractors, and the employees or agents of any of them.

Indemnity:

The Contractor shall indemnify and save harmless the Owner from and against any and all losses, claims, demands, payments, suits, actions, recoveries, and judgements of every nature and description brought or recovered against him, and/or the Owner, by reason of any act or omission of the said Contractor, his agents, or employees in the execution of the work.

24.4.2

Bonds:

To ensure the faithful execution and proper fulfilment of the Contract, the Contractor shall provide the Owner with the following bonds at the time of his execution of the Contract Agreement:

A Performance Bond in the amount of fifty percent (50%) of the total Contract amount covering the faithful performance of the Contract; and A Labour and Material Payment Bond in the amount of fifty percent (50%) of the total Contract Price.

The above bonds must be issued by a surety company licensed to carry on business in the Province of British Columbia and shall be provided on the forms included as Appendix I and Appendix II respectively.

24.4.3

Public Liability Insurance:

(Other than Automobile Third Party Liability Insurance):

Evidence of Insurance:

The Contractor shall deposit with the Owner, before the work commences, a Certificate of Insurance, signed by an authorized representative of the insurer, such certificate to be as shown in Appendix III.

Effective Dates and Terms:

The effective date of the Certificate of Insurance shall be the date of the execution of the Contract Agreement and the term of this policy shall be from such effective date until a date not less than twelve (12) months after the date of Substantial Performance completion of all work under the Contract.

Limits of Liability:

For bodily injury and for property damage shall be inclusive limits not less than \$5,000,000.

	24.4.4	Public Liability Insurance (Automobile): The Contractor shall deposit with the Owner before the work commences a Certificate of Insurance with respect to owned automobiles on ICBC Form No. APV 47 entitled "Confirmation of Insurance Coverage" and with respect to Non-Owned Automobiles including hired automobiles and Contractual Liability on ICBC non-owned automobile policy Form APV 29 (if non-owned automobile coverage is not included under the comprehensive general liability coverage) each signed by an authorized representative of the Insurance Corporation of British Columbia.
24.5 Physical Loss or Damage With Respect to New Buildings under Construction and/or Major Additions to Existing Structures	24.5.1	Responsibility for Placing Insurance: The types of insurance required under this section will be provided and maintained at the expense of the City of Coquitlam during the term of the Contract and will be as follows unless otherwise changed by specific endorsement to these Insurance Specifications.
	24.5.2	Insurance Coverage Required: Builders Risk Completed Value "All Risks" Course of Construction Insurance. This policy will be written in the names of the City of Coquitlam and the Contractor with loss payable as their respective interests may appear.
	24.5.3	Responsibility of Contractor – Limitations of cover and deductibles: The insurance provided by the City of Coquitlam as described herein will not provide the Contractor with full protection against any and all kinds of loss or damage which may arise out of the Contract. It is, therefore, the responsibility of the Contractor to fully understand the scope of the cover provided with particular attention to the exclusions, limitations of cover and deductible provisions contained in the Insuring Agreements of the policies and it is further the responsibility of the Contractor to take out at the Contractor's expense, whatever other additional insurance the Contractor may consider necessary or desirable for his protection subject as hereinafter provided. The Contractor shall act in the same manner on insurance made available through the City of Coquitlam as he would if he had arranged such insurance himself.
	24.5.4	Responsibility of Contractor – Direct Damage Insurance: If the Contractor fails to do all or anything that is required of him concerning insurance, the City of Coquitlam may do what is required and any monies expended by the City of Coquitlam for that purpose shall be repayable and recoverable from the Contractor. Should any action failure, or negligence of the Contractor result in higher insurance costs being incurred by the City of Coquitlam, such additional costs shall be payable or recoverable from the Contractor.

24.5.5 Responsibility of Contractor – Machinery and Equipment Belonging to Others:

Unless otherwise directed by the City of Coquitlam in writing, the Contractor shall carry insurance covering loss or damage to construction machinery, tools and equipment owned by and/or on bare rental from a third party or parties and used by the Contractor in performing the work, which insurance shall be in a form satisfactory to the City of Coquitlam and having coverage in accordance with the actual cash value of such construction machinery, tools and equipment. Such policies shall also provide for subrogation to be waived against the City of Coquitlam. A certified copy of the policy shall be delivered to the City of Coquitlam not later than thirty days after the commencement of work under the Contract.

24.5.6 Contractor's Waiver of Liability to Coquitlam:

The Contractor hereby releases the City of Coquitlam from any and all liability for damages to the extent that such damages are covered by the course of construction insurance referred to in Section 24.5 of these specifications.

24.5.7 Liability of Contractor:

Neither the providing of insurance by the Contractor or the City of Coquitlam in accordance with the requirements hereof, nor the insolvency, bankruptcy, nor failure of any insurance company to pay any claim accruing shall be held to waive any of the provisions of this Contract with respect to the liability of the Contractor or otherwise.

24.5.8 Responsibility of Contractor for protection of work, persons and property:

The Contractor and all persons employed by the Contractor or under his control, and all employees and subcontractors, shall use due care that no person or property is injured, and that no rights are infringed in the prosecution of the work. Contractors shall take particular care to protect the work against loss or damage caused by riot, vandalism or malicious mischief and shall be at the expense of the Contractor provide all necessary safeguards in the form of watchmen and/or watch dog protection to prevent loss or damage of this type. The payment of deductibles is the responsibility of the Contractor and if not paid by the Contractor such amounts shall be deducted by the City of Coquitlam from payment due to the Contractor. These deductibles will normally be \$250.00 each claim.

24.5.9 Action to be taken in the event of loss or damage to the work covered by the Contract:

When any loss or damage occurs to the work or to any materials and supplies on the site of the work, the Contractor shall remove any and all damaged or destroyed property and shall rebuild or replace the damaged or destroyed work, materials, or supplies and complete the work to the satisfaction of the

Owner. For such removal, rebuilding, or replacing, the Contractor shall be entitled to receive from the Owner the amount of insurance monies received by the Owner pursuant to the said adjustment which amount shall be paid to the Contractor as the work of rebuilding or replacing proceeds, and in accordance with the Agreement. Damage or destruction of the whole or any part of the work shall not affect the rights and obligations of either party under the Agreement, except that in such event the Contractor shall be entitled to such reasonable extension of time to complete the work as the Architect and/or Contract Administrator may decide.

24.5.10 Further responsibility of Contractor:

Other than with respect to loss or damage arising out of insured risks and herein before specified, the Contractor shall be responsible for all loss or damage whatsoever which may occur on or to the works completed or otherwise, until such time as the entire works have been completed and the Notice of Acceptance has been issued by the Owner, except that loss or damage caused solely by an act of the Owner.

In the event of any loss or damage occurring, the Contractor shall on notice from the Owner immediately put the works into the condition it was immediately prior to such loss or damage, all at the Contractor's expense except as previously stated.

24.5.11 Owner Not Responsible for Loss or Damage or Loss of Use of Property of Contractors and their Employees:

The Owner will not be responsible for securing or paying for insurance of any kind other than as specified in Section 24.5 of these specifications nor will the Owner have any responsibility whatsoever for loss or damage from whatever cause occurring to property owned, leased, or otherwise in the possession of the Contractor, subcontractors or their employees including, without restricting the generality of the foregoing, machinery, equipment, tools, supplies, and clothing at the construction site or elsewhere including loss of use of same.

24.6 Additional Insured

24.6.1 The Contractor shall ensure the following are named as "additional insured" on the liability policy for this contract:

- The City of Coquitlam

The City may identify private properties that are directly affected by construction. If so, the Contractor shall include the legal owners of these properties named as "additional insured" on the liability policy for this contract.

25.0 MAINTENANCE PERIOD

25.1 Correction of Defects 25.1.4

(Add new clause 25.1.4 as follows):

The Owner is authorized to make repairs to defects or deficiencies if, ten days after giving written notice, the Contractor has failed to make or undertake with due diligence the required repairs. However, in the case of emergency where, in the opinion of the Owner, delay is not reasonable, repairs may be made without notice being sent to the Contractor. All expenses incurred by the Owner in connection with repairs made pursuant to GC 25 shall be paid by the Contractor or may be deducted from the Maintenance Security, or other holdbacks. The Contractor shall promptly pay any shortfall.

**27.0 CONTRACTOR
PERFORMANCE
EVALUATION** 27.1

(Add new clause 27.1 as follows):

After the completion of the Contract, the Contractor will be evaluated on their performance of the Work. The evaluation will provide percentage scores on the following categories:

1. *Contract Administration*
2. *Construction Management*
3. *Schedule Management*
4. *Communications*
5. *Resource Management and Contractor Performance*
6. *Quality Management*

An evaluation summary report will be issued to the Contractor with scores for each of these categories. Upon request, the Contractor may attend a meeting with the City to discuss the evaluation.

This internal evaluation may be reviewed for reference on subsequent tenders with the City. Evaluation scores can form part of the tender analysis and influence contract award decisions.

Evaluation Scores in categories that are below 50% may result in a suspension of tendering privileges with the City.

APPENDIX I

PERFORMANCE BOND

NO. _____ \$ _____

KNOW ALL MEN BY THESE PRESENTS THAT

As Principal, hereinafter called the Principal, and

As Surety, hereinafter called the Surety, are held and firmly bound unto

As Obligee, hereinafter called the Obligee, in the amount of

_____ Dollars
(\$)

lawful money of Canada, for the payment of which sum, well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a written contract with the Obligee, dated the _____

day of _____ 20____, for

in accordance with the drawings and specifications submitted, therefore, which contract, drawings and specifications and addenda thereto, to the extent provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

NOW THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall promptly and faithfully perform said Contract (including any addenda thereto, provided such addenda do not collectively increase the amount to be paid to the Principal by more than twenty per cent (20%) of the amount of the Contract except with the written consent of the Surety) then this obligation shall be null and void; otherwise, it shall remain in full force and effect.

Whenever the Principal shall be, and declared by Obligee to be, in default under the Contract, the Obligee having performed Obligee's obligations thereunder, the Surety may promptly remedy the default, or shall promptly:

1. Complete the Contract in accordance with its terms and conditions, or
2. Obtain a bid or bids for submission to Obligee for completing the Contract in accordance with its terms and conditions, and upon determination by Obligee and Surety of the lowest responsible bidder, arrange for a contract between such bidder and Obligee and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the contract price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term 'balance of the contract price', as used in this paragraph, shall mean the total amount payable by Obligee to Principal under the Contract less the amount properly paid by Obligee to Principal.

Any suit under this Bond must be instituted before the expiration of two (2) years from date on which the Notice of Acceptance under the Contract is issued.

The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Obligee named herein or the heirs, executors, administrators, or successors of Obligee.

IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its Attorney-in-fact, this _____ day of _____ 20____.

SIGNED, SEALED and DELIVERED

In the presence of

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PRINCIPAL

SURETY

APPENDIX II

LABOUR AND MATERIAL PAYMENT BOND

(Private Contracts – Trustee Form)

Note: This Bond is issued simultaneously with another Bond in favour of the Obligee conditioned for the full and faithful performance of the Contract.

KNOW ALL MEN BY THESE PRESENTS THAT

As Principal, hereinafter called the Principal, and

As Surety, hereinafter called the Surety, are, subject to the conditions hereinafter contained, held and firmly bound unto

As Trustee, hereinafter called the Obligee, for the use and benefit of the Claimants, their and each of their heirs, executors, administrators, successors and assigns in the amount of

(\$) lawful money of Canada, for the payment of which sum well and truly to be made, the Principal and the Surety bind themselves, their heirs, executors, administrators, successors and assigns jointly and severally, firmly by these presents.

SIGNED AND SEALED this _____ day of _____, 20____.

WHEREAS, the Principal has entered into a written contract with the Obligee dated the _____ day of _____, 20____, for

which contract is by reference made a part hereof, and is hereinafter referred to as the Contract.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that, if the Principal shall make payment to all Claimants for all labour and material used or reasonably required for use in the performance of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect, subject, however, to the following conditions:

1. A Claimant for the purpose of this Bond, is defined as one having a direct contract with the Principal for labour, material, or both, used or reasonably required for use in the performance of the Contract, labour and material being construed to include the part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment directly applicable to the Contract provided that a person, firm or corporation who rents equipment to the Principal to be used in the performance of the Contract under a contract which provides that all or any part of the rent is to be applied towards the purchase price thereof shall only be a Claimant to the extent of the prevailing industrial rental value of such equipment for the period during which the equipment was used in the performance of the Contract. The prevailing industrial rental

These Supplementary General Conditions must be read in conjunction with the General Conditions contained in the Master Municipal Construction Documents, Volume II, Printed 2009

value of equipment shall be determined, insofar as it is practical to do so, in accordance with and in the manner provided for in the latest revised edition of the publication of the Canadian Construction Association entitled "Rental Rates on Contractors' Equipment" published prior to the period during which the equipment was used in the performance of the Contract.

2. The Principal and the Surety hereby jointly and severally agree with the Oblige as Trustee that every Claimant who has not been paid as provided for under the terms of his contract with the Principal before the expiration of a period of ninety (90) days after the date on which the last of such Claimant's work or labour was done or performed or materials were furnished by such Claimant, may as a beneficiary of the trust herein provided for, sue on this Bond, prosecute the suite to final judgment for such sum or sums as may be justly due to such Claimant under the terms of his said contract with the Principal and have execution thereon. Provided that the Oblige is not obliged to do or take any act, action or proceeding against the Surety on behalf of the Claimants or any of them to enforce the provisions of this Bond. If any act, action or proceeding is taken either in the name of the Oblige or by joining the Oblige as a party to such proceedings then such act, action or proceeding shall be taken on the understanding and basis that the Claimants or any of them who take such act, action or proceeding shall indemnify and save harmless the Oblige against all costs, charges and expense or liabilities incurred thereon and any loss or damage resulting to the Oblige by reasons thereof. Provided still further that subject to the foregoing terms and conditions, the Claimants or any of them may use the name of the Oblige to sue on and enforce the provisions of this Bond.
3. No suit or action shall be commenced hereunder by any Claimant:
 - a) unless such Claimant shall have given written notice within the time limits hereinafter set forth to each of the Principal, Surety and Oblige, stating with substantial accuracy the amount claimed. Such notice shall be served by mailing the same by registered mail to the Principal, Surety and Oblige at any place where an office is regularly maintained for the transaction of business by such persons or served in any manner in which legal process may be served in the Province or other part of Canada in which the subject matter of the contract is located. Such notice shall be given (i) in respect of any claim for the amount or any portion thereof required to be held back from the Claimant by the Principal under either the terms of the Claimant's contract with the Principal or under the Mechanic's Liens Legislation applicable to the Claimant's contract with the Principal whichever is the greater within one hundred and twenty (120) days after such Claimant should have been paid in full under the Claimant's contract with the Principal; (ii) in respect of any claim other than for the holdback or portion thereof referred to above within one hundred and twenty (120) days after the date upon which such claimant did or performed the last of the work or labour or furnished the last of the materials for which such claim is made under the Claimant's contract with the Principal.
 - b) after the expiration of one (1) year following the date on which Principal ceased work on the Contract including work performed under guarantees provided in the Contract.
 - c) Other than in a court of competent jurisdiction in the Province or District of Canada in which the subject matter of the Contract or any part thereof is situated and none elsewhere, and the parties hereto agree to submit to the jurisdiction of such court.
4. The amount of this Bond shall be reduced by and to the extent of any payments made in good further and in accordance with the provisions which may be filed of record against the subject matter of the Contract, whether or not claim for the amount of such lien be presented under and against this Bond.
5. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

IN TESTIMONY WHEREOF, the Principal has hereto set its hand and affixed its seal, and the Surety has caused these presents to be sealed with its corporate seal duly attested by the signature of its Attorney-in-fact the day and year first above written.

SIGNED, SEALED and DELIVERED

In the presence of

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PRINCIPAL

SURETY

APPENDIX III

CERTIFICATE OF INSURANCE

This Certificate issued to the City of Coquitlam is to certify that policies of insurance, as described below, have been issued to the Insured named below and are in force at this time. It is understood and agreed that thirty (30) days' prior written notice by registered mail of any material alterations, transfer, assignment or cancellation of any of the policies listed below, either in part or in whole, will be given to the holder of this Certificate.

- A. This Certificate is issued to: **City of Coquitlam**
3000 Guildford Way
Coquitlam, BC V3B 7N2
- Named Insured and Mailing Address:
- B. CONTRACT NUMBER AND/OR NAME
- Description of the Work:
- C. INSURANCE POLICY
- Name of Insurer:
Policy Number:
Effective Date:
- Liability Limit:
Expiry Date:
- D. INSURANCE COVERAGE
- COMMERCIAL GENERAL LIABILITY** coverage is required to insure against liability from the activities arising out of operations or work in connection with the above-described project, including liability arising out of the use of City property.
- D.1 The minimum limit shall be \$5,000,000.00 inclusive per occurrence against bodily injury, personal injury and property damage.
- D.2 The City of Coquitlam, its employees, officers, agents and volunteers are added as Additional Insureds, but only with respect to operations conducted by or on behalf of the Named Insured in connection with the above-described project, operations or work.
- D.3 This insurance shall be primary as regards the City of Coquitlam, its employees, officers, agents and volunteers as Additional Insureds.
- D.4 Any deductible or reimbursement clause contained in the policy shall not apply to the City of Coquitlam and shall be the sole responsibility of the Named Insured.
- D.5 The insurance shall include the following coverages:
- D.5.1 Cross Liability Clause
- D.5.2 Non-Owned Automobile Liability
- D.5.3 Unlicensed Automobile Liability
- D.5.4 Blanket Contractual Liability
- D.5.5 Broad Form Property Damage Liability
- D.5.6 Owner's & Contractor's Protective Liability
- D.5.7 Products & Completed Operations Liability
- D.6 Indicate provision of special coverage for this project as required by the City:
- YES NO [Special Coverage Description](#)
- () (X) Shoring and Underpinning Hazard
- () (X) Pile Driving and Vibrations
- (X) () Excavation Hazard
- () (X) Demolition
- () (X) Blasting
- D.7 () () **PROFESSIONAL LIABILITY INSURANCE for Consultant Service Agreements**

The *Consultant* shall obtain and maintain for the duration of the *Services* as described in the Agreement, at its own cost, Professional Liability Insurance on terms and from an insurer satisfactory to the City of Coquitlam.

The Professional Liability Insurance policy shall insure the *Consultant's* legal liability for errors, omissions and negligent acts, to the extent of no less than \$500,000.00 per Claim and \$1,000,000.00 Aggregate.

Authorized Signature and Stamp

Date

Name and Title

City' broker to return to City Representative

Department

These Supplementary General Conditions must be read in conjunction with the General Conditions contained in the Master Municipal Construction Documents, Volume II, Printed 2009



APPENDIX IV

PRIME CONTRACTOR DESIGNATION

Subject: **Prime Contractor Designation**
Contract #: **84311H**
Contract Name: **2019 & 2020 IC Installations & Water Service Renewals** (the "Project")

_____ (the "Contractor") represents, acknowledges and agrees that:

1. in accordance with section 118 of the Workers Compensation Act, R.S.B.C. 1996, c. 492 (the "Workers Compensation Act"), the Contractor shall be the "Prime Contractor" and is qualified to act as the "Prime Contractor" in respect of the Project ;
2. the Contractor accepts the duties and responsibilities for coordination of health and safety in accordance with the Workers Compensation Act and further agrees that it will do everything necessary to establish and maintain a system or process that will insure compliance with the Workers Compensation Act and the Regulations thereto;
3. the Contractor shall fulfill all the obligations of an "Owner" under section 119 of the Workers Compensation Act in respect of the Project site; and
4. that the City of Coquitlam has fulfilled its obligations as an "Owner" under section 119 of the Workers Compensation Act, in respect of the Project site.

Prime Contractor Name & Address:

Prime Contractor Signature

Date

Print Name

Please return a signed copy of this memo to the City of Coquitlam. If you have any questions, please contact the City's Health and Safety Advisor at 604-927-3068.

Supplementary Contract Specifications

These Supplementary Contract Specifications must be read in conjunction with the Specifications contained in the Master Municipal Construction Documents, Volume II, Printed 2009 and the City of Coquitlam Supplementary Specifications and Detailed Drawings

File #: 11-5330-20/84311/1 Doc #: 3184283.v1

Supplementary Contract Specifications

to the
MASTER MUNICIPAL SPECIFICATIONS
Volume II – Platinum Book

2019 & 2020 IC Installations & Water Service Renewals
CONTRACT 84311H

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The following Supplementary Specifications are to be considered part of the Specifications. These Supplementary Specifications take precedence over the Master Municipal Specifications.

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CONTRACT SPECIFIC NOTATIONS

**1.00 CONTRACT SPECIFIC
INSTRUCTIONS**

**1.01 Coordination of Work
with CMBC**

Major Roads & Community Corridor Roads are bus routes; therefore the Contractor shall be responsible to consult with the Coast Mountain Bus Company (CMBC) regarding delays, detours, temporary bus stop closures and any other works affecting the transit service in the area.

1.02 Outside Agency Approval

In accordance with the Contract Documents, the Contractor at his own cost, is responsible to consult with and obtain any approval required to meet and comply with all the conditions required from outside agency such as, but not limited to, BC One Call, Metro Vancouver, School District, BC Hydro, Telus, Kinder Morgan, and Fortis BC in the area of the place of Work.

**1.03 Cooperation with
Emergency and
Maintenance
Activities**

The Contractor will be responsible to cooperate with regular maintenance or emergency vehicles and staff for access to the site when required including:

- Fire, Police, and Ambulance
- Progressive Waste (garbage pick-up)
- City Utilities Maintenance (or representatives)

The Contractor shall ensure that garbage brought out by residents is picked up by garbage collection company.

1.04 Site Safety

The Contractor is responsible to ensure the construction site is safe at all times for workers, pedestrians, and vehicle traffic. At all times, the Contractor must ensure that the site has all potentially hazardous areas appropriately identified and protected, all cables, piping, and equipment shall be secured from the public and also must provide appropriate signage, lighting, and markings for the direction of vehicle and pedestrian traffic, all to ensure the safety of the public. Supply and use of this equipment is considered incidental to the contract.

Manhole lids, valve boxes and other appurtenances within the roadway that may present a traffic hazard during construction must be clearly marked for traffic.

1.05 Lane Closure Restrictions

Refer to: **Appendix A: Traffic Management Detail Specifications.**

A Road and Sidewalk Closure Permit is required for each instance of closure and will be valid for a maximum period of one (1) week and, if still necessary, re-submittal of a Road and Sidewalk Closure Request is required.

A copy of the approved Road and Sidewalk Closure Permit must be held on site by both the Site Superintendent and the person/company responsible for the traffic control implementation.

The Contractor must take the above information into account in the preparation and submission of the Tender.

Costs to complete the works taking the above restrictions into consideration shall be incidental to work described in other sections unless otherwise shown in the Schedule of Quantities and Prices.

1.06 Hours of Work

Refer to: **Appendix A: Traffic Management Detail Specifications.**

Written permission from the Contract Administrator will be required for any works to be performed on Saturday or Sunday.

In case the Contractor decides to work on a day which is a Statutory Holiday, he shall provide the Contract Administrator in writing at least (4) days in advance of such holiday, stating those places where said work is to be conducted. In case the

CONTRACT SPECIFIC NOTATIONS

Contractor fails to give such notice in advance of any Statutory Holiday, no work within the terms of the contract shall be done on such holiday.

The cost of inspections on a Statutory Holiday by City staff/s will be at Contractor's expense unless approved in writing otherwise by Contract Administrator.

1.07 Schedule of Work

All work under this Contract is to be completed within the designated Contract Duration. The Contractor must provide sufficient resources in a continuous effort and site presence to complete all the work within the allotted time. As set out in the MMCD the Contractor must provide updates to the construction schedule monthly.

1.08 Survey Layout

The Contractor is responsible to provide all survey layout for construction to ensure the construction meets the design specifications and/or elevations as shown on the Contract Drawings or as amended on-site by the Contract Administrator. The Contract Administrator will provide AUTOCAD drawing file to the Contractor as required.

1.09 Location of Existing Utilities

Before commencing any Work at the Place of the Work, the Contractor shall be responsible to locate in three dimensions all underground utilities and structures indicated on the Contract Documents as being the Place of the Work. The Contractor shall also be responsible to consult with all the utility corporations that provide electricity, communications, gas or other utility services in the area of the Place of Work, to locate all underground utilities for which they have records. The Contractor shall also locate in three dimensions any other utilities or underground structures that are reasonably apparent in an inspection of the Place of the Work. Cost to do the pre locating of all the utilities will be incidental.

The contractor is responsible to verify the depth and location of all utilities (watermains, storm mains, sanitary mains & etc.), including outside agency utilities (i.e. Fortis BC Mains, Kinder Morgan Pipeline, BC Hydro & Metro Vancouver.) and service connections (water, storm & sanitary services at the mains & property lines) by hand digging or by Hydro-Vac in the presence of the Inspector. Contact BC One for location of outside agency utilities.

Pre-locates must be completed as soon as possible after award of the contract so changes can be completed if necessary by *Contract Administrator* prior to site construction. The Contractor is responsible to exert all effort to complete the pre-locates using the utility connection cards, BC One Call, as-built records, design drawings, site inspections, sonde, camera, dye testing, test/pot holing and use of utility locating company. If pre-locates is not successful in spite of the efforts using the above, compensation for a maximum of 2 labours for 1 hour per intended pre-locates may be considered at the discretion of the Contract Administrator.

The contractor will not receive any compensation or allowance for delays if work is halted due to utilities & services connections not located prior to commencing construction.

City of Coquitlam does not guarantee water, sanitary and storm service connections are perpendicular to the mains or property lines. The City does not guarantee accuracy of the location and depth provided in the connection card.

Payment for this work will be treated as incidental to payment for work described in other Sections.

1.10 Manholes & Valves

Access to manholes and valves must be maintained at all time for city utilities crews and external utility companies. In case of an emergency the cost for exposing any buried manhole or valve covers during construction will be paid by the contractor.

**1.11 Utility Adjustments -
City Infrastructure and/or**

The Contractor is responsible for adjusting all utilities, belonging to Coquitlam and/or other agencies that are affected by the road works. All adjustments to utilities must be

CONTRACT SPECIFIC NOTATIONS

Other Agency Infrastructure	completed to the satisfaction of the utility owner. Utility adjustment will be considered incidental to the contract unless otherwise noted in the Contract Documents.
	The Contractor should note that certain utility owners may decide to complete their own adjustments. The Contractor will be required to cooperate with any utility company providing their own adjustments.
	The Contractor shall be responsible to contact the appropriate utility company within minimum of seventy two (72) hours of the work. No adjustment shall be made without the written approval of the utility company.
	<u>All manholes must be vertically adjusted a minimum of twenty four (24) hours prior to paving.</u>
1.12 Temporary Asphalt Pavement Restoration	The Contractor will be required to backfill all trenches (in paved areas) and place a temporary patch (75mm of hot mix asphalt), all aspects of the temporary patch aside from the thickness will be as per Coquitlam Standard Drawing COQ-G4, the same day excavation is made, unless otherwise approved by the Contract Administrator.
1.13 Accesses	The Contractor is responsible to maintain all business/residential vehicles and pedestrian accesses open at all times, the contractor may provide temporary accesses if the affected owner agrees. All costs associated with temporary accesses will be at the contractor's expense.
1.14 Pavement Markings	The Contractor will be responsible for temporary traffic markings necessary for traffic direction and safety until permanent markings are installed.
1.15 Verification of Dimensions and Quantities	Before proceeding with work, Contractor is to visit site and check and verify dimensions and quantities. Report variations between drawings and site conditions to the Contract Administrator before proceeding with work.
1.16 Precautions	Protect areas under construction from damage caused by excessive erosion, flooding, heavy rains, etc. Repair or replacement of unprotected damaged areas and as directed by the Contract Administrator will be at no cost to the Owner.
1.17 Service Disruptions	Contractor shall contact all residences and businesses regarding sewer shutdown for tie-ins. Contractor is responsible for ensuring that any sewer service disruptions will not affect the business operation in the area or Contractor may provide temporary alternative to the businesses affected. Payment is incidental to work described in other sections. See 2.05 for order of construction.
1.18 FORTIS BC Emergency Protocol	In an emergency, gas pipeline rupture or leak, Contact Fortis BC 24 Hour Emergency Line (1-800-663-9911) & Fire Department (911) immediately and then City Coquitlam Utility Control Centre (604-927-6287).
1.19 Fortis BC – minimum 0.3m clearance	Minimum 0.3m clearance is required between the gas mains/services and the water service pipes. The City of Coquitlam does not guarantee that the existing water services meet this requirement. It is the contractor's responsibility to expose the gas main & service crossings and confirm that it meets the minimum separation. No additional payment above the unit price bid will be made if additional work is required to meet the 0.3m clearance specification.
1.20 Water Service Replacements	Pipe bursting or an alternative trenchless method of construction as approved by the Contract Administrator may be used to replace water services. The City of Coquitlam does not guarantee that the trenchless method of construction will be successful at the Place of Work. No additional payment above the unit price bid will be made if the selected trenchless method of construction is unsuccessful and open excavation is ultimately required.

CONTRACT SPECIFIC NOTATIONS

2.00 CONSTRUCTION ACTIVITY

2.01 Notice to Residents and Businesses

Residents and businesses affected by the proposed construction must be notified by the Contractor at least 7 days prior to commencement of works and be provided with the construction schedule and Contractor's contact information.

2.02 Site Clean-up During Construction and End of Construction

The Contractor will be responsible for the complete clean-up of the work site during construction & at the end of construction and prior to the Substantial Performance review. This work is considered incidental to the Contract.

The work will include cleaning of all catch basins periodically or as directed by the Contract Administrator within the Work area, or nearby location as affected by the Work, regardless of the condition of the catch basins prior to starting the Work. All cleaning is to be performed by vacuum truck to the satisfaction of the Contract Administrator and will include off-site disposal of waste material.

Payment for this work will be treated as incidental to payment for work described in other Sections.

2.03 Construction Material in Sewer manholes and Pipe

The Contractor is responsible to ensure that construction activities do not deposit construction materials (eg. gravels) into the storm sewer or sanitary sewer manholes or pipe. The City has a video record of the pipe before construction. Prior to Substantial Performance, the City may again video inspect the lines to ensure no problems exist due to construction activities under this contract. If problems are encountered, the Contractor will be responsible for the cost of the video and all costs associated with the cleaning of the pipe.

2.04 Construction on Multiple Locations / Restoration Work

The Contractor must complete all Works on a particular street, including restoration, before proceeding on a different street unless approved by the Contract Administrator.

2.05 Order of Construction

The contractor will be required to conduct the work in the order listed below, unless otherwise approved by the Contract Administrator:

1. Laurentian Crescent, Anchor Place, Cable Court, Capstan Place, Channel Court, Daybreak Avenue, Dory Street, Hawser Avenue, Passage Drive, Pilot Drive, Plimsoll Street, Smith Ave, Spar Drive.
2. Colinet Street, Cottonwood Avenue, Fairview Street, Florence Street, Folsom Street.

3.00 MANDATORY MEETINGS AND CONTRACTOR REPRESENTATIVES AND SUBCONTRACTORS

3.01 Pre-Construction Meeting Requirements

After the Award of the Contract, the Contractor (Project Manager & Superintendent) will be required to attend a Pre-Construction Meeting with the Contract Administrator and provide all necessary information required by the Contract Administrator prior to provision of a Notice to Proceed. Items required to be provided at the meeting include:

1. A Detailed Construction Schedule showing the start date & completion date and the durations of major work components showing how all work will be completed within the Contract Duration.
2. Proof of insurance
3. Performance Bond and Labour and Materials Payment Bond
4. WCB Clearance Letter and copy of Notice of Project
5. City of Coquitlam Business License
6. A copy of portions of your Health and Safety Plan including the Title Page, Table of Contents, and portion showing latest revision date.

CONTRACT SPECIFIC NOTATIONS

7. Signed Prime Contractor Designation letter

3.02 Contract Schedule,
Contract Duration, and
Charges

A detailed, realistic construction schedule for this project will be required to be presented at the pre-construction meeting. The schedule must show major components and durations. All work under this project is to be completed within the designated Contract Duration as contained in the signed **Contract Agreement**, or as formally amended.

Failure to complete the work by the Substantial Performance Date will result in charges to the Contractor in the amount as detailed in Contract's **Supplementary General Conditions, Section 13 – DELAYS, Item 13.8.1 (a)** as amended.

3.03 Contract Superintendent
and Subcontractors

In compliance with the **MMCD General Conditions, Section 4.7, Superintendent**, the Contractor shall have a competent senior representative, (the "Superintendent") in **FULL TIME attendance** at the Place of Work while work is being performed for the duration of the contract. **This (FULL TIME) attendance is also required when work is being performed by Subcontractors.**

Work done by Subcontractors is to be directed by the Superintendent and monitored on site ensuring conformance to the Contract Documents and other particular direction to the Superintendent by the Contract Administrator. The Owner is not responsible for the direction of Subcontractors.

3.04 Changes of Contractor
Representatives &
Subcontractors

The Superintendent and Subcontractors indicated in the Form of Tender shall not be changed unless:

1. The Owner requests a replacement
2. The Contractor submits an application for a change, in writing, to the Contract Administrator with the change being approved in writing.

3.05 Mobilization and
Demobilization

Payment for mobilization and demobilization of all equipment, labour and materials (both from the Contractor and all sub-contractors) shall be incidental.

END OF SECTION

1.0 GENERAL

1.3 Submission

Delete 1.3.2 and
replace with the
following

Submit one copy of an accurate project record document in final form prior to applying for Substantial Performance including any video report. Record documents to include changes in the Issued for Construction Drawings, new elevation & location of all utilities, utility crossings, manhole rim, catchbasin rim, vaults, valve boxes and inverts affected by the work. Legal Holdbacks will not be released until record drawings have been submitted and accepted by the Contract Administrator.

Add Clause 1.3.6

Submit Inspection Chamber and Water Service record spread sheet (Appendix B) at the project completion with all the required information for the items installed.

END OF SECTION

1.0 QUALITY

The Contractor shall provide a final product conforming to the Contract Documents and the intent of the work. The work is to be accurate to the dimensional and tolerance requirements of the contract.

The intent of this project is to install inspection chambers, repair service connections as required, repair storm and sanitary mains, install hydrants, renew water service connections and complete all surface restorations. All Work must be free from any defects, leaks and deformities.

Payment will be subject to adjustments based on quality assurance tests performed by the Contract Administrator.

1.1 Quality Control (QC) by Contractor

The MMCD (2009) definition of "Quality Control" is the process by which the Contractor checks specific materials, products, and workmanship to ensure strict conformance with the Contract Documents.

The Contractor is fully responsible for quality control of the materials, production, and construction processes. Quality control tests shall be performed by the Contractor, at their own expense, to ensure that products meet the contract specifications.

Failure by the Contractor to conduct adequate quality control testing during production and construction will negate the Contractor's ability to appeal the quality assurance tests used for acceptance/rejection of the work.

Under no circumstances will QC test results produced after completion of the Quality Assurance (QA) results be considered for appeal purposes

Any changes in the Work with respect to the location, grade, or line shall be approved in advance by the Contract Administrator. Failure to notify the Contract Administrator of changes in writing may result in rejection of Work.

1.2 Inspection of Work, Quality Assurance, and Material Testing, by the Owner

The MMCD (2009) definition of "Quality Assurance" means the process by which the Owner evaluates if the work is being constructed in accordance with the Contract Documents. This definition will be used for this contract

The *Contract Administrator* will provide construction review through spot inspections and spot materials testing for Quality Assurance.

Any materials testing results indicating a non-conformance to the Contract Documents will require construction corrective action by the Contractor. The Contractor shall have no claim for delays, interruptions, double-handling of materials, rejection of materials, or any other cause brought about by such tests, including awaiting the outcome of such tests.

Costs for all subsequent testing to corrective action to verify conformance to the Contract Documents will be the full responsibility of the Contractor. Inspection review by the Owner will not relieve the Contractor from providing a product that meets or exceeds the requirements of the Contract Documents.

1.3 Inspection

Materials testing shall be as described in MMCD General Conditions, Section 4.12 with the following change:

Delete Section 4.12.2(a) and insert the following:

Where the MMCD specification clauses for Inspection and Testing indicate the Contract Administrator will arrange for all testing for work described in this section will be amended to read The Contractor will arrange for and pay for all testing for work described in this section. The testing shall take place at the following prescribed rates and as directed by the contract administrator. The contract administrator has the authority to call for testing, up to the rates and frequencies specified, at the Contractors cost.

All testing covered under this item shall be performed by a CSA/CCIL certified laboratory and technicians with copies of all test results to be sent directly to the Contract Administrator. Re-testing resulting from failed first tests shall be at the Contractors expense.

1.4 Survey Layout

All Survey Layout will be completed by the Contractor in accordance with the Contract Drawings and Coordinate System set out within them. The Contractor will be provided digital AutoCAD files but shall be responsible to confirm elevations and tie in locations and report any discrepancies prior to construction.

1.5 Testing

Contractor shall carry out inspection and testing (QC) to ensure compliance with Contract Documents. Contractor shall submit test results within one week of testing to the Contract Administrator.

The Contractor shall provide test results prior to the preparation of the payment certificate.

**1.6 Contractors
Responsibilities**

Furnish labour and facilities to:

1. Provide access to work to be inspected
2. Facilitate inspections and tests
3. Make good work disturbed by inspection and tests

1.7 Access to Work

Allow inspection testing agencies access to Work.

1.8 Tests

Test rates and frequencies (excluding failed tests), when not defined in the MMCD, Contract Drawings or Detail Specifications Sections shall be at the following frequencies or as directed by Contract Administrator:

1. Trench Backfilling and Compaction

1.1 Compaction: 1 test / 10 lm / 300mm lift

1.2 Sieve: 1 test / placed material / 50 m³

2. Granular Base

2.1 Compaction: 1 test / 500m² / 100mm depth of granular base

2.2 Sieve: 1 test / placed material / 100 m³

3. Granular Subbase

3.1 Compaction: 1 test/500m² / 0.15m depth of granular subbase

3.2 Sieve: 1 test / placed material / 100 m³

4. Embankment (Subgrade)

4.1 Compaction: 1 test/ 50m² / 0.15m depth of fill

4.2 Sieve: 1 test / placed material / 100 TONNES

5. Asphalt

5.1 Marshall test: 1 test per 250 TONNES placed, min. 1 test / day
ASTM D1559, D3203, C117, C136

5.2 Superpave: 1 test per 250 TONNES placed, min. 1 test / day
CAI-SP2, ASTM D3203, C117, C136

5.3 Cores: 1 per 500 m²/lift

5.4 Continuous asphalt density testing during paving.

6. Subgrade Preparation

6.1 Compaction & Moisture: 1 test / 500 m²

7. Concrete Tests

7.1 Air, Slump & 1 Set Cylinders: 1 test / 10 m³, min. 1 set / day

8. Reclaimed Materials

8.1 Compaction: 1 test/500m² / 0.15m depth of reclaimed materials

**1.9 Measurement for
Payment**

Payment for all work performed under this section will be incidental to payment for work described in other Sections.

END OF SECTION

1.0 GENERAL

1.6 Payment

Delete 1.6.1 and
replace with the
following

Payment for all work described in this section will be incidental to
payment for work described in other Sections unless otherwise
shown in Schedule of Quantities and Prices.

END OF SECTION

1.0	GENERAL	Add 1.0.6	<p>The <i>Contractor</i> is responsible for all temporary traffic control on the streets required for completion of the work. The <i>Contractor</i> will be responsible to provide a Traffic Management Plan (TMP) for approval (5) five working days prior to any lane closures taking place. TMP is to be prepared by a professional certified by the American Traffic Safety Services Association.</p> <p>The TMP shall outline the approach to traffic management, show recognition and minimization of risks indicates signing locations, identify Traffic Control Persons (TCP) stations, show lane shifting and proposed closures.</p>
		Add 1.0.7	<p>A Road and Sidewalk Closure Permit is required from Coquitlam for all work affecting pedestrian and traffic flow related to construction. A permit is required for each specific construction interference with pedestrian and traffic flow. The Contractor must follow the approved TMP. Any changes to this TMP must be submitted to City's Traffic Operations for approval. The road and sidewalk closure permit form can be obtained for use from the City's website at http://www.coquitlam.ca/city-services/licenses-and-permits/road-and-sidewalk-closure-permit.aspx.</p>
		Add 1.08	Refer to Appendix A – Traffic Management Detail Specifications
1.4	Traffic Control	Add 1.4.9.3.1	<p>The <i>Contractor</i>, as required by the <i>Contract Administrator</i> and the City, is to supply Construction Zone information signs (stationary), refer to MMCD 01 58 01 for the required identification signage.</p> <p>The <i>Contractor</i> is responsible for the removal of the signs at the completion of the work.</p>
		Delete 1.4.10.1.3 and replace with the following	When workmen or equipment are employed over travelled way over brow of hills, around sharp curves or at other locations where oncoming traffic would not otherwise have adequate warning.
1.5	Measurement for Payment	Delete 1.5.1 and replace with the following	<p>Payment for all work performed under this section including submission of Traffic Management Plan (TMP), Traffic Control Persons (TCP) & all temporary traffic signs, devices as required for traffic & pedestrian safety; and all other items described in the Traffic Regulation Section, and all labor, material, equipment and work described under Appendix A: Traffic Management Detail Specifications shall be treated as incidental to payment for work described in other Sections unless shown otherwise in the Schedule of Quantities and Prices.</p>

END OF SECTION

ENVIRONMENTAL PROTECTION

1.0 GENERAL

1.0.3 Erosion and
Sediment Control
Supervisor

Add 1.0.3

The Erosion and Sediment Control (ESC) Supervisor is the Qualified Professional who is experienced in implementing ESC Plans and who is responsible for the inspection and monitoring of ESC Facilities to ensure these are installed and maintained in accordance with the ESC Plan, and if necessary, are modified during construction to ensure compliance with the Stream and Drainage System Protection Bylaw No. 4403, 2013.

1.2 Temporary Erosion
and Sediment
Controls

Delete 1.2.1 and
replace with the
following

Properly drain all portions of the site. Protect the site and the watercourses to which it drains, directly or indirectly, against erosion and siltation in accordance with a Sediment Control Plan under the City of Coquitlam Stream and Drainage System Protection Bylaw No. 4403, 2013 during construction and until the maintenance period is completed. Ensure no silt, gravel, debris or other deleterious substance resulting from construction activity discharges into existing drainage systems or watercourses or onto highways or adjacent property. The *Contractor* is responsible for all damage that may be caused by water backing up or flowing over, through, from or along any part of the work or otherwise resulting from his operations.

Keep existing culverts, drains, ditches and watercourses affected by the work clear of excavated material at all times. When it is necessary to remove or alter any existing drainage structure, provide suitable alternative measures for handling the drainage. Adequately support culverts and drainpipes across trenches to prevent displacement and interference with the proper flow of water due to trench settlement.

Provisions must be made to allow safe conveyance of flow during non-working hours. The Contractor is solely responsible for any repairs that may be required following such an event.

Sweep streets, and clean catch basins, manhole sumps, detention tanks, and maintain siltation controls as often as the *Contract Administrator* and the City deems necessary.

Follow all Federal and Provincial regulations and guidelines respecting protection of fish, fish habitat, and watercourses.

Delete 1.2.2.2 and
replace with the
following

Do not operate construction equipment in watercourses.

Add 1.2.2.9

In any Watercourse, or In-Stream Works:

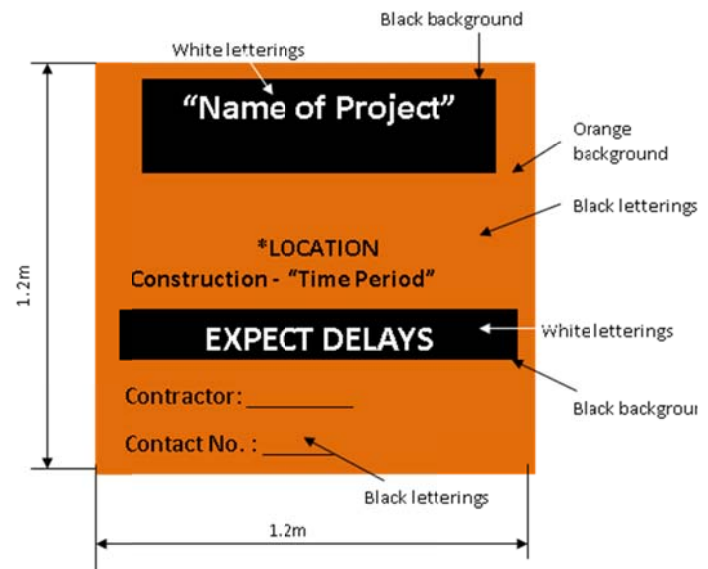
- .1 Prior to any work, Erosion and Sediment control measures should be in place; and
- .2 Fish salvage completed by Environmental Monitor; and
- .3 Temporary water passages or other approved means of handling waterflow in creeks installed to prevent or minimize any impact to fish and aquatic habitat as approved by Contract Administrator.

Failure of the Contractor to properly address concerns relating to this Section will result in shut-down of the work. No claim will be accepted by the Owner for costs associated with this work shut-down.

1.4	Environmental Protection	Add 1.4.3.5	Immediately contain and clean up any leaks and spills of prohibited materials at the <i>Place of Work</i> .
		Add 1.4.3.6	Ensure that a well-stocked spill kit is on-site at all times and that the <i>Contractor's</i> employees are familiar with appropriate spill response techniques.
		Add 1.4.3.7	Immediately notify the <i>Contract Administrator</i> and the City of any leaks or spills of prohibited materials that occur at the <i>Place of Work</i> .
		Add 1.4.3.8	Ensure that any fuel stored on-site is located at least 30 metres from the nearest stream, and is placed within a bermed and lined area, in order to prevent leaks or spills into the environment.
		Add 1.4.3.9	Ensure that no equipment fueling or servicing is conducted within 30 metres of a stream.
1.9	Archaeological / Historical Resources	Add 1.9	Immediately cease work and inform the <i>Contract Administrator</i> and the City, if any archaeological or historical resources are encountered during construction. Leave these resources in place and do not disturb them in any way.

END OF SECTION

1.1	Section 01 58 01 includes	Add 1.1.3	Work described in Appendix A – Traffic Management Detail Specifications.
1.3	Measurement and Payment	Delete 1.3.1 and replace with the following	Payment for the installation of 1.2m x 1.2m static construction notification signs (shown below) with all the details as described in Appendix A – Traffic Management Detail Specifications, includes supply, placement & removal and will be incidental to payment for work described in other Sections, unless shown otherwise in the Schedule of Quantities and Prices.



Add 1.3.2	Payment for changeable message signs (CMS) including supply, placement, communication management & removal as required for traffic & pedestrian safety will be incidental to payment for work described in other Sections, unless shown otherwise in the Schedule of Quantities and Prices.
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END OF SECTION

1.4	Measurement and Payment	Add to Clause 1.4.4	Payment will be as shown in Schedule of Quantities and Unit Prices based on actual work completed. Payment includes removal and disposal offsite of all materials removed to complete the work and as described in Contract.
		Add to Clause 1.4.5	Payment will be as shown in Schedule of Quantities and Unit Prices based on actual work completed. Payment includes removal and disposal offsite of all materials removed to complete the work and as described in Contract.
2.1	Materials	Delete 2.1.5.1 and replace with the following	Hand-formed and hand-placed concrete: Slump: 80 mm Air entrainment: 5 to 8%. Maximum aggregate size: 20 mm. Minimum cement content: 335 kg/m ³ . Minimum 28 day compressive strength: 32 MPa.
		Add 2.1.7	Tactile warning surface tile shall be replaceable cast-in-place style. Truncated domes shall be in square grid pattern with a 5 mm nominal raised height, base diameter of 23 mm and top diameter of 11.5 mm. Dome spacing range shall be between 40 mm – 60 mm. Color of the panel shall be Federal Yellow (Y) per US Federal Standard 595B Table IV, Color No. 335. Minimum size of the panel shall be 600 mm by 1200 mm.
3.0	EXECUTION		
3.5	Concrete Placement	Delete 3.5.9 and replace with the following	The <i>Contractor</i> is responsible for adjusting all utility manhole frames and valve boxes, belonging to Coquitlam and/or other agencies that are affected by the road works. All adjustments to utilities must be completed to the satisfaction of the utility owner. Riser rings will not be accepted.
			The <i>Contractor</i> should note that certain utility owners may decide to complete their own adjustments. The <i>Contractor</i> will be required to cooperate with any utility company providing their own adjustments.
			The <i>Contractor</i> shall be responsible to contact the appropriate utility company within a minimum of seventy two (72) hours of the work. No adjustment shall be made without the written approval of the utility company. <u>All manholes must be vertically adjusted a minimum of twenty four (24) hours prior to concrete placement.</u>
3.9	Expansion Joints	Delete 3.9.1 and replace with the following	Form transverse expansion joints at both ends of curb returns and at maximum spacing of 9.0 m for sidewalks, 30.0 m of curb and gutter, at each end of driveway crossing, at tangent point of circular work, and on either side of catch basins.

END OF SECTION

1.0 GENERAL

1.4 Measurement and Payment

Delete 1.4.1 and replace with the following

Payment for all work performed under this section will be incidental to payment for work described in other Sections.

2.0 PRODUCTS

2.7 Granular Pipe Bedding and Surround Material

Add to 2.7.1

All recycled or other extraneous materials shall be approved by *Contract Administrator* and the City prior to use.

2.10 Granular Base

Delete 2.10.2

Add 2.10.3

All 25 mm minus granular base is to conform to the following gradation specifications:

Sieve Designation (mm)	Percent Passing (%)
25	100
19	80-100
12.5	75-90
9.5	50-85
4.75	35-70
2.36	25-50
1.18	15-35
0.30	5-20
0.075	0-5

Add 2.10.4

The intention of the Gradation Chart is to identify the desired mix of size of aggregate in the granular base. The Target Percentage Passing is the middle of the shown Range.

Tests that show sieve values of Percent Passing that are consistently low or consistently high in two (2) or more consecutive tests will be considered to be non-conforming.

2.11 Recycled Aggregate Material

Delete 2.11.1 and replace with the following

Aggregates containing recycled material may be utilized if approved by the Contract Administrator and the City. In addition to meeting all other conditions of the specifications, recycled material should not reduce the quality of the construction achievable with quarried materials. Recycled material shall consist only of aggregates, crushed portland cement concrete, or asphalt that is free of impurities.

2.13 Low Permeability Mineral Soil

Add 2.13

Approved low permeability mineral soil shall consist of either high fines (15 to 30% passing 75µm sieve) silty sand or medium to low plasticity clay, free of organics and other deleterious materials and/or debris.

END OF SECTION

CLEARING AND GRUBBING

1.2	Definitions	Add 1.2.5	Trimming of trees, hedges and shrubs, and snag cutting of trees, removal of hedges and shrubs is included with Clearing and Grubbing. Co-ordinate with property owners and use the services of a certified arborist when necessary. Generally trees, bushes and shrubs shall be cleared for the full width of the work, within the construction limits, with the extent of clearing minimized.
			Final height of the snag cut will be per approval of the Contract Administrator.
			It is the Contractor's responsibility to obtain permission from the property owners.
		Add 1.2.6	Clearing and grubbing does not include removal of grass, topsoil and ditch vegetation as these items are deemed part of trench excavation.
1.4	Measurement and Payment	Delete 1.4 and replace with the following	Payment for all work performed under this section will be incidental to payment for work described in other Sections, unless shown otherwise in the Schedule of Quantities and Prices; and
			Includes removal and disposal of all branches, stumps, trees, timbers and vegetation to complete the work as shown on the Contract Drawings or as directed by the Contract Administrator. Works include cutting of branches & trees as required to create the necessary clearance to accommodate the construction; and
			Includes removal and offsite disposal of all trees, roots, vegetation, organic matter, invasive species, stumps and topsoil stripping and disposal that are located within the work area(s).
3.5	Removal and Disposal	Add 3.5.6	The Contractor shall remove all invasive plant species at the work sites and dispose properly on an approved location.

END OF SECTION

SHRUB AND TREE PRESERVATION

1.3	Measurement and Payment	Delete 1.3.1 and replace with the following	Payment for all work performed under this section will be incidental to payment for work described in other Sections, unless shown otherwise in the Schedule of Quantities and Prices.
2.0	PRODUCTS		
2.1	Materials	Add 2.1.10	Protective Fencing: Posts - Pressure treated wood 100 mm dia.; Post to be 1.8 m to 2.0m in height at 2.0 m O.C. Snow fence as per Coquitlam Approved Products List; Flagging Tape - 4" Orange glow - 'Tree Retention Area'.
3.0	EXECUTION		
3.1	Existing Trees	Add 3.1.7	The <i>Contractor</i> is responsible to minimize damage to all trees which are to remain.
		Add 3.1.8	The <i>Contractor</i> will be responsible for all claims and costs including the cost of examination by an Arborist, repair, removal and replacement of trees, as required by the Arborist, the <i>Contract Administrator</i> and the City for tree damage where proper notification was not received from the <i>Contractor</i> . Damage will be assessed based on the International Society of Arboriculture Guidelines. The term shall be for a period of one year following the date of Substantial Performance of the <i>Work</i> .
		Add 3.1.9	Place protective fencing/barricades as detailed on Coquitlam Standard Detail Drawings COQ-R26 where shown on contract drawings. <i>Contractor</i> shall maintain fence in good condition during construction.
		Add 3.1.10	When work is to be performed inside fenced areas, <i>Contractor</i> shall take care to avoid damage to existing vegetation. Work to be done inside areas of existing vegetation to be retained includes: <ul style="list-style-type: none"> .1 Removal of isolated trees as directed by the <i>Contract Administrator</i> and the City. .2 Selective pruning and tree removal at edges to create tidy and well-shaped forest edge. .3 Placing planting soil and planting of trees.
		Add 3.1.11	Do not park, service or fuel vehicles within the vegetation retention areas.
3.4	Pruning	Add 3.4.2	Do not cut roots or branches of retained trees without approval of the <i>Contract Administrator</i> and the City.

END OF SECTION

1.0 GENERAL

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|-------------|-----------------------------------|---|---|
| 1.8 | Limitations of Open Trench | 1.8.1
Replace last sentence with the following | If circumstances do not permit complete backfilling of all trenches, and where permitted by the <i>Contract Administrator</i> and the City, adequately protect all open trenches or excavations with approved fencing or barricades and, where required, with flashing lights. |
| 1.10 | Measurement and Payment | Add to 1.10.3 | Payment for over excavation including supply, placement and compaction of 19mm clear crushed backfill will be made on a volumetric basis at the unit rate tendered, and only for the volume authorized by the Contract Administrator. Payment to include removal and offsite disposal of the unsuitable excavated native material. |
| | | Add 1.10.9 | Payment for supply, backfilling and compaction to 95% modified proctor density with imported backfill. Measurement of volume placed is limited to the trench section only and the width of the measurement will not exceed the maximum trench width of 1.2 meters for sanitary & storm sewer works and 0.6 meters for waterworks, unless noted otherwise or as approved by Contract Administrator. Import trench backfill shall be used on excavation along paved roadway or as instructed by Contract Administrator. |
| | | | Payment for import trench backfill will be made by measurement of volume confirmed by the tonne delivered to the Place of Work based on truck weigh slips. Weigh slips must be submitted to the Contract Administrator on a daily basis. Weigh slips which are not submitted daily will not be accepted for payment. |

2.0 PRODUCTS

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|------------|-----------------------------------|----------------|---------------------|
| 2.2 | Use of Specified Materials | Delete 2.2.1.2 | Delete Pit Run Sand |
| | | Delete 2.2.3.3 | Delete Pit Run Sand |

3.0 EXECUTION

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|------------|----------------------------|---|---|
| 3.3 | Excavation | Delete 3.3.1.2 and replace with the following | Connections to existing waterworks systems are to be made by the <i>Contractor</i> under the inspection / supervision of the <i>Contract Administrator</i> and the City. |
| 3.6 | Surface Restoration | Delete 3.6.2.4 and replace with the following | Restore lawns with approved topsoil and sod to match existing lawn. |
| | | Delete 3.6.3.1 and replace with the following | Restore surface with a minimum 100 mm of 19 mm granular road base material. |
| | | Delete 3.6.7.5 and replace with the following | Restore Pavement as detailed on Coquitlam Standard Detail Drawing COQ-G4 with the exception that the temporary patch shall be a minimum thickness of 75 mm. Dry if necessary and paint clean, dry edge with asphalt emulsion (tack coat). |
| | | Add 3.6.7.11 | Sidewalks are to be restored with a full-panell restoration. |

END OF SECTION

GRANULAR SUBBASE

- 1.4 Measurement and Payment** Delete Clause 1.4 and replace with
- .1 Measurement for granular subbase will be for actual quantity placed based on weigh tickets provided to Contract Administrator as loads are delivered.
 - .2 Payment for Subsection 1 above includes supply, placement and compaction of granular subbase material, adjustment of moisture content, and boning to establish the road cross-section.
 - .3 Payment includes removal of unsuitable subgrade including disposal off-site prior to direct placement of granular.
- Payment includes supply, placement and compaction of granular subbase material and adjustment of moisture content.

2.0 PRODUCTS

- 2.1 Specified Materials** Delete
- 2.1.1.1 Select Granular Subbase
 - 2.1.1.2: 75 mm Pit Run Gravel
 - 2.1.1.4: Pit Run Sand
 - 2.1.1.5: Approved Native Material
 - 2.1.1.7: River Sand

END OF SECTION

GRANULAR BASE

- | | | | |
|---------------------|--------------------------------|------------------------------------|--|
| 1.4 | Measurement and Payment | Delete Clause 1.4 and replace with | <p>.1 Measurement for granular base of variable thickness will be incidental to work described in Section 31 23 01, Supplementary Specification 1.10.9.</p> <p>.2 Payment for Subsection 1 above includes supply, placement and compaction of granular base material, adjustment of moisture content, and boning to establish the road cross-section.</p> <p>.3 Payment includes removal of unsuitable subgrade including disposal off-site prior to direct placement of granular.</p> |
| 2.0 PRODUCTS | | | |
| 2.1 | Granular Base | Add 2.1.1.3 | <p>25 mm minus crushed gravel conforming to the gradation specifications under Section 31 05 17S – 2.10.3.</p> |

END OF SECTION

HOT-MIX ASPHALT CONCRETE PAVING

1.4	Related Work	Add 1.1.8 Add 1.1.9	Roadway Excavation, Embankment & Compaction.....Section 31 24 13 Manholes and Catch Basins.....Section 33 44 01
1.5	Measurement and Payment	Delete Clause 1.5.1 and replace with	Payment for asphaltic concrete paving includes all construction joint preparation, tack coat, supply and placing of the asphaltic concrete, compaction and cleaning frames, covers and lids of castings affected, all testing as described in Supplementary General Conditions – Clause 4.12, all surface restoration as specified under Section 31 23 01 – Sub-section 3.6, all temporary and permanent pavement markings restoration as specified in Section 32 17 23 and all other work and materials necessary to complete installation as shown on Contract Drawings and specified under this Section. Payment for asphaltic concrete paving is incidental to work described in other section unless otherwise specified in the Schedule of Quantities and Prices.
2.2	Mix Design	2.2.3.2	Change Marshall Stability for both lower and upper course to “10 kN min”
3.7	Joints	Delete Clause 3.7.5 and replace with	Construct butt joints as directed in the field by the Contract Administrator.

END OF SECTION

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| 1.5 | Measurement and
Payment | Delete Clause 1.5 and
replace with | Payment for all work performed under this section will be
incidental to work described in other sections. |
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END OF SECTION

1.0 GENERAL

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|------------------------------------|-------------------------------|--|
| 1.1 Related Work | Add 1.1.6 | Shrubs & Tree PreservationSection 31 11 41 |
| 1.4 Measurement and Payment | Delete 1.4.1 and replace with | Payment for supply and placement of growing medium and imported topsoil is incidental to work described in other sections. Grading shall include supply of materials, on-site handling, and placement to thickness specified, compaction, watering, application of fertilizers, finish grading and swales. |

3.0 EXECUTION

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|-----------------------------------|-----------|---|
| 3.4 Placing Growing Medium | Add 3.4.6 | Scarify soil, feather grades and remove noxious weeds from the edge of tree preservation areas. |
|-----------------------------------|-----------|---|

END OF SECTION

SODDING

1.0	GENERAL	Delete 1.0.2 and replace with the following	This section is based on the "British Columbia Landscape Standards and the B.C. Nursery Trades Association. This standard is intended to set a level of quality which is equaled or bettered in the construction documents.
1.4	Handling and Storage	Delete 1.4.3 and replace with the following	Schedule sod deliveries such that sod installation occurs within twenty-four (24) hours of being lifted from the source sod farm.
		Delete 1.4.4 and replace with the following	Sod shall be neatly stacked or rolled at the source sod farm, delivered and unloaded on sturdy pallets which are no more than 3 pallets high.
1.5	Drainage Control	Delete 1.5.1 and replace with the following	Provide for proper water management and drainage of site during work of this section. Water management shall include silt traps, erosion control measures, temporary water collection ditches, as well as their adequate maintenance to ensure that storm water which may become laden with soil, growing medium or hydraulic seed is detained and cleaned prior to discharge from <i>Place of Work</i> .
1.6	Samples	Add 1.6.2	Submit one (1) square metre of sod to the <i>Contract Administrator</i> and the City for review. Ensure sample is complete with name of sod farm, base soil type, seed mix percentage.
		Add 1.6.3	<i>Contract Administrator</i> and the City shall review sod sample for approval prior to installation. The sample accepted by the review will form the standard by which the project will be supplied.
		Add 1.6.4	Should the <i>Contractor</i> require the source of sod supply to change during the construction a written request must be provided to the <i>Contract Administrator</i> and the City 48 hours in advance. The request shall be followed up by submission of proposed sod substitution sample and include the name of sod farm, base soil type, seed mix percentage for <i>Contract Administrator</i> and the City review prior to the delivery.
1.8	Measurement and Payment	Delete 1.8.1 and replace with the following	Payment for nursery sod includes supply and placing of sod as shown on the Contract Drawings or as directed by the Contract Administrator and grass maintenance to meet Conditions of Total Performance, and is incidental to work described in other sections.
2.0	PRODUCTS		
2.1	Sod	Delete 2.1.1 and replace with the following	Sod to be approved by the <i>Contract Administrator</i> and the City and to be nursery grown, true to type, conforming to standards of nursery Sod Growers' Association and their Nursery Sod Specifications. Sod to be quality, cultured turf grass grown from seed approved by Canada Department of Agriculture, free of disease, clovers, stones, pests and debris.
		Add 2.1.1.1	Nursery sod: .1 Shall be No. 1 Premium grade and contain only species of grass indicated on the supplier's certificate.

SODDING

.2 Sod shall be 'non-netted'

Add 2.1.1.2

Table Guideline of Approved Sod Mix Ratios

Supreme Soil Base Sod	
(Elka II) Perennial Ryegrass	40%
(Shamrock) Kentucky Bluegrass	30%
(Cindy) Chewing Red Fescue	30%
Seed Rate: 50g per square metre	

Add 2.1.8

All sod shall be completely free of invasive and/or noxious broadleaf weeds, grasses including but not limited to poa annua, disease, fungi, detrimental nematodes and detrimental insects.

2.2 Water

Delete 2.2.1 and replace with the following

Potable, free of impurities that would inhibit seed germination. *Contractor* to ensure adequate water is available to maintain seeded areas during germination and in a vigorously growing, healthy state until *Total Performance* of work of this section.

2.3 Fertilizer

Add 2.3.2

Fertilizer shall be complete synthetic slow release fertilizer. Type and application shall be as required by the growing medium analysis report.

2.4 Wooden Pegs

Add 2.4

.1 Wooden Pegs shall be 19 mm x 19 mm x 150 mm long No. 1 grade or better Hem/fir.

2.5 Binder Twine

Add 2.5

.1 Binder Twine shall be hemp based multiple strand string.

2.6 Flagging Tape

Add 2.6

.1 Flagging Tape shall be 30 mm wide, biodegradable ribbon tape made of non woven cellulosic material, and red color, or an approved equivalent.

3.0 EXECUTION

3.1 Finish Grade Preparation

Delete 3.1.2 and replace with the following

Prior to the placement of sod *Contract Administrator* and the City to review and direct minor adjustments and refinements of finish grades prior to the *Contractor* proceeding. Review includes grades, growing medium depth and condition of finished surface. Subsequent to the *Contract Administrator* and the City review the *Contractor* shall re-grade, add growing medium and make adjustments as directed by *Contract Administrator* and the City.

Delete 3.1.5 and replace with the following

Fine grade growing medium to lines and levels shown on Contract Drawings. Ensure that all low spots, humps and irregularities are eliminated prior to review by *Contract Administrator* and the City.

3.2 Sodding

Delete 3.2 and replace with the following

- .1 Sod shall not be placed during hot dry summer periods, at freezing temperatures, or over frozen growing medium.
- .2 Allow sod to dry sufficiently during wet weather to prevent tearing during lifting and handling.
- .3 Handle sod carefully to minimize tearing and dropping of soil.
- .4 Placement of Sod:
 - .1 Lay sod in rows smooth and flush to adjoining grass areas and paving and top surfaces of curbs unless shown otherwise on *Contract Drawing*. Ensure there is a full roll width between the new sod and any adjoining surfaces.

SODDING

Small cut pieces from a full roll will not be accepted.

- .2 Stagger joints and ensure that sod sections are butted closely together without overlapping or leaving gaps between sections.
- .3 Cut out irregular or thin sections with a sharp knife.
- .4 Cut sod to fit tight around landscape elements.
- .5 Cut sod to create clean, smooth lines along all plant beds.
- .5 Placement of Sod on Slopes:
 - .1 Lay sod with the length of each sod section parallel to slope taking extra care to ensure that sod sections are butt tight and each sod section is set in a staggered formation.
 - .2 On slopes exceeding 3:1 gradient ensure sod is secured with wooden pegs at intervals of not more than 450 mm along the center of each section. Ensure wooden pegs are driven flush with the sod.
 - .3 Prior to acceptance of sod areas that have been secured with wooden pegs either remove the wooden pegs or drive each wooden peg at least 50 mm below finished grade.
 - .4 Where required, place erosion control mesh or netting and secure with stakes or staples sunk firmly into ground to a minimum depth of 150 mm at maximum intervals of 4 meters along pitch of slope. Place stakes or staples horizontally across slope at intervals equal to width of mesh or netting minus 150 mm and drive flush with top of sod.
- .6 Use a light roller to ensure that there is full, close contact between sod and growing medium. Use of a heavy roller to correct irregularities in grade is not permitted.
- .7 Ensure all sodded areas are watered immediately after installation. Verify that water applied to has penetrated through sod into top 100 mm of growing medium. Continue watering operations as needed to ensure that adequate moisture content is maintained to encourage deep root growth and healthy, vigorous leaf growth.
- .8 Protect newly placed sod from heavy foot traffic during installation and until acceptance by the *Contract Administrator* and the City. Protection shall include but is not limited to placement of wood planks or plywood of sufficient thickness to bear the imposed weight and prevent damage to sod or displacement and/or compaction of sod/growing medium.
- .9 Sod that has been damaged by construction operation, construction / site personnel or construction traffic shall be replaced at no cost to the *Owner*. Replacement shall include removal of growing medium, regrading of sub grade, replacing growing medium and sod as required.

SODDING

- .10 Water sod area immediately with sufficient amounts to saturate sod and upper 100 mm of growing medium. Do not allow the sod to dry out so that the joints become visible.
- 3.4 Grass Maintenance** Delete 3.4 and replace with the following
- .1 Maintenance of sodded areas shall begin immediately after sodded operation and shall continue until all deficiencies noted in the *Substantial Performance* review have been rectified to the satisfaction of the *Contract Administrator* and the City and conditions for *Total Performance* have been achieved. The *Contractor* is to notify the *Contract Administrator* and the City in writing forty eight hours (48) prior to stopping maintenance operations.
- .2 Sod Cutting: After the 'first' cut of sodded lawn areas cutting operations shall be carried out on a weekly (seven day) basis until *Total Performance* by *Contract Administrator* and the City:
- .1 First cut of sodded lawn areas shall occur when a uniform grass height of 75 mm has been attained. First cut shall be to a height of 65 mm.
- .2 Continue regular weekly cutting at a height of 65 mm until *Total Performance*.
- .3 Cutting operations shall be such that each cut is at right angles to the previous cut.
- .4 *Contractor* to remove grass clippings after each cut and dispose of off site.
- .5 Roll when required to remove any minor depressions or irregularities.
- .6 Immediately repair seeded areas that show deterioration or bare spots. Top-dress all areas showing shrinkage due to lack of watering and seed with seed mix that matches the original seed mix.
- .3 Fertilizer analysis shall conform to recommendations provided with growing medium analysis. Application of fertilizer shall follow manufacturers' recommendations noting that after October 1 lawn areas shall not be fertilized until April 15th of the following spring.
- .4 Sodded lawn areas shall be kept free of invasive and/or noxious broadleaf weeds, grasses including but not limited to poa annua, disease, fungi, detrimental nematodes and detrimental insects.
- .5 All maintenance equipment and practices are to conform to the BC Landscape Standard Level 2 'Groomed'.
- .6 Protect all sodded areas against trespassing and from damage at all times clearly marked, staked, string and flagging tape.
- .1 Perimeter Protection: Where directed by the *Contract Administrator* and the City, sodded areas shall be surrounded by a 900 mm high barrier made up of the following components:
- .1 Wood posts placed at 1.8 metres on centre.
- .2 Wood Posts to be driven to a depth of 300mm.
- .3 String two (2) strands of hemp based binder twine (or equal product) between posts. Insure one full wrap of twine around each post.
- .4 Tie 300 mm strands of 'red' flagging tape at 450 mm intervals along the entire length of both strands of

SODDING

twine.

- .5 Maintain perimeter protection until *Total Performance* issued. Upon acceptance by *Contract Administrator* and the City, remove perimeter fence and dispose of off site.

3.5 Condition for Total Performance

Delete 3.5.1 and replace with the following

Conditions for *Total Performance* of Sodded areas:

- .1 Sodded areas exhibit fully established root systems.
- .2 No seams are visible between sod sections.
- .3 Sod areas are smooth and evenly graded. No depressions, foot marks or vehicle tracks.
- .4 Sod is free of bare and dead spots and does not have any broadleaf weeds, noxious grasses including but not limited to poa annua.
- .5 No surface growing medium is visible when grass has been cut to height of 65 mm.
- .6 Sodded areas have been cut a minimum of two (2) times, at seven (7) day intervals.
- .7 Sodded areas are a uniform green colour with no discoloured sections or patches.
- .8 Sodded areas exhibit a thick, dense, uniform and healthy appearance.

Add 3.5.2

Lawns sodded after September 30th will be not be reviewed for *Total Performance* until April 30th the next year.

3.6 Guarantee / Maintenance

Delete 3.6.1 and replace with the following

The *Contractor* hereby guarantees that the sod will remain free of weeds and defects for a period of one (1) year from the date of *Substantial Performance*. The *Contractor* shall make all corrections, adjustments and replacements required as a result of failure of all products in this section. During the *Maintenance Period*, the *Contractor* will replace sodded areas, determined by *Contract Administrator* and the City, to be dead or failing at the end of the *Maintenance Period*. Replacements to be made at next appropriate season and, conditions of guarantee will apply to all replacement seeding for one full growing season.

Delete 3.6.2 and replace with the following

The Owner reserves the right to extend the *Contractor's Maintenance Period* and responsibilities for one (1) additional year if, at end of the initial guarantee period, the development and growth of the sod is not sufficient to ensure future survival.

END OF SECTION

1.0 GENERAL

**1.9 Measurement and
Payment**

Add to 1.9.1

Payment includes planting, labour, material and equipment required to complete the work including the costs of all trees, live stakes, shrubs, seeds and ground cover.

Payment for all work performed under this Section will be incidental to payment for work described in other Sections unless shown otherwise in the Schedule of Quantities and Prices.

END OF SECTION

WATERWORKS

1.0 GENERAL

1.8 Measurement and
Payment

Delete 1.8.2 and
replace with 1.8.2.1

Payment for watermain and service connection will include location and exposure of existing utilities, asphalt & concrete saw cutting, disposal of pavement, trench excavation, disposal of surplus excavated material, support of utility poles and adjacent piping, supply and installation of all pipe, bends, bolts, gaskets, thrust blocks, couplings (Robar 1506), restraints and tie rods, all nuts, bolts and fasteners to be 304 stainless steel or better, application of petrolatum mastic on all metal but non stainless water appurtenances, blind flanges, caps, fittings and related materials, tie-ins, bedding, approved native excavated backfill material compacted in place, cleaning, pressure and leakage testing including all labor, material and equipment required to complete the test, flushing, disinfection where required, all surface restoration as specified under Section 31 23 01 – Sub-section 3.6, including pavement restoration, restoration of asphalt curb, and all other work and materials necessary to complete installation as shown on Contract Drawings and specified under this Section; and

Payment includes all works as described in Clause 1.8.2.2.

Add 1.8.2.2

Native excavated material approved for re-use as trench backfill shall be used on boulevard and outside of paved roadway area and shall have all cobbles greater than 150 mm diameter removed and disposed off-site and shall be granular in nature and free from organic materials. Native excavated material shall not be used as trench backfill where moisture content does not permit compaction to specified density. Where native excavated material is unacceptable for use as trench backfill, imported trench backfill shall be supplied, placed, and compacted to specified density.

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.

Remove and dispose of all trees, roots, vegetation, organic matter and stumps that are located in the right of way and which fall within the work area. Trim small branches from trees or hedges as required and where necessary use an approved tree paint to repair damage to surviving vegetation where branches have been removed. Obtain the Engineer's approval before trees are removed. Replace shrubs and trees that are located on private properties that are damaged during construction.

Discard materials obtained from within the work area and adjacent private properties that are not suitable for reuse or not wanted by private owners at an approved dump site at Contractor's expense.

Payment includes all labor, material, equipment to complete the Work and as described on the Contract Drawing.

Measurement for watermain will be made along the centerline of the main, through the valves and fittings, with no deduction for length of valve or fittings, over surface after work has been completed; and

Delete 1.8.4 and
replace with

Payment for new Terminal City C71P hydrants installed on the existing mains by wet tapping includes the hydrant body, c/w Storz "quick connect" pump nozzle, lateral connections from mainline tee off watermain to hydrants, all new pipes, integral isolation gate

WATERWORKS

valve, Terminal City Nelson Type style valve box & cover, valve stem riser pipe, bends, couplings (Robar 1506), any necessary pipe extensions to achieve the required hydrant height, concrete thrust block, tie rods, all nuts, bolts and fasteners to be 304 stainless steel or better, application of petrolatum mastic on metal but non stainless water appurtenances, direct tapping of the existing mains, bedding and all import and native backfill material, testing and disinfection, surface restoration as indicated in the requirements in 1.8.2.1 of this Section and all other incidental work as shown on Standard Detail Drawing W3 & W4. Where applicable, includes removal of old Hydrant Assembly at same location and deliver to the City's Works Yard at 500 Mariner Way, Coquitlam, BC.

Measurement will be made at the unit price bid for each hydrant assembly installed.

Delete 1.8.5 and
replace with 1.8.5.1

Payment for service connection renewal includes removal and disposal of concrete meter box, valve box, curb stop, piping and meter (where applicable), reconnecting to the existing corporation stop using a MacDonald 6130 compression coupling (where specified), supply and installation of curb stops, 150mm pvc riser, funny nut, service pipes, re-use of existing TC Nelson Type valve box as approved by Contract Administrator and all related fittings and appurtenances specified and/or shown on Standard Detailed Drawing W2b (except where noted) or Coquitlam Standard Drawing W2E, as applicable, and reconnecting to the existing service at or near property line or as shown on the Contract Drawings including any fittings and repair couplings. Water service connection locations are provided in the tender documents.

Payment also includes all applicable work described in 1.8.2.1 and 1.8.2.2 unless specified otherwise in the Schedule of Quantities and Prices.

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.

Measurement and payment for service connection will be made at the unit price bid per lineal meter of water service connection installed as measured along the ground from the center of the main to the terminus of the service.

NOTE: PAYMENT FOR SERVICE CONNECTIONS WILL NOT BE MADE UNTIL RESTORATION WORK IS COMPLETE TO CITY'S SATISFACTION.

Add 1.8.5.2

Payment for new 19mm service connection includes locating and cutting the existing service supply, removal and disposal of concrete meter box, curb stop, piping and meter (where applicable), supply and installation of mainline double strap saddles, corporation stops, reconnecting to the existing main, curb stops, service pipes and all related fittings and appurtenances specified and/or shown on Standard Detailed Drawing W2b (except where noted), all labor, material and equipment including use of tapping machine and reconnecting to the existing service at or near property line or as shown on the Contract Drawings including any fittings and repair couplings. Payment also includes all applicable work described in 1.8.2.1 and 1.8.2.2 unless specified otherwise in the Schedule of Quantities and Prices.

WATERWORKS

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.

Measurement and payment for service connection will be made at the unit price bid per lineal meter of water service connection installed as measured along the ground from the center of the main to the terminus of the service.

NOTE: PAYMENT FOR SERVICE CONNECTIONS WILL NOT BE MADE UNTIL RESTORATION WORK IS COMPLETE TO CITY'S SATISFACTION.

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| Add 1.8.5.3 | Measurement and payment for new cast iron Terminal City Nelson type valve box complete with lid marked "WATER" at the unit price bid for each item installed |
| Add 1.8.5.4 | Payment for 150mm PVC DR 35 or better riser pipe will be incidental to work described under this section. |
| Delete 1.8.6 and replace with | Payment for air valve vent includes supply and installation of all items upstream of the existing double acting air valve as shown in COQ-W6, including manhole coring, all applicable works as described in 1.8.2.1 and 1.8.2.2, all labour, equipment and material to complete the work. |
| Add 1.8.6.1 | Payment for blow-off hand wheel replacement includes removal and disposal of hand wheel, supply and installation of square nut assembly. Payment includes all applicable works as described in 1.8.2.1 and 1.8.2.2, all labour, equipment and material to complete the work. |
| Add 1.8.6.2 | Payment for blow-off assembly include all materials, works, and appurtenances shown on detailed drawings COQ-W8. Payment includes all applicable works as described in 1.8.2.1 and 1.8.2.2, all labour, equipment and material to complete the work. |

2.0 PRODUCTS

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|---|---|--|
| 2.2 Mainline Pipe, Joints and Fittings | Replace Clause 2.2.1.1 | Pipe: to AWWA C151, and shall meet the following Pressure Class or Thickness Class:
- 100mm – 350mm – Thickness Class 50
- 400mm & greater – PC 350 |
| 2.3 Valves and Valve Boxes | Delete 2.3.6.1 & 2.3.6.2 and replace with | Circular type valve box shall be cast iron Terminal City Nelson Type style valve box c/w lid marked "WATER". |
| | Delete 2.3.7.1 & 2.3.7.2 and replace with | Service valve boxes shall be as shown in Standard Detail drawing W2b for services 19mm to 50mm only. The circular type valve box shall be Terminal City Nelson Type. For services 100mm and greater, follow COQ – W2F or as specified by Contract Administrator. |
| | Delete 2.3.7.3 and replace with | Curb stop valve boxes (300 mm from property line) alternative on 19 mm dia. to 38 mm dia. services without operating rods to be assembled as specified for Mainline Valve Boxes - 2.3.6 and shown on Standard Detail Drawing W2b. |
| | Delete 2.3.7.5 and replace with | Corporation stop valve boxes (at mainline tees or tapings) on services 50mm diameter and larger as specified for Mainline Valve Boxes per City of Coquitlam Standard Drawing COQ-W2E and COQ- |

WATERWORKS

			W2F.
2.5	Service Connections, Pipes, Joints and Fittings	Delete 2.5.1 and replace with	Pipe diameter 19 mm to 75 mm to be Type K annealed copper to ASTM B88M.
2.8	Granular Pipe Bedding and Surround Material	Add 2.8.3	Shall conform to Type 2 gradation.
3.0 EXECUTION			
3.6	Pipe Installation	Add 3.6.15	When the water main crosses a storm or sanitary sewer, the water main shall be installed a minimum 0.5 m clear above the sewer. Where this is not possible, the water main shall have a minimum 0.3m clearance under the sewer with all joints within a 3.0 m horizontal distance from the sewer wrapped with heat shrink plastic or packed and wrapped with petrolatum tape in accordance to the following standards: <ul style="list-style-type: none"> - ANSI/AWWA C214 (factory applied) - ANSI/AWWA C209 (field applied) - ANSI/AWWA C217-90 (petrolatum tape) - All materials used are to have zero health hazard Installation shall be in accordance with the requirements of the Regional Health Engineer under the Health Act.
		Add 3.6.16	Prior to construction, the contractor shall locate and expose all utilities crossing the proposed water main, water services, tie in locations and any other proposed works.
3.10	Service Connection Installation	Add 3.10.13	Water service connections must be installed as one continuous length of pipe.
3.12	Hydrants	Delete 3.12.1 and replace with	Install hydrant assemblies at locations as directed by <i>Contractor Administrator</i> by direct tapping of the watermain. Locations specified in the Schedule of Quantities are approximate only. The contractor shall perform the tap while the main is at working pressure. Standard off-set from property line shall be 1.0 meter or as directed by the Contract Administrator.
3.23	Connections to Existing Mains	Delete 3.23.1 and replace with	Connections to existing waterworks systems will be made by the Contractor under the supervision of the Contract Administrator. Make all necessary arrangements with the Contract Administrator to schedule work to prevent construction delays.
		Add 3.23.2	Provide written notification to all affected residents and businesses a minimum 48 hours prior to service interruption. Work shall follow CONTRACT SPECIFIC NOTATIONS, Section 00 72 43S
		Add 3.23.3	Arrange shutdown of the existing valves by the City. Contractor is not allowed to operate any main valves without prior approval of the Contract Administrator.
			Failure to follow this Clause will result in immediate shut-down of the work. The Contractor will be required to safely restore facility conditions to allow traffic flow at their expense. Work cannot re-start until City's Water Dept or its representative is present to shutdown the existing main valve.

WATERWORKS

No claim will be accepted by the Owner for costs associated with this work shut-down.

Add 3.23.4

Provide temporary service while existing service is interrupted as detailed in Contract Drawings or Detailed Specifications.

Add 3.23.5

Fittings used for tie ins should be cleaned of all foreign material and sprayed with a 1% hypochlorite solution prior to assembly. Disinfect all pipes and fittings installed at the connection.

Add 3.23.6

Contractor shall be responsible for the costs for the City to flush and purge all air from existing mains and services in the area affected by the service interruption.

Add 3.23.7

Procedure for Watermain Tie-ins Coliform Bacterial Testing

Procedures for Bacteriological Tests shall be as described in AWWA C651-99.

No connection to existing watermains will be authorized until final results of coliform bacterial testing have been received and reviewed by the Water Foreman.

All samples shall be taken by the City Water Utility and all valve operation shall be handled by the City Water crews.

The Contractor shall provide sampling point at the end of each main segment. The Contractor shall provide all labour, material and equipment to temporarily connect and disconnect the new main in order to properly acquire test samples.

Initial flushing, testing and chlorination will be undertaken by the Contractor from a water source approved by the Water Superintendent.

Coordination for the bacterial testing and tie in shall be coordinated by the project Engineering Inspector and the Water Superintendent prior to final flushing.

The Engineering inspector shall review with the Water Superintendent and the Contractor sampling locations and appurtenances. The Engineering Inspector shall check and record chlorine residual prior to final flushing.

After final flushing the City Water crew will collect one set of samples minimum 24 hours after the chlorinated water has been flushed. Samples will be taken from the City supply from the new main as well as the terminus and all branches.

Test results will be delivered to the Water Superintendent who will provide a copy to the Engineering Inspector. The Water Superintendent will judge the adequacy of the test results and issue an authorization to connect. City Water crews will provide shutdown and flushing as required.

END OF SECTION

1.0 GENERAL

1.6	Measurement and Payment	Delete 1.6.1 and replace	<p>Payment for sanitary sewer will be made separately for various sections of sanitary sewer consistent with pipe materials, diameters and backfill requirements shown on the Contract Drawings and described under individual payment items in the Schedule of Quantities.</p>
		Delete 1.6.2 and replace with	<p>Payment for sanitary sewers includes asphalt & concrete saw cutting, disposal of pavement, trench excavation, disposal of surplus excavated material, removal and disposal of existing pipes, supply and installation of all pipe, fittings and related materials, tie-ins other than noted in Clause 1.6.7, bedding and all import backfill material, approved native backfill, granular base, granular Subbase, cleaning and flushing, testing (if applicable), all surface restoration under Section 31 23 01 – Sub-section 3.6 including permanent pavement restoration and all other work and materials necessary to complete installation as shown on Contract Drawings and specified under this Section; and</p> <p>Payment for concrete driveway and curb & gutter will be made under Section 03 30 20S.</p> <p>Native excavated material approved for re-use as trench backfill shall be used on boulevard and outside of paved roadway area and shall have all cobbles greater than 150 mm diameter removed and disposed off-site and shall be granular in nature and free of organic materials. Native excavated material shall not be used as trench backfill where the moisture content does not permit compaction to the specified density. Where native excavated material is unacceptable for use as trench backfill, imported trench backfill shall be supplied, placed, and compacted to specified density. Imported trench backfill shall not be used without the prior approval of the Contract Administrator.</p> <p>Restore all trench cuts across roadways/driveways with a temporary hard surface approved by the <i>Contract Administrator</i> following pipe excavation if paving is not scheduled to take place within 24 hours.</p> <p>Payment includes by-pass pumping to include all pumps, labour and materials required to facilitate the work. Payment for the by-pass pumping will be incidental. Payment includes all applicable materials and work described in 1.6.4.1.</p> <p>Measurement for sanitary sewer will be made along the ground from the start of new pvc pipe to the terminus of the new pvc pipe.</p> <p>NOTE: PAYMENT FOR ANY SANITARY SEWER WORKS WILL NOT BE MADE UNTIL RESTORATION WORK IS COMPLETE TO CITY'S SATISFACTION.</p>
		Delete 1.6.3 and replace with	<p>Payment for new service connections includes 100mm SDR28 PVC pipe, shear band couplers, bends, increaser, pvc wye, stubs, caps, Le-Ron inspection chamber c/w locking collar and red lid and all related fittings and components specified and/or shown on Standard Detail Drawings. Payment includes all applicable service pipes, materials and work described in 1.6.2.</p> <p>Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.</p> <p>Measurement for service connection will be for each complete</p>

SANITARY SEWERS

service installed, including the inspection chamber, length of service pipe installed and length of riser.

Add 1.6.3.1

Payment for sanitary service connection repair includes 100mm SDR28 PVC pipe, shear band couplers, bends, increaser, stubs and all related fittings and components specified and/or shown on Standard Detail Drawings. Payment includes all applicable service pipes, materials and work described in 1.6.2.

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.

Measurement and payment for sanitary connection repair will be made at the unit price bid per lineal meter of service lead installed as measured along the ground from the downstream end of work done in Clause 1.6.4 to the terminus of the repair.

Add 1.6.4

The lump sum payment is to supply and install Le-Ron molded sanitary inspection chambers c/w locking collar & red lid including the riser as per MMCD S7, S8 and S9 at each location. The tendered price is to include all labour, shear band couplers, 2m PVC SDR28 pipe stubs and all related fittings and components specified and/or shown on Standard Detail Drawings and all such other items that may be required to complete the work as specified. Payment includes all applicable materials and work described in 1.6.2.

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.

A City crew will be inspecting the service connection by hand video prior to the Contractor's installing the IC. The Contractor shall notify the City inspector once the section of the service connection is ready for hand video. Payment includes assisting City crew in hand videoing the service connection. Based on the hand video result or apparent condition of the pipe, repair is to be done under Clause 1.6.3.1. Repair shall only be done as approved by Contract Administrator or City inspector.

NOTE: Depth specified on the utility connection record without an IC is typically measured from the top of the clean out wye.

Payment includes work as described in 1.6.4.1

Add 1.6.4.1

Remove and dispose of all trees, roots, vegetation, organic matter and stumps that are located in the right of way and which fall within the work area (including stripping of ditches). Trim small branches from trees or hedges as required and where necessary use an approved tree paint to repair damage to surviving vegetation where branches have been removed. Obtain the Contract Administrator's approval before trees are removed. Replace shrubs and trees that are located on private properties that are damaged during construction.

Materials removed from within the right of way are the property of the private property owner. Materials removed within private property remain the property of the private property owner.

Discard materials obtained from within the right of way and from

SANITARY SEWERS

adjacent private properties that are not suitable for reuse or not wanted by private owners at an approved dump site.

Where possible and as agreed with the *Contract Administrator*, reuse topsoil obtained from within the right of way.

Brooks Boxes with a steel lid are to be provided for inspection chambers located in driveways as necessary. Payment for the Brooks Boxes will be incidental.

Payment includes support of poles if necessary and manhole barrel preparation to accommodate the service connection.

Lump sum to include for all labour, materials, and equipment required to supply and install the work as specified and restore surface to its original conditions or better.

Add 1.6.4.2

The unit price is an additional payment for depth in excess of the depth stated plus 0.6m as indicated on the service connection card. The payment is to accommodate installation of Le-Ron molded sanitary inspection chambers as per MMCD S7 and S9 at a deeper elevation. The tendered price is to include all labour, materials and all related fittings and components specified and/or shown on Standard Detail Drawings, use of shoring, shoring cage and all such other items that may be required to complete the work as specified. Payment does not include all other items already included in this section, Clause 1.6.4. and Section 31 23 01.

Example:

Depth on Connection Card, 0.3m

Actual depth of service connection measured from the ground, 1.8m

Portion to be paid as additional: $1.8\text{m} - (0.3\text{m} + 0.6\text{m}) = 0.9\text{m}$

0.9m will be paid as additional: $0.9\text{m} \times \text{unit price}$

Add to Clause 1.6.7

Payment includes all applicable works in Clause 1.6.2

2.0 PRODUCTS

2.5 Granular Pipe Bedding and Surround Material

Add 2.5.3

Pipe bedding shall be 19 mm clear crushed rock or as approved by the Contract Administrator. Surround material above the springline within the pipe zone may be Type 2.

3.0 EXECUTION

3.8 Connections to Existing Mainline Pipes

Delete 3.8.1 and replace with

Connections with two sizes smaller or less to existing mainlines shall be made by removal of the section of the main and replacement with a manufactured PVC wye complete with stubs and double hub PVC couplings for PVC mains and approved shear band couplings for other mainline materials.

The contractor shall video inspect all connections to existing mains following completion of installation.

END OF SECTION

STORM SEWERS

1.0 GENERAL

1.6 Measurement and
Payment

Delete 1.6.1 and
replace

Payment for storm sewer will be made separately for various sections of storm sewer consistent with pipe materials, diameters and backfill requirements shown on the Contract Drawings and described under individual payment items in the Schedule of Quantities.

Delete 1.6.2 and
replace with

Payment for storm sewers includes asphalt & concrete saw cutting, disposal of pavement, trench excavation, disposal of surplus excavated material, removal and disposal of existing pipes, supply and installation of all pipe, fittings and related materials, tie-ins other than noted in Clause 1.6.9, bedding and all import backfill material, approved native backfill, granular base, granular subbase, cleaning and flushing, testing (if applicable), all surface restoration under Section 31 23 01 – Sub-section 3.6 including permanent pavement restoration and all other work and materials necessary to complete installation as shown on Contract Drawings and described under individual payment items in the Schedule of Quantities and specified under this Section; and

Payment for concrete driveway and curb & gutter will be made under Section 03 30 20S.

Native excavated material approved for re-use as trench backfill shall be used on boulevard and outside of paved roadway area and shall have all cobbles greater than 150 mm diameter removed and disposed off-site and shall be granular in nature and free of organic materials. Native excavated material shall not be used as trench backfill where the moisture content does not permit compaction to the specified density. Where native excavated material is unacceptable for use as trench backfill, imported trench backfill shall be supplied, placed, and compacted to specified density. Imported trench backfill shall not be used without the prior approval of the Contract Administrator.

Restore all trench cuts across roadways/driveways with a temporary hard surface approved by the *Contract Administrator* following pipe excavation if paving is not scheduled to take place within 24 hours.

Payment includes by-pass pumping to include all pumps, labour and materials required to facilitate the work. Payment for the by-pass pumping will be incidental. Payment includes all applicable materials and work described in 1.6.4.1.

Measurement for storm sewer will be made along the ground from the start of new pvc pipe to the terminus of the new pvc pipe.

NOTE: PAYMENT FOR ANY STORM SEWER WORKS WILL NOT BE MADE UNTIL RESTORATION WORK IS COMPLETE TO CITY'S SATISFACTION.

Delete 1.6.3 and
replace with

Payment for new service connections includes 150mm SDR28 PVC pipe, shear band couplers, bends, increaser, pvc wye, stubs, caps, Le-Ron molded inspection chamber c/w locking collar and green lid and all related fittings and components specified and/or shown on Standard Detail Drawings. Payment includes all applicable service pipes, materials and work described in 1.6.2 unless specified otherwise in the Schedule of Quantities and Prices.

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill

STORM SEWERS

will be made under Section 31 23 01 – Sub-section 1.10.9.

Measurement for service connection will be for each complete service installed, including the inspection chamber, length of service pipe installed and length of riser.

Add 1.6.3.1

Payment for storm service connection repair includes 150mm SDR28 PVC pipe, shear band couplers, bends, increaser, stubs and all related fittings and components specified and/or shown on Standard Detail Drawings. Payment includes all applicable service pipes, materials and work described in 1.6.2 unless specified otherwise in the Schedule of Quantities and Prices.

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.

Measurement and payment for storm lead repair will be made at the unit price bid per lineal meter of service lead installed as measured along the ground from the downstream end of work done in Clause 1.6.4 to the terminus of the repair.

Delete 1.6.4 and
replace with

The lump sum payment is to supply and install Le-Ron molded storm inspection chambers c/w locking collar & green lid including the riser as per MMCD S7, S8 and S9 at each location. The tendered price is to include all labour, shear band couplers, 2m PVC SDR 28 pipe stubs and all related fittings and components specified and/or shown on Standard Detail Drawings and all such other items that may be required to complete the work as specified. Payment includes all applicable materials and work described in 1.6.2.

Imported trench backfill shall not be used without the prior approval of the Contract Administrator. Payment for imported trench backfill will be made under Section 31 23 01 – Sub-section 1.10.9.

A City crew will be inspecting the service connection by hand video prior to the Contractor's installing the IC. The Contractor shall notify the City inspector once the section of the service connection is ready for hand video. Payment includes assisting City crew in hand videoing the service connection. Based on the hand video result or apparent condition of the pipe, repair is to be done under Clause 1.6.3.1. Repair shall only be done as approved by Contract Administrator or City inspector.

NOTE: Depth specified on the utility connection record without an IC is typically measured from the top of the clean out wye.

Payment includes work as described in 1.6.4.1.

Add 1.6.4.A

This provisional item will be paid where listed in the SOQ, and when a storm service is discovered during the excavation for a sanitary IC, allowing for the storm IC to be installed with limited additional excavation. IC installation to be completed with all the applicable works listed in 1.6.4.

Add 1.6.4.1

Remove and dispose of all trees, roots, vegetation, organic matter and stumps that are located in the right of way and which fall within the work area (including stripping of ditches). Trim small branches from trees or hedges as required and where necessary use an

STORM SEWERS

approved tree paint to repair damage to surviving vegetation where branches have been removed. Obtain the Engineer's approval before trees are removed. Replace shrubs and trees that are located on private properties that are damaged during construction.

Materials removed from within the right of way are the property of the private property owner. Materials removed within private property remain the property of the private property owner.

Discard materials obtained from within the right of way and from adjacent private properties that are not suitable for reuse or not wanted by private owners at an approved dump site.

Where possible and as agreed with the *Contract Administrator*, reuse topsoil obtained from within the right of way.

Brooks Boxes with a steel lid are to be provided for inspection chambers located in driveways as necessary. Payment for the Brooks Boxes on a driveway will be incidental.

Payment includes support of poles if necessary and manhole barrel preparation to accommodate the service connection.

Lump sum to include for all labour, materials, and equipment required to supply and install the work as specified and restore surface to its original conditions.

Add 1.6.4.2

The unit price is an additional payment for depth in excess of the depth stated plus 0.6m as indicated on the service connection card. The payment is to accommodate installation of Le-Ron molded storm inspection chambers as per MMCD S7, S8 and S9 at a lower elevation. The tendered price is to include all labour, materials and all related fittings and components specified and/or shown on Standard Detail Drawings, use of shoring, shoring cage and all such other items that may be required to complete the work as specified. Payment does not include all other items already included in this section, Clause 1.6.4. and Section 31 23 01.

Example:

Depth on Connection Card, 0.3m

Actual depth of service connection measured from the ground, 1.8m

Portion to be paid as additional: $1.8\text{m} - (0.3\text{m} + 0.6\text{m}) = 0.9\text{m}$

0.9m will be paid as additional: $0.9\text{m} \times \text{unit price}$

Add 1.6.9

Payment includes all applicable works in Clause 1.6.2.

2.0 PRODUCTS

2.1 Concrete Pipe

Delete 2.1.6 and replace with

Pre-Test in accordance with Section 33 30 01 Clause 2.1.4.

2.6 Service Connections

2.6.1

Replace 100 mm minimum diameter with PVC SDR 28 **150 mm** minimum diameter.

Delete 2.6.8.1 and replace with

Connections to HDPE main pipe to be made with a fusion machine.

Delete 2.6.8.2 and replace with

Connections to ribbed PVC pipe to be made with a manufactured wye fitting where wye locations are known in advance. For

STORM SEWERS

connections to ribbed PVC mainline pipe larger than 450 mm an insertable tee for ribbed PVC pipe is permitted for connections more than two sizes smaller than mainline pipe. When an insertable tee is used, hole cut into mainline pipe to cut as few ribs as possible.

Add 2.6.11

Insertable tee fitting shall have a rubber collar which inserts into the mainline pipe to form a tight seal and shall have stainless steel band to secure the tee insert. The tee insert shall be a standard bell end with depth control lugs

**2.9 Granular Pipe
Bedding and
Surround Material**

Add 2.9.3

Pipe bedding shall be 19 mm clear crushed rock or as approved by the Contract Administrator. Surround material above the springline within the pipe zone may be Type 2.

3.0 EXECUTION

3.6 Pipe Installation

Add 3.6.14

Test pipe in accordance with Section 33 30 01 Clause 3.12.

**3.8 Connections to
Existing Mainline
Pipes**

Add 3.8.5

Connections to existing mainlines 450 mm and smaller shall be made by removal of the section of the main and replacement with a manufactured PVC wye complete with stubs and double hub PVC couplings for PVC mains and approved shear band couplings for other mainline materials.

Connections to existing concrete mainline and mainlines larger than 450 mm shall be made in accordance with this section and will be made using a core cutter.

The contractor shall video inspect all connections to existing mains following completion of installation

END OF SECTION

Appendix A - Traffic Management Detail Specifications

These supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents (Platinum Edition), Volume II, 2009.

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|-----------------------------|---|
| 1.0 GENERAL | |
| | .1 This Traffic Management detail specification refers to the Contractor's specific plans to identify project traffic risks affecting the <i>Work</i> , provide Traffic Control Plans, and to implement the traffic control for the safe passage of vehicles and pedestrian through the work zone. |
| 1.1 Related Works | .1 Traffic Control, Vehicle Access and Parking MMCD Section 01 55 00S. |
| 1.2 References | .1 WorkSafe BC, Occupational Health and Safety (OHS) Regulation, Section 18 – Traffic Control.

.2 B.C. Ministry of Transportation (MOT) Traffic Control Manual for Work on Roadways |
| 1.3 Project Requirements | .1 A Road and Sidewalk Closure Permit is required by Coquitlam for all work affecting traffic flow related to construction. A permit is required for each specific construction interference with traffic flow. The Road and Sidewalk Closure Permit Request form is attached as Appendix 1 to this document. A digital copy of the Road and Sidewalk Closure Permit form can be obtained for use during the contract from the City's website at http://www.coquitlam.ca/city-services/licenses-and-permits/road-and-sidewalk-closure-permit.aspx .

A Road and Sidewalk Closure Permit form application must be submitted to City's Traffic Operation Division 5 working days prior to start of work. |
| 1.4 Measurement and Payment | .1 For this Contract, all work associated with Traffic Management Plan (TMP) and Traffic Control will be as shown in the Schedule of Quantities and Prices. |
| 2.0 PRODUCTS | |
| 2.1 Traffic Management Plan | .1 The Contractor is required to assign a Traffic Manager for the Contract with the responsibility of preparing the Traffic Management Plan and the Traffic Control Plans, as well as the responsibility for continuing implementation of traffic control for the Work.

.2 The Traffic Management Plan (TMP) will consist of the following components:
.1 Identification of risks to traffic during the Work
.2 Traffic Control Plans for individual stages of the construction
.3 Incident Management Plan for the response to an unplanned event and recording of incident information.

.3 Submission of the TMP is to be made to the <i>Contract Administrator</i> within five (5) days of the <i>Notice of Award of the Contract</i> , and must be approved by the <i>Contract Administrator</i> prior to start of the <i>Work</i> .

.4 Review of the TMP will be performed by the Contract Administrator. Comments for revisions to the TMP will be returned to the <i>Traffic Manager</i> for implementations.

.5 The Contractor shall comply with all the requirements of applicable laws, rules, regulations, codes and orders of the municipal and other appropriate authorities concerned with work on streets or highways and shall post proper notices and/or signals, and provide necessary barriers, guards, lights, flagmen or watchmen as may be necessary for proper maintenance of traffic and |
-

These supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents (Platinum Edition), Volume II, 2009.

protection of persons and property from injury or damage. All costs involved in respect to the above requirements will be deemed to be included in the Contract Price.

- .6 The Contractor shall give due notice to local police and fire departments prior to beginning construction and shall comply in all respects with their requirements.
- .7 The Contractor, during the progress of the work, shall make adequate provision to accommodate the normal traffic along streets and highways immediately adjacent to or crossing the work so as to cause the minimum of inconvenience to the general public.
- .8 The Contractor is required to maintain local traffic and driveway access during all stages of construction. This includes maintaining a 1.5m width walkway or pathway through the construction site for pedestrians.
- .9 Where existing streets or roads are not available as detours, all traffic shall be permitted to pass through the work with as little inconvenience and delay as possible unless otherwise provided or authorized by the Contract Administrator. If half the street only is under improvement, the other half shall be conditioned and maintained as detour.

2.2 Incident Management and Reporting

- .1 The Contractor shall facilitate incident response vehicles and staff and move traffic safely and expeditiously through or around an incident on site and provide assistance to emergency response personnel as required. An incident includes, but is not limited to, motor vehicle accidents, emergency road repairs, disabled vehicles, and debris on the road. The immediate response to an emergency shall by necessity make use of available devices and equipment.
- .2 If an incident occurs on site, the Contractor will be required to submit a report to the Contract Administrator documenting details of the incident including event, location, date, time, action taken, duration and restoration of site.

2.3 Traffic Control Plans

- .1 The Contractor shall designate a qualified Traffic Control Supervisor for the works, per the requirements of WCB regulations Section 18.

The designated Traffic Control Supervisor may be the same individual that is designated as the Traffic Manager, or may be a separate individual qualified for the responsibilities of this function.
- .2 The Contractor shall prepare weekly the anticipated traffic control activities, locations, and durations for the upcoming week.
- .3 Permissible delays shall only be considered outside Peak Hours. Permissible delays are categorized as follows:
 - a) Minor Delays - Less than two (2) minutes in duration; for occasional interruption due to construction activities. These delays shall be coordinated with available breaks in the traffic flow.
 - b) Major Delays - Maximum ten (10) minutes in duration; for occasional interruption of traffic for construction activities if traffic volumes permit.

These supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents (Platinum Edition), Volume II, 2009.

3.0 EXECUTION		.4 The Contractor is responsible for ensuring that the flow of traffic is unimpeded by construction-related activities.
3.1	Traffic Control Plan	<p>.1 A copy of the approved <u>current</u> Traffic Plan must be held on site by both the Site Superintendent as well as the person/company responsible for the traffic control implementation.</p> <p>.2 Failure to produce a valid approved Traffic Plan on site, or having work not follow the Traffic Control Plan will result in immediate shut-down of the work. The Contractor will be required to safely restore facility conditions to allow traffic flow at their expense. The Contractor must take all steps to acquire an approved Traffic control Plan before work can re-start on site. No claim will be accepted by the Owner for costs associated with this work shut-down.</p>
3.2	Road and Sidewalk Closure Permits	<p>.1 The Contractor must have, on-site, a copy of an approved Road and Sidewalk Closure Permit valid for the work being done. Failure to produce a valid Road and Sidewalk Closure Permit on-site will result in shut-down of the work. Failure to comply on what is stated on the approved permit will result in shut-down of the work. The Contractor will be required to safely restore facility conditions to allow traffic flow at their expense. The Contractor must take all steps to acquire a Road and Sidewalk Closure Permit before work can re-start on site. No claim will be accepted by the Owner for costs associated with this work shut-down.</p>
3.3	Traffic Control Personnel & Equipment	<p>.1 The Contractor shall supply all necessary traffic control devices required to perform traffic control services for the project. Signs and traffic control devices not applying to existing conditions shall be removed. Where operations are carried out in stages, only those traffic control devices that apply to the current stage are to be left in place.</p> <p>.2 There must be sufficient Traffic Control Persons (TCPs) on site to appropriately and safely direct traffic in all sections of the Work.</p>
3.4	Signage	<p>Supply, installation, maintenance and removal of all works-related signs shall be the responsibility of the Contractor. The location and type of each sign shall be indicated on the approved Traffic Control Plan, for each stage of the works.</p> <p>Traffic control signs and devices must be positioned and used as specified in the Traffic Control Plan and signs and devices must be located so as to allow traffic to move by or through the work area in a controlled manner and, if necessary, to come to a controlled stop with due regard for the prevailing weather and road conditions.</p> <p>Signs shall be checked daily for legibility, damage, suitability and location. Signs and delineators shall be cleaned as frequently as necessary to ensure full legibility and reflectance.</p>
3.5	Detours	<p>Any proposed detours must be approved by the Contract Administrator and conducted in accordance with the approved Traffic Plan and the Traffic Control Manual for Work on Roadways.</p>
3.6	Abrupt Changes in Surface Elevations	<p>The Contractor shall minimize any abrupt changes in roadway elevation left exposed to traffic during both working and non-working hours.</p> <p>A wedge of asphalt must be used as a transition to vertical differences in travelled</p>

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areas and have a slope of 4:1 or less.

3.7 Cyclist and Pedestrian
Access

The Contractor shall make provision for pedestrians, wheel chairs and bicycles to have safe access across the work zone at all times. If this cannot be readily accommodated then acceptable detours and appropriate signs shall be provided.

3.8 Temporary Pavement
Markings

The Contractor shall be responsible for the application and removal of all temporary pavement markings and reflective devices.

All temporary markings must be removed after installation of permanent markings.

4.0 TRAFFIC RESTRICTIONS

4.1 Road and Sidewalk Closure
Permits

.1 One lane of traffic must be maintained at all times during any allowed lane closure times.

.2 A Road and Sidewalk Closure Permit is required for each instance of closure and will be valid for a maximum period of one (1) week and, if still necessary, re-submittal of a Road and Sidewalk Closure Request is required. The permit fee is waived on this project.

A copy of the approved Road and Sidewalk Closure Permit must be held on site by both the Site Superintendent and the person/company responsible for the traffic control implementation.

.3 Total Road Closure Is Not Permitted

.4 Detours will only be permitted as approved by the Contract Administrator and must have a complete Traffic Control Plan indicating detour route, signing, and duration. Detours will not be allowed without sufficient lead time for commercial and retail operation to react appropriately to detour information provided to them.

4.2 Lane Closure Restrictions

.1 **For each of the road sections affected:**

- Road and Sidewalk Closures will be reviewed for appropriateness during the allowable hours of work.
- Minimum single lane traffic is required at all times
- Access to properties to be maintained
- Sufficient Traffic Control Persons are required for each Road and Sidewalk Closure (or any work activities), including side street intersections, to safely guide traffic through the work site
-

4.3 Hours of Work

The hours of work shall be from **0700 h to 1900 h** inclusive Monday to Friday and **0900 h to 1800 h** inclusive Saturdays. The Contractor must schedule his work within these hours or obtain written authorization from the Contract Administrator to vary said hours.

**5.0 CONSTRUCTION
OPERATIONS**

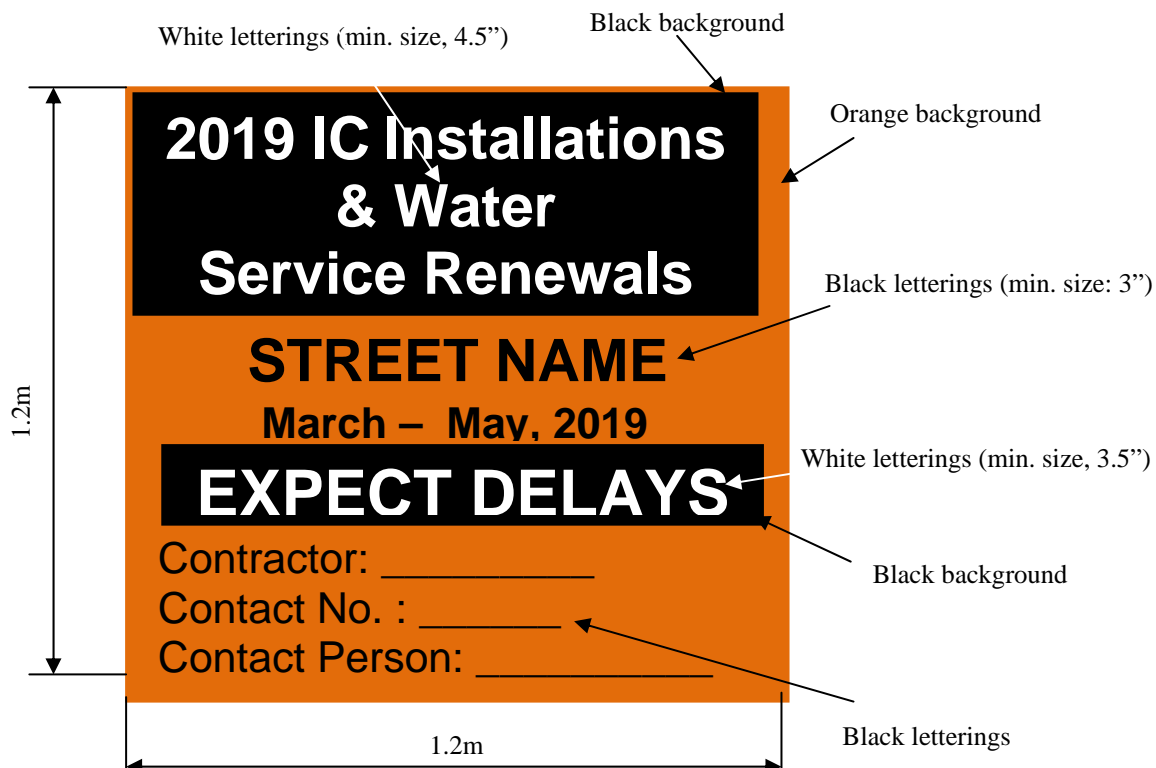
5.1 Truck Routes

.1 The Contractor is restricted to the City's designated Truck Routes. The current Truck Route Map is available on the City's website at www.coquitlam.ca and can be found under **Residents, Transit & Transportation, Trucking Routes**.

These supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents (Platinum Edition), Volume II, 2009.

- | | | |
|-----|-------------------------------------|--|
| 5.2 | Road Specific Considerations | .1 Ensure that Traffic Management Plan accommodates businesses and residences during construction activities. |
| 5.3 | Work stoppage due to traffic | The City will not control or direct traffic control activities of the Contractor, but may require an immediate stop to any work where, in the sole opinion of the Contract Administrator, the provided traffic management plan is ineffective. |
| 5.4 | Construction Activity and Signage | The Contractor will be responsible to place other construction information signs as required to inform the public of construction activities, and ensure safe travel through the work site. |
| 5.5 | Construction Zone Information Signs | <p>If the duration of the work is to be longer than 2 days, the Contractor is required to provide, one week prior to start of work, stationary signs to inform traffic of existing and anticipated conditions at all entry points of the street to be worked on. Signs can be re-used provided that the street name is legible and reflects the actual street & work duration for the street currently working on.</p> <p>Ensure that signs and locations are addressed in the Traffic Management Plan. Signs are to be located at least 3m away from any travelled roadway edge and 0.6m away from sidewalk or travelled shoulder edge with minimum head clearance of 2m. All signs are to be removed at the end of the construction period on each location.</p> |

Construction Zone Information Signs to follow specifications below:



These supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents (Platinum Edition), Volume II, 2009.

APPENDIX 1



City of Coquitlam Road and Sidewalk Closure Permit Request

Traffic Operations Division
3000 Guildford Way, Coquitlam BC V3B 7N2
Phone: 604-927-6250 Fax: 604-927-6255
Email: trafficoperations@coquitlam.ca

Submit to the Traffic Operations Division a minimum of 5 business days prior to the intended closure date.

~~Permit Fee: \$75.00 (Effective February 1, 2019)~~

~~Payment Methods: After review, and if approved, payment options will be emailed to the applicant.~~

Application Date:

City Project Number (if applicable):

Contact Information

Company Name:

Applicant Name:

Name of Contractor doing work for Company/Applicant:

Phone: Fax:

24 Hour Emergency Phone: Email:

Location, date and time, and traffic control plan information

I request approval to close (check all that apply): Direction: ☐ Northbound ☐ Southbound ☐ Eastbound ☐ Westbound

☐ Curb/Outside Lane ☐ Centre/Inside Lane ☐ Right Turn Lane ☐ Left Turn Lane ☐ Cycling Lane ☐ Sidewalk

☐ Single Lane Alternating Traffic ☐ Full Closure

Road/Street Name:

Location Description:

Date & Time Information: Dates:

Starting

Ending

Hours:

Starting

Ending

Purpose:

Will this closure disrupt: Bus Routes or Stops? ☐ Yes ☐ No If yes, the Applicant will need to contact Coast Mountain Bus Company regarding disruptions.

Will this closure disrupt: Garbage/Recycling Routes or Pick Up? ☐ Yes ☐ No If yes, the Applicant will need to assist the contractor and/or contact the City's Environmental Services Group. www.coquitlam.ca/trashtalk

These supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents (Platinum Edition), Volume II, 2009.

Traffic Control Plan*:

- (a) Traffic Management Manual for Work on Roadways Figure Number _____, or
(b) A Traffic Control Plan (*attach separately*) indicating signage, taper lengths, direction of traffic, work area, and north arrow

Traffic control persons (flag persons) on duty? ☐ Yes ☐ No If yes, specify how many: _____

*** Important Notice:** All operations within the road right-of-way must comply with Worksafe BC regulations and BC Ministry of Transportation standards for work on roadways.

Application Checklist

- ☐ Permit Fee
- ☐ Prime Contractor Designation Letter
- ☐ City of Coquitlam Certificate of Insurance
- ☐ Traffic Control Plan or Traffic Management Manual for Work on Roadways Figure Number _____
- ☐ Coast Mountain Bus Company (Phone: 778-593-5774 | Email: special.events@coastmountainbus.com) contacted regarding impact to bus routes and bus stops
- ☐ City of Coquitlam Environmental Services Group (Phone: 604-927-3500 | Email: wastereduction@coquitlam.ca) contacted regarding impact to garbage/recycling routes and pick up

I HEREBY AGREE to the terms stipulated herein and further agree to indemnify and save harmless the City against any and all claims, actions, or expenses whatsoever or by whomsoever brought against the City by the reason of the City granting us this Road and Sidewalk Closure Permit. I further agree to accept responsibility to ensure proper situation control and street sweeping for the duration of the road or sidewalk obstruction.

Date

 _____
Applicant Signature

Office Use Only PERMIT STATUS

- ☐ Permit Fee ☐ Prime Contractor Letter ☐ Certificate of Insurance
- ☐ Traffic Control Plan ☐ Impact to bus service ☐ Impact garbage and recycling collection
- ☐ Request is denied for the following reason(s): _____
- ☐ Request is approved with the following change(s): _____
- ☐ Request is approved as submitted

Date

Traffic Technologist or Designate

These supplementary Specifications must be read in conjunction with the Master Municipal Specifications contained in the Master Municipal Construction Documents (Platinum Edition), Volume II, 2009.

***Appendix B –
Inspection Chamber and
Water Service Record Sheet***

Inspection Chamber Installations / Water Services



Project Manager:

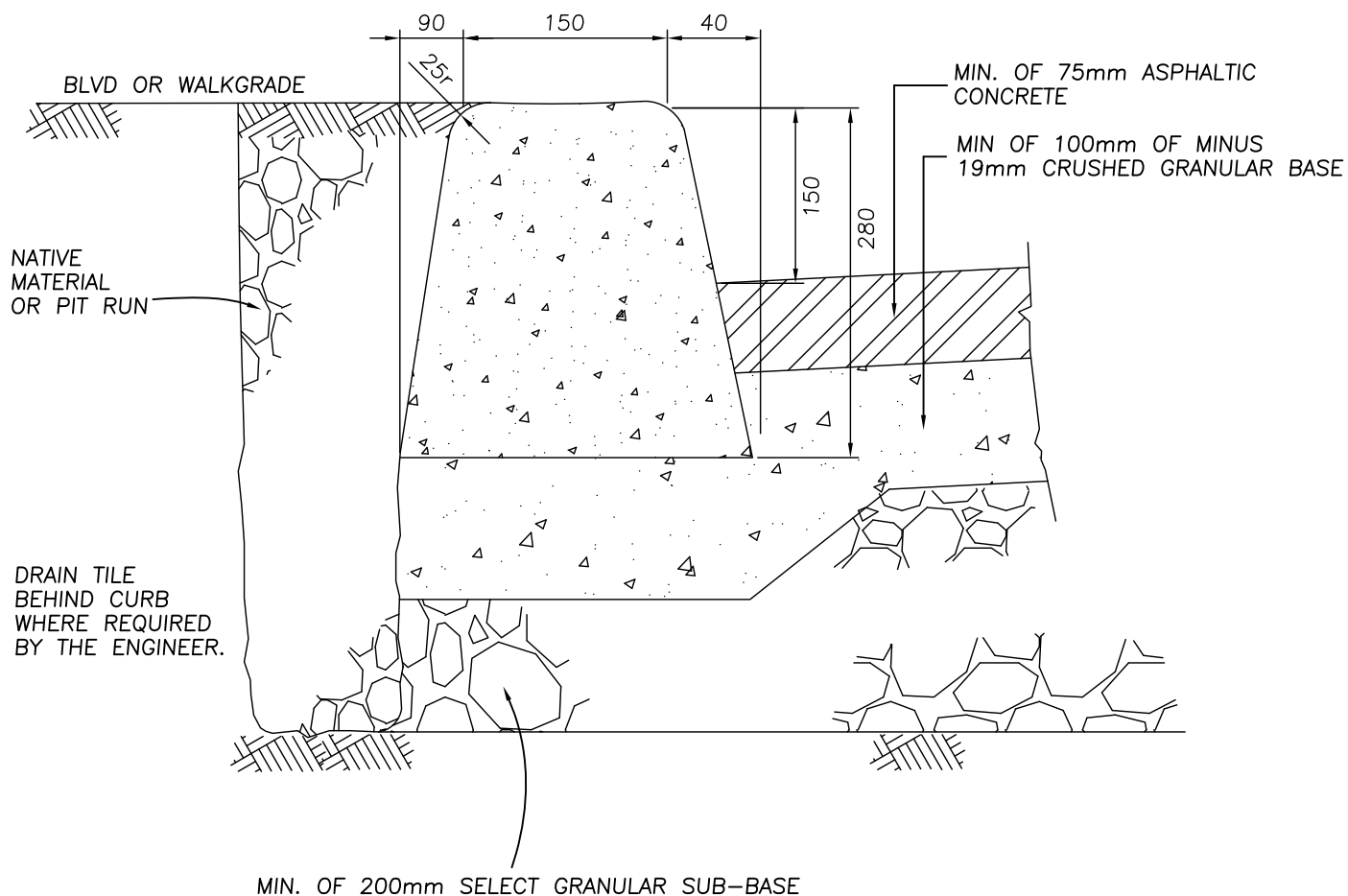
Contractor:

Item	Street Address	Water Service - Installation				Sanitary - IC Installation (yes)	Renewed Sanitary Connection from PL to main	Storm - IC Installation (yes)	Renewed Storm Connection from PL to main	Hydrant
		Date Installed	Size	Material	Service Box Type					
1	2700 Anchor Place									
2	2705 Anchor Place									
3	2709 Anchor Place									
4	2712 Anchor Place									
5	2716 Anchor Place									
6	2720 Anchor Place									
7	2732 Anchor Place									
8	2500 Cable Court									
9	2504 Cable Court									
10	2507 Cable Court									
11	2510 Cable Court									
12	2511 Cable Court									
13	2512 Cable Court									
14	2514 Cable Court									
15	2529 Cable Court									
16	3175 Capstan Crescent									
17	3137 Capstan Place									
18	3140 Capstan Place									
19	3145 Capstan Place									
20	3148 Capstan Place									
21	3153 Capstan Place									
22	2500 Channel Court									
23	2508 Channel Court									
24	2512 Channel Court									
25	2519 Channel Court									
26	628 (NE Crn) Cottonwood Ave - Hydrant									
27	623 Cottonwood Avenue									
28	631 Cottonwood Avenue									
29	633 Cottonwood Avenue									
30	2707 Daybreak Avenue									
31	2724 Daybreak Avenue									
32	2760 Daybreak Avenue									
33	2766 Daybreak Avenue									
34	2790 Daybreak Avenue									
35	2797 Daybreak Avenue									
36	3103 Daybreak Avenue									
37	3118 Daybreak Avenue									
38	1014 Dory Street									
39	1020 Dory Street									
40	683 Fairview Street									
41	681 Florence Street									
42	703 (SW Crn) Folsom Street - Hydrant									
43	712 Folsom St - Handwheel									
44	2700 Hawser Ave									
45	2710 Hawser Ave									
46	340 Laurentian Cres - Blow-off									
47	401 Laurentian Crescent									
48	403 Laurentian Crescent									
49	405 Laurentian Crescent									

Item	Street Address	Water Service - Installation				Sanitary - IC Installation (yes)	Renewed Sanitary Connection from PL to main	Storm - IC Installation (yes)	Renewed Storm Connection from PL to main	Hydrant
		Date Installed	Size	Material	Service Box Type					
50	407 Laurentian Crescent									
51	409 Laurentian Crescent									
52	413 Laurentian Crescent									
53	429 Laurentian Crescent									
54	453 Laurentian Crescent									
55	469 Laurentian Crescent									
56	477 Laurentian Crescent									
57	1801 Madore Avenue									
58	2718 Mara Drive									
59	2556 Passage Drive									
60	2557 Passage Drive									
61	2558 Passage Drive									
62	2562 Passage Drive									
63	2563 Passage Drive									
64	2580 Passage Drive									
65	2582 Passage Drive									
66	2588 Passage Drive									
67	2591 Passage Drive									
68	2712 Pilot Drive									
69	2718 Pilot Drive									
70	2730 Pilot Drive									
71	2736 Pilot Drive									
72	2740 Pilot Drive									
73	2787 Pilot Drive									
74	2802 Pilot Drive									
75	2807 Pilot Drive									
76	1299 Pinetree Way									
77	3130 Plimsoll Street									
78	3138 Plimsoll Street									
79	3139 Plimsoll Street									
80	3146 Plimsoll Street									
81	3150 Plimsoll Street									
82	3155 Plimsoll Street									
83	3158 Plimsoll Street									
84	825 (East PL) Smith Ave - Hydrant									
85	923 (East PL) Smith Ave - Hydrant									
86	1035 Smith Avenue									
87	975 (SW Crn) Smith Avenue - Hydrant									
88	1048 Spar Drive									
89	1049 Spar Drive									
90	1051 Spar Drive									
91	1057 Spar Drive									
92	1060 Spar Drive									
93	1073 Spar Drive									
94	1077 Spar Drive									
95	1079 Spar Drive									
Completed by:		Date:								

*For sanitary & storm service connections, please make note of material used if service connection is replaced from PL to main

Appendix C – Standard Detailed Drawings



CURB ON GRAVEL BASE NO SIDEWALK

PLOTTED: 22-Feb-16

CURB ON GRAVEL BASE

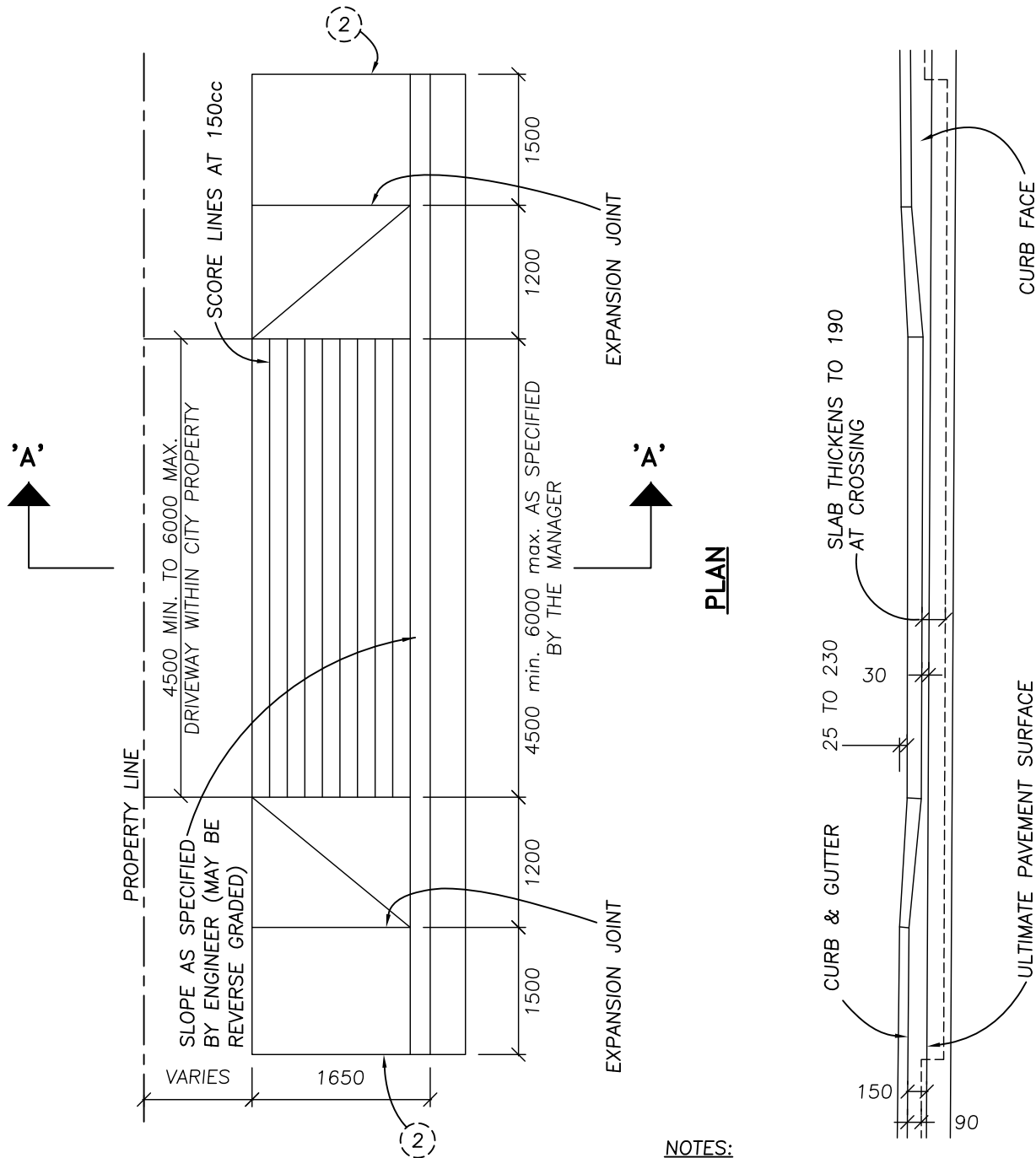
DATE: NOV/2015

DRAWN: REY

SCALE: N.T.S.

DRAWING NUMBER:

COQ-C6

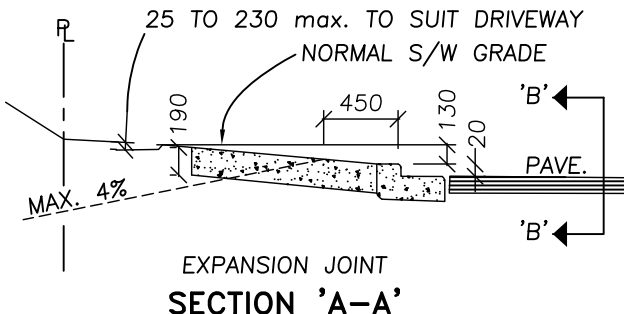


PLAN

FRONT ELEVATION
SECTION 'B-B'

NOTES:

1. WHERE DRIVEWAY IS AT LOWER GRADE THAN SIDEWALK, CROSSING SLOPES, BREAKOUT POINT AND D/W GRADE AS INDICATED BY DASHED LINES IN SECTION IF APPROVED BY THE MANAGER.
2. WHERE NEW CROSSING IS INSTALLED IN EXISTING SIDEWALK, BREAKOUT TO NEAREST TOOLED TRANSVERSE LINE.
3. WHERE SIDEWALK DOES NOT EXIST. DRIVEWAY MUST START AT TOP OF FLARE AND EXTEND AT 45° TO A MAX WIDTH OF 6.0m ON CITY PROPERTY.
4. SLOPE DRIVEWAY AS SPECIFIED BY THE ENGINEER.



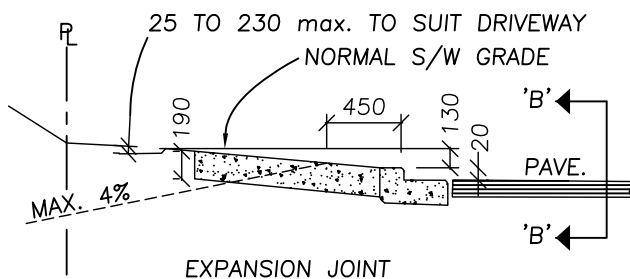
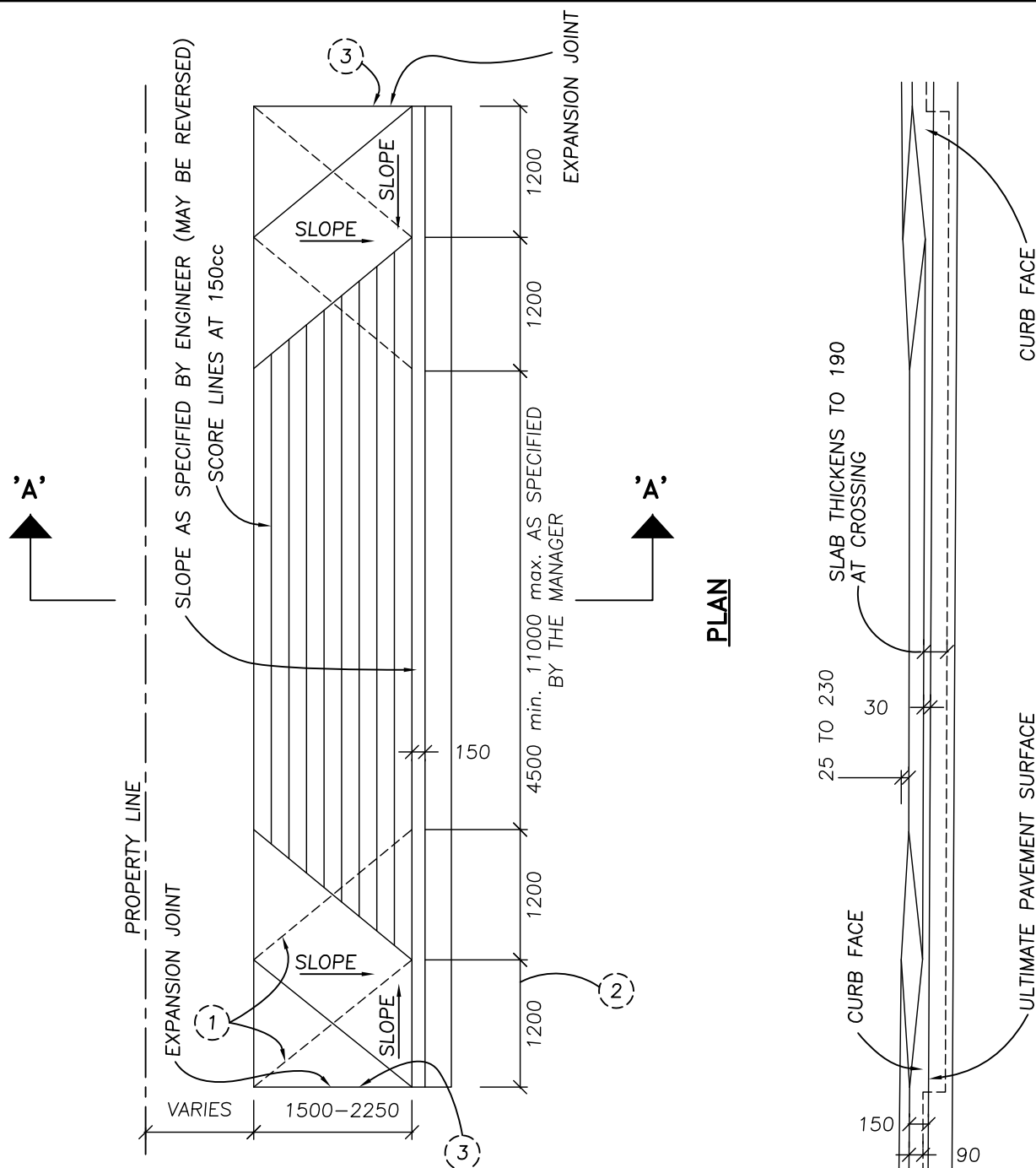
SECTION 'A-A'

PLOTTED: 22-Feb-16

LOCAL, COLLECTOR
CROSSING OF CURB, GUTTER
AND SIDEWALK

DATE: DEC/2015
DRAWN: REY
SCALE: N.T.S.

DRAWING NUMBER:
COQ-C7



NOTE

- (1) — WHERE DRIVEWAY IS AT LOWER GRADE THAN SIDEWALK, CROSSING SLOPES SHALL BE REVERSED AS INDICATED BY DASHED LINES IN SECTION.
- (2) — FLARE REQUIRED ON EACH SIDE.
- (3) — WHERE NEW CROSSING IS INSTALLED IN EXISTING SIDEWALK, BREAKOUT TO NEAREST TOOLED TRANSVERSE LINE.

PLOTTED: 18-Feb-16

SECTION 'A-A'

INDUSTRIAL, COMMERCIAL SIDEWALK CROSSING WITH DRIVEWAY

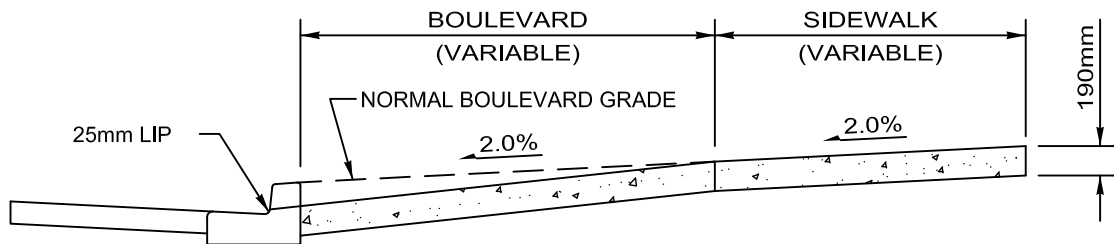
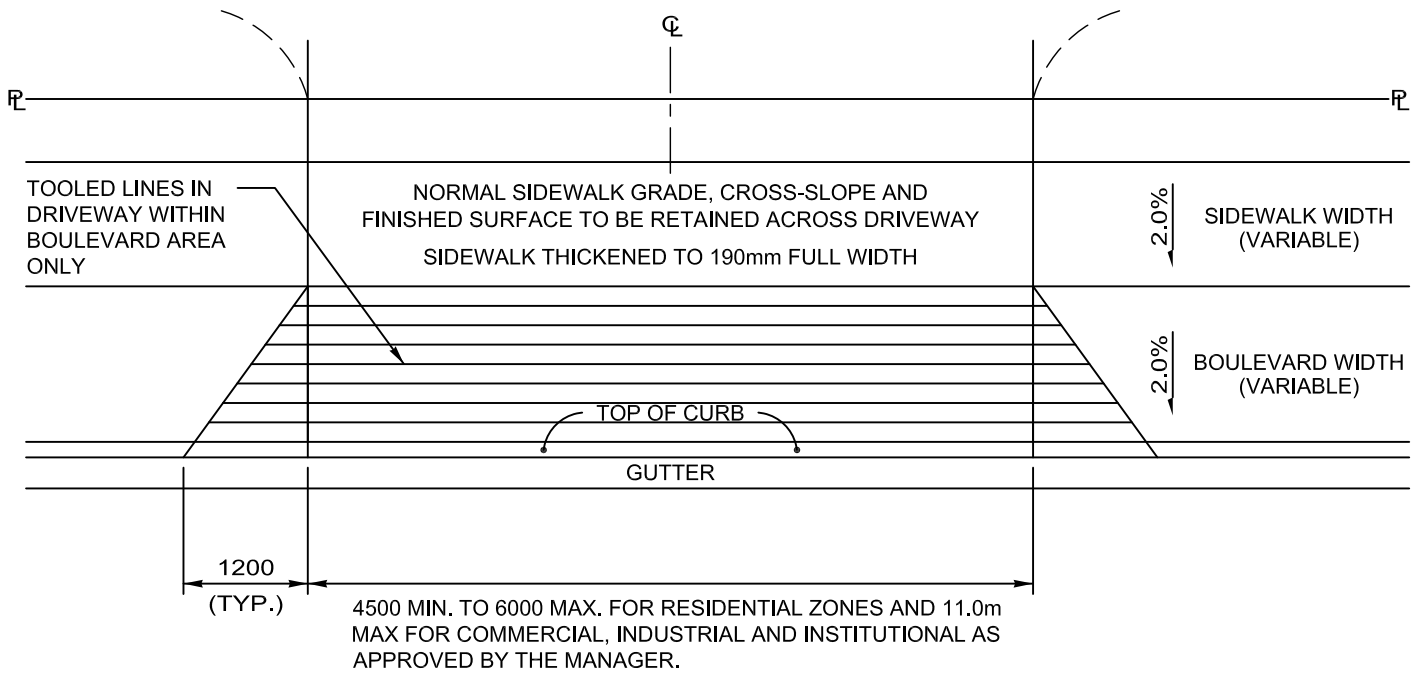
DATE: FEB/2016

DRAWN: REY

SCALE: N.T.S.

DRAWING NUMBER:

COQ-C7A



NOTES:

1. DRIVEWAY LETDOWN TO BE CENTERED ON GARAGE.
2. DRIVEWAY WIDTH ON CITY PROPERTY TO MATCH WIDTH OF LETDOWN EXCLUDING THE FLARES.

PLOTTED: 19-Feb-16

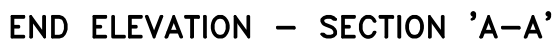
TYPICAL CURB/SIDEWALK DRIVEWAY
LETDOWN - SEPARATED SIDEWALK

DATE: FEB/2016
DRAWN: REY
SCALE: N.T.S.

DRAWING NUMBER:
COQ-C7B



SECTION 'B-B'

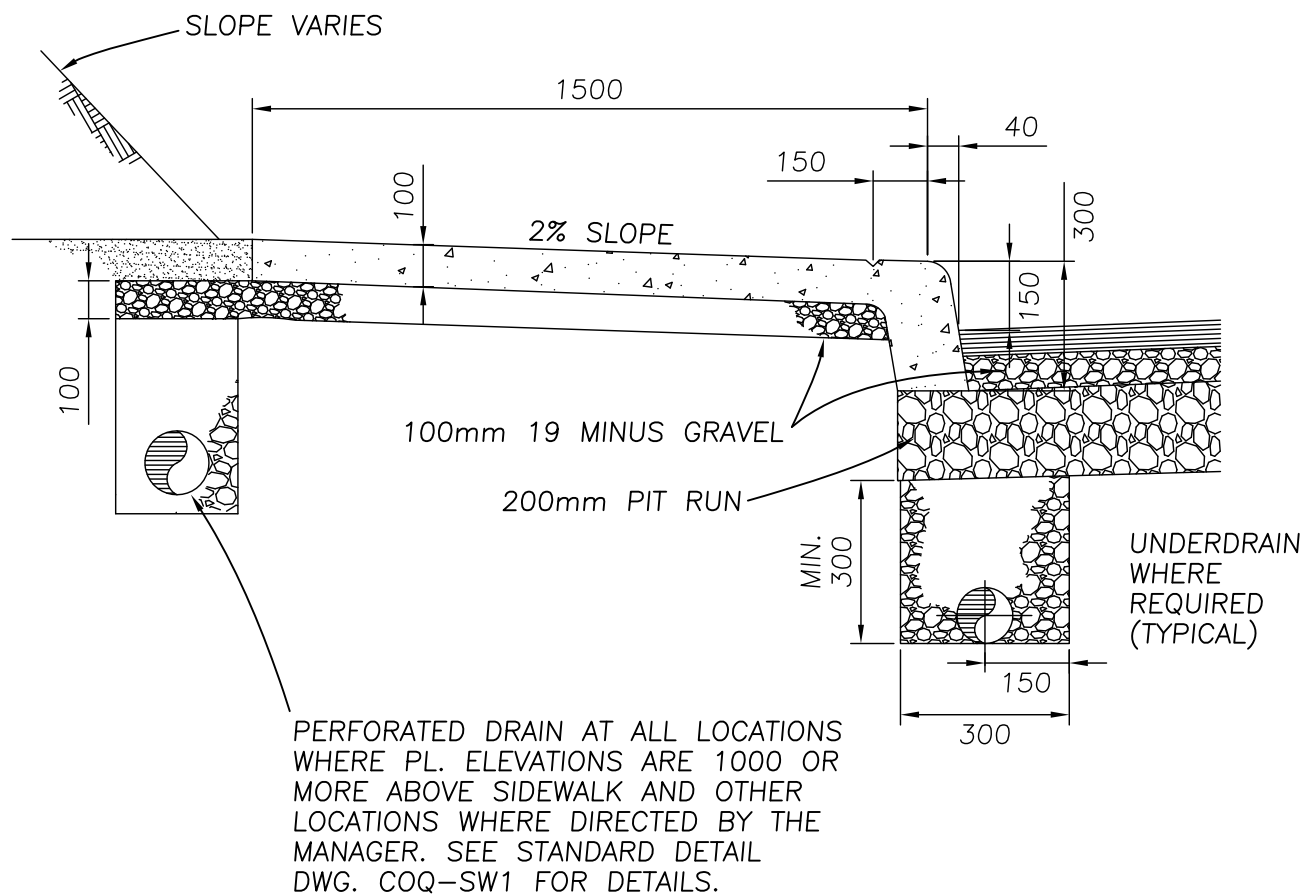


1. WHERE DRIVEWAY IS AT LOWER GRADE THAN SIDEWALK, CROSSING SLOPES SHALL BE REVERSED AS INDICATED BY DASHED LINES IN SECTION.
2. FLARE REQUIRED ON EACH SIDE
3. WHERE NEW CROSSING IS INSTALLED IN EXIST. SIDEWALK, BREAK OUT TO NEAREST TRANSVERSE LINE.

MONOLITHIC CURB-SIDEWALK CROSSING WITH DRIVEWAY

DATE:	MAY/2015
DRAWN:	REY
SCALE:	N.T.S.

DRAWING NUMBER:
COQ-C7C

MONOLITHIC CURB SIDEWALK

PLOTTED: 26-Feb-16

MONOLITHIC SIDEWALK

DATE: NOV/2015

DRAWN: REY

SCALE: N.T.S.

DRAWING NUMBER:

COQ-C8