



INVITATION TO TENDER 19-16

**WATERMAIN RENEWAL
PAINTER, BARCLAY, GARFIELD**

**MASTER MUNICIPAL CONSTRUCTION DOCUMENTS - 2009
Platinum Edition**

UNIT PRICE CONTRACT

May 22nd, 2019



INVITATION TO TENDER 19-16

WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD

TABLE OF CONTENTS

The complete Contract Documents consist of the following parts:

1. The Master Municipal Construction Documents (Tender Package) consisting of the following parts (**included in this tender package**):
 - Invitation to Tender
 - Instructions to Tenderers, Part I
 - Form of Tender
 - Appendix 1 -- Schedule of Quantities and Prices
 - Appendix 2 -- Preliminary Construction Schedule
 - Appendix 3 -- Experience of Superintendent
 - Appendix 4 -- Comparable Work Experience
 - Appendix 5 – Subcontractors
 - Appendix 6 – Tenderer's Current Projects Underway
 - Agreement - Draft
 - Schedule 1 -- Schedule of Contract Documents
 - Schedule 2 -- List of Contract Drawings
 - Appendix 7 - Safety Covenant
 - Appendix 8 - Prime Contractor Agreement
 - Appendix 9 – Letter of Acceptance – Base Course Gravel in Advance of Paving
 - Supplementary General Conditions
 - Supplementary Specifications
2. Additional reference documentation consisting of the following parts (**not distributed in this tender package**) available at www.campbellriver.ca:
 - Supplementary Specifications, City of Campbell River, Design Standards 2010, Appendix A to Subdivision and Development Servicing Bylaw 3419
 - City of Campbell River, Approved Utility Product List April 2011
3. The balance of the Master Municipal Construction Documents, Platinum, 2009 edition. These documents are available in the "MMCD - General Conditions, Specifications and Standard Detail Drawings" (**not distributed in this tender package**):



INVITATION TO TENDER 19-16

WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD

The City of Campbell River invites tenders for the Watermain Renewal – Painter, Barclay, Garfield project which includes the following generalized scope of work:

Work under this Contract includes, but is not limited to, all supervision, construction, equipment, labour, material, permits and related items required for the renewal of approximately 920 lineal meters of PVC watermain on Painter Road, Barclay Road and Garfield Road. In general terms, this work will involve the installation of new watermain, services, hydrants, isolation valves and some drainage culvert replacements as well as the reinstatement of the affected asphalt road surface and flat work.

Also included is the requirement to coordinate the necessary asphalt paving with the City's paving contractor, which is delivered under separate contract, and the requirement to reinstate existing pavement markings after paving work is complete.

This Tender is available electronically by downloading from BC Bid or the City's website at:
<http://www.campbellriver.ca/business-economy/do-business-with-the-city/bidopportunities>

A mandatory site meeting will **NOT** be held.

This Tender is scheduled to close at:

Tender Closing Time:	3:00 p.m. local time
Tender Closing Date:	Wednesday June 12th, 2019 <i>There will NOT be a Public Opening for this Tender</i>
Delivered to:	City of Campbell River City Hall 301 St. Ann's Road 1 st Floor Reception Desk Campbell River, BC V9W 4C7 ATTN: Daniel Xu
Tender Enquiries:	Daniel Xu, CPPB, CSCP Senior Buyer Telephone: 250.286.5788 Email: purchasing@campbellriver.ca



INVITATION TO TENDER 19-16

WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD

RECEIPT CONFIRMATION FORM

As receipt of this document, and to directly receive any further information, addendums, etc. regarding this competition, please return this form to:

Email: purchasing@campbellriver.ca

Fax: 250.286.5763

Company Name: _____

Address: _____

City: _____

Province/State: _____ Postal/Zip Code: _____

Telephone No: _____ Fax No: _____

Contact Person: _____

Title: _____

Email: _____

CITY OF CAMPBELL RIVER
INVITATION TO TENDER 19-16
WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD
INSTRUCTIONS TO TENDERERS PART I

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4	Additional Instructions to Tenderers	IT 4

INSTRUCTIONS TO TENDERERS - PART I

(TO BE READ WITH "INSTRUCTIONS TO TENDERERS - PART II"
CONTAINED IN THE EDITION OF THE PUBLICATION
"MASTER MUNICIPAL CONSTRUCTION DOCUMENTS" AND APPLICABLE CITY OF CAMPBELL
RIVER BYLAWS SPECIFIED IN ARTICLE 2.2 BELOW)

Reference No.: TENDER 19-16

Contract: WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD

Introduction

1

1.1 These Instructions apply to and govern the preparation of tenders for this *Contract*. The *Contract* is generally for the following work:

The City of Campbell River invites tenders for the Watermain Renewal – Painter, Barclay, Garfield project which includes the following generalized scope of work:

Work under this Contract includes, but is not limited to, all supervision, construction, equipment, labour, material, permits and related items required for the renewal of approximately 920 lineal meters of PVC watermain on Painter Road, Barclay Road and Garfield Road. In general terms, this work will involve the installation of new watermain, services, hydrants, isolation valves and some drainage culvert replacements as well as the reinstatement of the affected asphalt road surface and flat work.

Also included is the requirement to coordinate the necessary asphalt paving with the City's paving contractor, which is delivered under separate contract, and the requirement to reinstate existing pavement markings after paving work is complete.

1.2 Direct all tender inquiries regarding the *Contract*, to:

Daniel Xu, CPPB, CSCP
Senior Buyer
Telephone: 250.286.5788
Email: purchasing@campbellriver.ca

Tender Documents

2

2.1 The tender documents which a tenderer should review to prepare a tender consist of all of the *Contract Documents* 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 *Contract Documents* include the Drawings listed in Schedule 2 to the Agreement, entitled "List of Drawings".

2.2 A portion of the Contract Documents is included by reference. Copies of these documents have not been included with the tender package. These documents are the Instructions to Tenderers - Part II, General Conditions, Specifications and Standard Detail Drawings contained in the publication entitled "Master Municipal Construction Documents - General Conditions, "Specifications and Standard Detail Drawings" and relevant sections of Supplementary Specifications, City of Campbell River, Design Standards 2010, Appendix A to Subdivision and Development Servicing Bylaw 3419. Refer to Schedule 1 attached to the Agreement or, if no edition has been specified, then the applicable edition shall be the most recent edition as of the date of this *Contract*. All sections of this publication are by reference included in the *Contract Documents*.

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 judgement about its reliability, accuracy or completeness and neither the *Owner* nor any representative of the *Owner* gives any guarantee or representation that the additional information is reliable, accurate or complete.

**Submission of
Tenders**

3

3.1 Tenders must be submitted in a sealed opaque package, clearly marked on the outside with the above *Contract* Title and Reference No., and must be received on or before:

Tender Closing Time: 3:00 p.m. local time

Tender Closing Date: Wednesday June 12th, 2019

There will NOT be a Public Opening for this Tender

Delivered to: City of Campbell River City Hall
301 St. Ann's Road
1st Floor Reception Desk
Campbell River, BC V9W 4C7
ATTN: Daniel Xu

3.2 Late tenders will not be accepted or considered, and will be returned unopened.

3.3 Tender Submission

.1 Tenders **must** be submitted on the Tender Forms included in these tender documents. The addition to or changing of any words in these Tender Forms by the tenderer or the failure to comply with and complete all items may be cause for rejection without consideration of the tender.

- .2 The Tender Submission **must** include acknowledgement of receipt of all issued addenda.
- .3 The Tender submission **must** include:
 - Appendix 1 – Schedule of Quantities and Prices – GST Excluded;
 - Appendix 2 – Preliminary Construction Schedule;
 - Appendix 3 – Experience of Superintendent;
 - Appendix 4 – Comparable Work Experience;
 - Appendix 5 – Subcontractors;
 - Appendix 6 – Tenderers Current Projects Underway.
- .4 The Tender Submission **must** include the specified financial security, in the form of the “Bid Security” as required in Section 5.2 of the Instructions to Tenderers Part II.
- .5 The Form of Tender **must** bear the signature of a legal signing authority of the tenderer.
- .6 Other than acknowledgement of receipt of addenda, or request for withdrawal or revision, documents submitted as part of a tender will **not** be considered if received by any of the Owner's facsimile machines.
- .7 Except as expressly and specifically permitted in these Instructions to Tenderers, no Tenderers shall have any claim for any compensation of any kind whatsoever, as a result of participating in the tender, and by submitting a bid, each Tenderer shall be deemed to have agreed that it has no claim.

**Additional
Instructions to
Tenderers**

4

**Freedom of
Information**

4.1

The *Owner* is subject to the provisions of the Freedom of Information and Protection of Privacy Act. As a result, while Section 21 of the Act does offer some protection for third party business interests, the *Owner* cannot guarantee that any information provided to the *Owner* can be held in confidence. All tenders, after closing time and date become the property of the *Owner*.

**Cost of Tender
Submission**

4.2

The *Owner* shall not be liable for a Tenderer's cost of submitting a tender.

**Evaluation
Criteria**

4.3

(a) The *Owner* reserves the right to waive informalities in or reject any or all tenders or accept the tender deemed most favourable in the interests of the *Owner*. Tenders will be evaluated on the combination of information provided in the Form of Tender and Appendices, which may offer the best value and not necessarily the lowest price. The *Owner* reserves the right to conduct pre-selection meetings with Tenderers. The *Owner* further reserves

the right to conduct post-selection meetings in order to correct, change or adapt the selected Tender to the wishes of the *Owner*. **Acceptance of any tender may be subject to budgetary considerations and/or City of Campbell River Council approval, and/or the approval of other jurisdictions having authority.**

**Construction
Association
Policies**

4.4

4.4.1

The *Owner* is not a member of the Public Construction Council of British Columbia, the British Columbia Construction Association or any other construction association.

4.4.2

The *Owner* does not adopt or agree to be bound by "The Procedures and Guidelines Recommended For Use on Publicly Funded Construction Projects" produced by the Public Construction Council of British Columbia, September 1989, or any other procedure/guideline recommended, adopted or produced by any construction association in the tendering and award of the *Contract* of this project.

**Good Neighbour
Policy**

4.5

4.5.1

The *Owner's* Good Neighbour Policy as adopted by City of Campbell River Council on April 15, 1997 shall apply to this contract.

4.5.2

The Policy states: "That Contractors working on Municipal rights-of-way or on private land where new rights-of-way are being created, be required to provide written notice to the residents in the immediate area of the works, describing what is being constructed, when the works will occur, who to contact for more information and what precautions should be taken if necessary; and that the work-site be posted for safety reasons."

**Mandatory Site
Meeting**

4.6

A Mandatory Site Meeting will **NOT** be held. Tenderers should make themselves familiar with the project site.

Addition\Deletion

4.7

Tenderers are advised that the *Owner* may, at its option, and subject to available funding and budgetary considerations, delete any *Work* described in the *Contract Documents* or may require that optional work be added to the scope of *Work*.

**Omissions and
Discrepancies**

4.8

The Tenderer must carefully examine the *Contract Documents* and the site of the proposed works, judging for and satisfying themselves as to the probable conditions to be encountered. Should a Tenderer find omissions from or discrepancies in the *Contract Documents*, or be in doubt as their meaning, the Tenderer should notify the *Owner* no later than 5 days prior to the tender closing, who may cause to send a written instruction to all Tenderers in the form of an addendum, which shall become part of the contract and shall be covered in the contract price. The Tenderer may not claim, after the submission of a tender, that there was any misunderstanding with respect to the conditions imposed

by the documents. No oral interpretations made to a Tenderer as to the meaning of the *Contract Documents* shall be considered binding. Every request for an interpretation shall be made in writing, forwarded to the office referred to in paragraph 3.1 of the Instructions to Tenderers – Part I.

**Amendment of
Tenders**

4.9

4.9.1

Delete Paragraphs 12.1 of the Instructions to Tenderers, Part II and replace with the following paragraphs 4.9.2 and 4.9.3:

4.9.2

A Tenderer may, without prejudice to itself, withdraw or revise a tender after it has been deposited with the *Owner*, provided the request for withdrawal or revision is filed with the *Owner* in writing before the time set for the Tender closing. Non-facsimile request(s) should be submitted in a sealed opaque envelope clearly marked with the contract name and reference number to the office referred to in paragraph 3.1 of the Instructions to Tenderers - Part 1. In the case of revision(s), a revised price will not be accepted, only the addition to or deduction from the tender price will be accepted. Written withdrawals or revisions must be signed by the same person or persons who signed the original Form of Tender.

4.9.3

In the case of facsimile or e-mail requests for withdrawal or revision, they will only be accepted if they are received by the *Owner's* Supply Management Department facsimile machine at 250.286.5763 or via e-mail at purchasing@campbellriver.ca before the scheduled tender closing time. Tenderers assume the entire risk that the facsimile and computer equipment and staff at the above office will receive the facsimile or e-mail containing the withdrawal or revision. The *Owner* assumes no risk or responsibility whatsoever that any facsimile or e-mail will be received as required and shall not be liable to any *Tenderer* if for any reason a facsimile or e-mail is not received.

For purposes of this paragraph 4.9.3, "received" means the request for withdrawal or revision is visible to the *Owner's* staff in its entirety, and is either in printed form or is capable of immediate reproduction in printed form.

**Sub-Surface
Conditions**

4.10

A geotechnical assessment or a geotechnical exploration has not been completed. Tenderers shall make their own assessment of the soil and groundwater conditions at the location.

**Environmental
Conditions**

4.11

An environmental assessment has been completed. Refer to Mainstream Biological EMP report attached. A CEMP will be required for review upon NoA.

Working Hours

4.12

Work inside the *Owner's* Property shall be carried out between the hours of 7:00 a.m. and 10:00 p.m. seven (7) days a week unless other arrangements are made between the *Owner* and the *Contractor*.

**Commencement
And Completion
of Work**

4.13 The *Owner* requires that the *Work* under this Contract be completed as quickly as possible after *Contract* award, and within the following milestones:

Substantial Performance of this Contract to be achieved within 90 days from Notice to Proceed.

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 I (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.

4 I (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 stated as:

A tender must be accompanied by the *Bid Security* in the form of:

a a Bid Bond issued by a surety licensed to carry on the business of suretyship in British Columbia in a form reasonably satisfactory to the *Owner*, or

b cash, bank draft or letter of credit in a form acceptable to the *Owner*,

in an amount equal to 10% of the *Tender Price*.

5 I (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*.

Tenderer's Initial Owner's Initial

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- 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*; and
- b a Baseline *Construction Schedule*, as per Supplementary General Condition 4.6.1; and
- c a "clearance letter" indicating that the tenderer is in WCB compliance; and
- d a copy of the insurance policies as specified in GC 24 indicating that all such insurance coverage is in place; and
- e a Health and Safety Program Manual pertaining to the Work;
- f a Construction Environmental Plan as per Contract Drawings Sheet 1.

5.1.2 As per General Condition 4.6.6, the Owner shall issue the Notice to Proceed within 14 days of receipt of the documentation required under item 5.1.1 above.

5.1.3 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*.

5.1.4 sign the *Contract Documents* as required by GC 2.1.2.

6 I (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 me (us) to enter into the *Contract* and the *Owner* may, on written notice

Tenderer's Initial Owner's Initial

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to me (us), award the *Contract* to another party. I (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 my (our) *Tender Price* is less than the amount for which the *Owner* contracts with another party to perform the *Work*.

7 I (WE) DECLARE THAT:

7.1 no person, firm or company other than the undersigned, has any interest in this tender or in the proposed *Contract* for which this tender is made;

7.2 this tender is made without any connection, knowledge, comparison of figures, or agreement with any other company, firm or person making a tender for the same work;

7.3 in tendering for this work, and when called upon to enter into an agreement with the *Owner*, I (we) will be bound to comply with all laws, statutes, and municipal bylaws pertaining to the work. The agreement will be governed by the laws of the province of British Columbia;

7.4 in submitting this tender I (we) did not rely upon any information provided by the *Owner*, or any of the *Owner's* employees or agents, relating to the conditions, contingencies, risks or other circumstances, local or otherwise, which might influence or affect the performance or the cost of the work, including, without limiting the nature of the ground, subsoil, substrata of the work site, the means of access to the work site, the quality, quantity, nature or location of the materials to be furnished or removed in performance of the work, and the conditions under which the labour force will be employed, except the extent that any such information is expressly set forth in the *Contract Documents*. I (we) have relied on our own examination of the work site and have informed ourselves as to all conditions, contingencies, risks, and circumstances, local or otherwise, which might influence or affect the performance or the cost of the work. I (we) accept the site prior to the signing of the *Contract*.

8 WE AGREE:

Tenderer's Initial Owner's Initial

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8.1 The work shall be completed entirely in 90 *Days* from *Notice to Proceed* (The Designated Completion Period);

8.2 There shall be no exclusion of time from the Designated Completion Period for any reason OTHER than delays clearly attributable to the OWNER, its agents, employees or any Authorized Representatives.

9 I (WE) DECLARE THAT:

9.1 I (we) recognize that the lowest or any tender will not necessarily be accepted; and

9.2 I (we) recognize that the *Owner* reserves the right to reject all tenders or to accept the tender which best suits its long term objectives; and

I (we) recognize that the *Owner* reserves the right to accept or reject all or part of this Tender at any time during the period specified by paragraph 5.1 of this Form of Tender.

10 I (WE) DECLARE THAT:

10.1 I (we) do not (or any related company) have any family, ownership, and operating relationships with the City of Campbell River, or any elected official, staff or other officials holding public office in the City of Campbell River and agree that the Owner reserves the right to reject any tender that may be perceived to be in a conflict of interest.

11 I (WE) DECLARE THAT:

11.1 In this tender:

(a) "Related Party of the Tenderer" means:

- an officer or director of the Tenderer;
- a shareholder of the Tenderer;
- a corporation with a shareholder or director who is also a shareholder or director of Tenderer;

(b) "Public Authority" has the same meaning as under the Community Charter.

11.2 I (we) hereby declare that neither the Tenderer nor a Related Party of the Tenderer:

(a) has had a bid bond or performance bond retained or claimed against;

Tenderer's Initial Owner's Initial

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- (b) has breached a contract for works or services with the *Owner* or other Public Authority in British Columbia;
- (c) has been engaged in a legal action against the *Owner* or another Public Authority in British Columbia, or the elected or appointed officers and employees of the *Owner* or that other Public Authority, in relation to;
 - any other contract for works or services;
 - any matter arising from the exercise of the *Owner's* or the other Public Authority's powers, duties or functions under the Community Charter, Local Government Act or other enactment;
- (d) has been charged or convicted of an offence in relation to the performance of a contract for works or services with the *Owner* or other Public Authority;

within five years of the closing date of this Tender.

Tenderers who are unable to truthfully complete this declaration must provide full particulars of the relevant circumstances. Submission of a false declaration is grounds for rejection of a tender.

11.3 I (we) hereby declare that the *Owner* may in its absolute discretion reject a Tender submitted by a Tenderer if the Tenderer or a Related Party of the Tenderer:

- (a) has had a bid bond or performance bond retained or claimed against;
- (b) has breached a contract for work or services with the *Owner* or other Public Authority in British Columbia;
- (c) has been engaged in a legal action against the *Owner* or another public authority in British Columbia, or the elected or appointed officers and employees of the *Owner* or that other public authority, in relation to:
 - any other contract for works or services;
 - any matter arising from the exercise of the *Owner's* or the other public authority's powers, duties or functions under the Community Charter, Local Government Act or other enactment;
- (d) has been charged or convicted of an offence in relation to the performance of a contract for works or services with the *Owner* or other Public Authority;

Tenderer's Initial Owner's Initial

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within five years of the closing date of this Tender.

11.4 I (we) hereby declare that in determining whether to reject a tender the *Owner* will consider whether:

- (a) the legal action is likely to affect the Tenderers ability to work with the *Owner*, its consultants and representatives, and;

whether the *Owner's* or other public authority's experience with the Tenderer indicates that the *Owner* is likely to incur increased costs including but not limited to staff and legal costs in the administration of this contract if it is awarded to the Tenderer.

12 I (WE) AGREE THAT:

12.1 I (we) agree that if any director, officer or employee, agent or other representative of a Tenderer makes any representation or solicitation to the Mayor, any Councillor, officer or employee of the City of Campbell River, other than those specifically designated in the Tender documents, with respect to this Tender, whether before or after the submission of the Tender, the City shall be entitled to reject or not accept the Tender.

Tenderer's Initial Owner's Initial

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MY (OUR) ADDRESS is as follows:

(Full Legal Name of Corporation, Partnership or Individual)

(address)

(city, province) (postal code)

Phone: _____

Fax: _____

E-mail: _____

This Tender is executed this _____ day of _____,
2019.

(Printed Name)

(Authorized Signatory)

Tenderer's Initial Owner's Initial

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Appendix 1

SCHEDULE OF QUANTITIES AND PRICES – GST EXCLUDED
(See paragraph 5.3.1 of the Instructions to Tender – Part II)
(All prices and *Quotations* including the *Contract Price* shall include all
Taxes, but shall not include *GST*, *GST* shall be shown separately)

ITEM No.	MMCD REF.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
<u>01 GENERAL REQUIREMENTS</u>						
<u>01 01 01 MOBILIZATION and DEMOBILIZATION</u>						
1	3.1	Mobilization and Demobilization (max 10% of total price)	LS	1		
<u>01 55 00 TRAFFIC CONTROL</u>						
2	1.5.1	MoTI Traffic Control	LS	1		
<u>03 30 20 CONCRETE WALKS, CURBS AND GUTTERS</u>						
3	1.4.6	Private Concrete Driveway 120mm thick (c/w Granular Base)	sq.m.	10		
<u>31 EARTHWORKS</u>						
<u>31 23 01 EXCAVATING, TRENCHING AND BACKFILLING</u>						
4	1.10.3	Over-Excavation including Backfilling (<i>Optional Work</i>)	cu.m.	100		
5	1.10.4.1	Removal and Off-Site Disposal of Disused AC Pipe	Lin. M.	78		
6	1.10.4.2	Dump Fees for AC Pipe Disposal	Allowance	1	\$7,000	\$7 000
7	1.10.4	Removal and Off-Site Disposal of Disused Pipe (except AC Pipe) and Structures	Lin. M.	40		
8	1.10.9	Prelocate existing water services near property line (Hand Excavation)	each	10		
Sub-Total Page 9:						\$

Tenderer's Initial Owner's Initial

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**CITY OF CAMPBELL RIVER
TENDER 19-16
WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD
FORM OF TENDER**

9	1.10.10	Prelocate existing utilities connection detail no.1	LS	1		
10	1.10.10	Prelocate existing utilities connection detail no.2	LS	1		
11	1.10.10	Prelocate existing utilities connection detail no.3	LS	1		
12	1.10.10	Prelocate existing utilities connection detail no.4	LS	1		
13	1.10.10	Prelocate existing utilities connection detail no.5	LS	1		
14	1.10.10	Prelocate existing utilities at Painter and Garfield	LS	1		
<u>31 23 23 CONTROLLED DENSITY FILL</u>						
15	1.4.1	CDF (Pipe 100mm diameter)	Lin. M.	930		
<u>31 24 13 ROADWAY EXCAVATION, EMBANKMENT AND COMPACTION</u>						
16	1.8.5	Common Excavation (<i>Optional Work</i>)	cu.m.	50		
17	1.8.14	Roadway and Driveway Asphalt Removal for All Thicknesses	sq.m.	3,300		
<u>32 ROADS AND SITE IMPROVEMENTS</u>						
<u>32 01 01 GENERAL ROAD REPAIRS</u>						
18	1.2.1	General Road Repairs (<i>Optional Work</i>) <i>Force Account</i>	Allowance	1	\$10,000	\$10,000
<u>32 11 23 GRANULAR BASE</u>						
19	1.4.2	Supply and Place 50mm thick Granular Base - (<i>Optional Work</i>)	sq.m.	3,300		
<u>32 12 16 HOT-MIX ASPHALT CONCRETE PAVING</u>						
20	1.5.7	Saw Cut roadway asphalt or concrete pavements or chip seal for permanent pavement restoration	Lin. M.	1,030		
21	1.5.9	Coordination with Owner's Asphalt Concrete Supplier	LS	1		
<u>32 17 23 PAINTED PAVEMENT MARKINGS</u>						
22	1.5.2	Thermoplast stop bars (4)	LS	1		
Sub-Total Page 10:						\$

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**CITY OF CAMPBELL RIVER
TENDER 19-16
WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD
FORM OF TENDER**

<u>32 93 01 PLANTING OF TREES, SHRUBS AND GROUND COVERS</u>						
23	1.9.1	Landscaping Shrub,Trees and Plants replacement costs (L)	each	12		
<u>33 UTILITIES</u>						
<u>33 11 01 WATERWORKS</u>						
24	1.8.2	Pipe-150mmm dia. C900 DR18 PVC at all depths, import backfill (Garfield Road)	Lin. M.	362		
25	1.8.2	Pipe-150mmm dia. C900 DR18 PVC at all depths, import backfill (Painter Road)	Lin. M.	264		
26	1.8.2	Pipe-150mmm dia. C900 DR18 PVC at all depths, import backfill (Barclay Road)	Lin. M.	307		
27	1.8.2	Pipe-250mmm dia. C900 DR18 PVC at all depths, import backfill (Hwy 19)	Lin. M.	6		
28	1.8.3	Gate Valve- 150mm FxH	Each	13		
29	1.8.3	Gate Valve- 250mm FxH	Each	1		
30	1.8.3	Tee- 250Hx250Fx150F	Each	1		
31	1.8.3	Tee- 150Hx150Fx150F	Each	5		
32	1.8.3	Cross-15Fx150Fx150Fx150F	Each	1		
33	1.8.3	5 deg Bend- 150 HxH	Each	1		
34	1.8.3	11.25 deg Bend- 150HxH	Each	1		
35	1.8.3	22.5 deg Bend- 150HxH	Each	15		
36	1.8.3	45 deg Bend- 150HxH	Each	1		
37	1.8.3	Flange Adaptor- 150HxF	Each	1		
38	1.8.3	Cap assembly -150	Each	1		
39	1.8.3	Blind Flange-150	Each	1		
40	1.8.4	Service Connection- 50mm dia. Re-connect only (School)	Each	1		
41	1.8.4	Service Connection- 25mm dia. c/w tracer, idles, setter,meter box, connection restoration (Commercial)	Each	1		
42	1.8.4	Service Connection- 19mm dia. c/w tracer, idles, setter,meter box, connection restoration (Residential)	Each	46		
43	1.8.14	Hydrant Assembly. Std Dwg W4 Terminal City C-71P	Each	6		
44	1.8.15	Wrap watermain joints	Each	18		
Sub-Total Page 11:						\$

Tenderer's Initial Owner's Initial

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**CITY OF CAMPBELL RIVER
TENDER 19-16
WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD
FORM OF TENDER**

45	1.8.13	Tie in Location 1: tie to existing 250mm AC main (Hwy 19A & Garfield) c/w restraints. MoTI Permit Required	LS	1		
46	1.8.13	Tie in Location 2: tie to existing 150mm PVC main (Garfield & Discovery) c/w restraints .	LS	1		
47	1.8.13	Tie in Location 3: tie to existing 150mm AC main (Painter & Pengelley) c/w restraints	LS	1		
48	1.8.13	Tie in Location 4: tie to existing 150mm AC main(s) (Barclay & Pengelley) c/w restraints	LS	1		
<u>33 40 01 STORM DRAINS</u>						
49	1.6.1/2	Culvert- HDPE 600mm w/import backfill and riprap armour	Lin. M.	11		
50	1.6.1/2	Culvert- PVC DR35 300mm diameter w/ Imported Backfill	Lin. M.	41		
<u>33 44 01 MANHOLES AND CATCHBASINS</u>						
51	1.5.1	Type 2 Lawn Drain- As Per S12	each	1		
52	1.5.2	Headwall structure c/w riprap armour, grate and handrail 600mm	each	2		
53	1.5.2	Headwall structure c/w riprap armour, grate and handrail 300mm	each	4		
Sub-Total Page 12:						

SUMMARY

Page 9:	\$
Page 10:	\$
Page 11:	\$
Page 12:	\$
Sub-Total	\$
GST (5%):	\$
TOTAL:	\$

Tenderer's Initial Owner's Initial

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Appendix 3
EXPERIENCE OF SUPERINTENDENT
(See paragraph 5.3.3 of the Instructions to Tenderers - Part II)

Name: _____

Experience:

1. Dates: _____
Project Name: _____
Responsibility: _____

References: _____

2. Dates: _____
Project Name: _____
Responsibility: _____

References: _____

3. Dates: _____
Project Name: _____
Responsibility: _____

References: _____

Tenderer's Initial	Owner's Initial

Appendix 4

COMPARABLE WORK EXPERIENCE
(See paragraph 5.3.4 of the Instructions to Tenderers - Part II)

PROJECT	OWNER/ CONTRACT NAME	PHONE NUMBER	WORK DESCRIPTION	VALUE (\$)

Tenderer's Initial Owner's Initial

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Appendix 6

TENDERERS CURRENT PROJECTS UNDERWAY

PROJECT	OWNER/ CONTRACT NAME	PHONE NUMBER	WORK DESCRIPTION	VALUE (\$)	% COMPLETE

Tenderer's Initial Owner's Initial

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Draft Agreement

Between Owner and Contractor

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

Reference No.: TENDER 19-16

Contract: WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD

BETWEEN: CITY OF CAMPBELL RIVER

(the "Owner")

AND: TBD

(the "Contractor")

The Owner and the Contractor agree as follows:

ARTICLE 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 within 90 Days of being issued a Notice to Proceed subject to the provisions of the Contract Documents for adjustments to the Contract Time.
- 1.3 Time shall be of the essence of the Contract

ARTICLE 2 CONTRACT DOCUMENTS

- 2.1 "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.

ARTICLE 3 CONTRACT PRICE

- 3.1 The price for the Work ("Contract Price") shall be the sum in Canadian dollars of the following:
 - 3.1.1 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 Lump Sums listed in the Schedule of Quantities and Prices; plus
 - 3.1.2 all lump sums, if any, as listed in the Schedule of Quantities and Prices, for items relating to or incorporated into the Work; plus
 - 3.1.3 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*.

ARTICLE 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.

ARTICLE 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*.

ARTICLE 6 NOTICES

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

The *Owner*: City of Campbell River
301 St. Ann's Road
Campbell River, BC
V9W 4C7
Attention: Mr. David Dougherty, ASCT, Capital Works Supervisor
E-mail: david.dougherty@campbellriver.ca

The *Contractor*: **TBD**

The *Contract Administrator*: City of Campbell River
301 St. Ann's Road
Campbell River, BC
V9W 4C7
Attention: Mr. David Dougherty, ASCT, Capital Works Supervisor
E-mail: david.dougherty@campbellriver.ca

- 6.2 A communication or notice that is addressed as above shall be considered to have been received:
- 6.2.1 immediately upon delivery, if delivered by hand; or
- 6.2.2 immediately upon transmission if sent and received by fax or e-mail; or
- 6.2.3 after 5 *Days* from date of posting if sent by registered mail.

**CITY OF CAMPBELL RIVER
TENDER 19-16
WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD
DRAFT AGREEMENT**

- 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 fax or e-mail assumes all risk that the fax or e-mail will be received properly, and the provisions of paragraph 12.5 of the Instructions to Tenderers, Part II apply to the sender.

ARTICLE 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 ensure 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:

TBD

(FULL LEGAL NAME OF CORPORATION, PARTNERSHIP OR INDIVIDUAL)

(AUTHORIZED SIGNATORY)

(WITNESS)

Owner:

City of Campbell River

(AUTHORIZED SIGNATORY)

(WITNESS)

SCHEDULE 1

CITY OF CAMPBELL RIVER

Schedule of Contract Documents

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", 2009 PLATINUM edition. All sections of this publication are included in the *Contract Documents*.

The documents noted with "***" are available at www.campbellriver.ca

- a) Agreement;
- b) Addenda;
- c) Supplementary General Conditions;
- d) General Conditions*;
- e) Supplementary Specifications;
- f) Specifications*;
- g) Drawings listed in Schedule 2 to the Agreement;
- h) Supplementary Detail Drawings;
- i) Standard Detail Drawings*;
- j) Executed Form of Tender;
- k) Instructions to Tenderers;
- l) All other Contract Drawings;
- m) Supplementary Specifications, City of Campbell River, Design Standards 2010, Appendix A to Subdivision and Development Servicing Bylaw 3419**;
- n) City of Campbell River: Approved Utility Product List***;

Appendix 7

SAFETY COVENANT

BETWEEN:

_____ of
(Company Name (Print legibly))

(Address)

_____ (City) _____ (Postal Code)

_____ (Phone no.) _____ (Fax no.)

hereinafter referred to as the "Contractor"

AND:

CITY OF CAMPBELL RIVER

hereinafter called the "Owner"

WHEREAS:

The Contractor covenants and agrees that when performing any work for the Owner, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the Occupational Health and Safety (OHS) Regulation, B.C. Reg. 296/97, as may be amended from time to time, that are applicable to the work being performed, and as well will comply with the provisions of the *Workers Compensation Act, R.S.B.C., 1996, c.492*, as amended (the 'Act').

Without limiting the generality of the foregoing, the Contractor agrees:

- 1) Before commencing any work for the Owner, the Contractor will consult the OHS Regulation and will determine which provisions of the OHS Regulation is applicable to the work that the Contractor is to perform. The Contractor will strictly comply with all applicable OHS Regulations when performing the work.
- 2) Before commencing any work for the Owner, the Contractor will review and familiarize itself with any existing policies or procedures developed by the Owner in relation to the work. If in the opinion of the Contractor, by following a policy or procedure that the Owner has established in relation to the work, the Contractor, or an employee of the Contractor or of the Owner, or any other worker, is put at increased risk, the Contractor must request a written change of policy or procedure from the Owner, applicable only to the work the Contractor is to perform, before proceeding with the work. The Owner reserves the right to refuse to amend its policies or procedures in response to any such request where the Owner, after such consultation with WorkSafe BC as the Owner considers necessary, determines that the Owner's policy or procedure does not increase the risk to any worker at the location of the work to be performed, and determines that the

- Contractor's request is unreasonable, or is unnecessary for the protection of workers at the location of the work.
- 3) To have read every section of the OHS Regulation that pertains to the job at hand, to ensure that it understands the pertinent OHS Regulation and its application to the supervisor(s) and to all of the workers at the location of the work, and to ensure that each worker under the Contractor's supervision follows the applicable OHS Regulation. To assist Contractors with this task, the City of Campbell River directs them to consult with WorkSafe BC directly, to access the WorkSafe BC Regulations and Policies available on the WorkSafe BC website.
- 4) To understand, comply with and, to the full extent of the Contractor's lawful authority, to enforce all of the following provisions of the OHS Regulation as they pertain to the job at hand and to the workers employed by the Contractor, and to provide to the owner, at any time upon request, evidence of compliance with the following:
- a) Rights & Responsibilities – Occupational Health & Safety Program (Part 3, including investigations, inspections, written instructions, records and statistics, adequate supervision, complete understanding by the workforce of the right and responsibility to refuse unsafe work)
 - b) General Conditions (Regulation – Part 4)
 - c) Chemical and Biological Substances (Regulation – Part 5)
 - d) Substance Specific requirements (Regulation – Part 6)
 - e) Noise, Vibration, Radiation and Temperature (Regulation – Part 7)
 - f) Personal Protective Clothing and Equipment (Regulation - Part 8)
 - g) Confined Space Entry (Regulation – Part 9)
 - h) Lock-out (Regulation – Part 10)
 - i) Fall Protection (Regulation – Part 11)
 - j) Tools, Machinery and Equipment (Regulation – Part 12)
 - k) Ladders, Scaffolds and Temporary Work Platforms (Regulation – Part 13)
 - l) Cranes and Hoists (Regulation – Part 14)
 - m) Rigging (Regulation – Part 15)
 - n) Mobile Equipment (Regulation – Part 16)
 - o) Traffic Control (Regulation – Part 18)
 - p) Electrical Safety (Regulation – Part 19)
 - q) Construction, Excavation & Demolition (Regulation – Part 20)
 - r) Forestry Operations (Regulation – Part 26)
 - s) Evacuation and Rescue (Regulation – Part 32)
 - t) Occupational First Aid (Regulation – Part 33)
 - u) Coordination of Multiple Employer Workplaces (Regulation – Part 20, s. 20.3)

PROVISIONS OF THE *WORKERS COMPENSATION ACT* – PART 3 SPECIFIC TO CONTRACTORS ON A WORKSITE:

- i. Division 3 – General duties of Employers, Workers and Others (Sections 115, 116, 117, 118, 119, 120, 121, 122, 123, 124);
 - ii. Division 4;
 - iii. Division 10.
- 5) The *Workers Compensation Act* stipulates that the Owner (the City of Campbell River) is required to enforce any observed infraction of the Act or Regulation. The Contractor accepts that the City of Campbell River will be conducting periodic checks of the Contractor during the Contractor's work for the City of Campbell River and will be asking the Contractor to comply with the Act/Regulation in the event that any contravention is observed. If a contravention is observed and not corrected, the Contractor may be asked to leave the worksite and may result in termination of the contract for the work.

- 6) For the purposes of streamlining large construction projects and multiple employer worksites, the Owner reserves the right to designate a “prime contractor” amongst contractors who are working on a job-site together. A designated person employed by the “prime contractor” – appointed by the Owner - will act as the coordinator of the other contractors on that job-site and will ensure that each of the contractors on the job site are following all of the Act and WorkSafe BC Regulations as well as site-specific policies and procedures. This includes having in place an approved WorkSafe BC Safety Program and a list of the qualified persons amongst the other contractors who have been designated to be responsible for each of the other contractor’s site health and safety activities.
- 7) In the event that a prime contractor has been designated, it is the responsibility of the Contractor to inquire who the “prime contractor” is for the worksite and to comply with the requirements for a multiple employer worksite where a prime contractor has been designated, as set out in the preceding section.

NOTE:

- a) Payment of WorkSafe BC Assessments by any Contractor does not obviate the responsibility of the contractor to any of the foregoing.
- b) The foregoing constitutes requirements of the Prevention Division of WorkSafe BC for any workplace in the Province of British Columbia and constitutes the Owner’s expectations of contractors.

The Contractor covenants and agrees that when performing any work for the Owner, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the B.C. Employment Standards Act (RSBC 1996), as may be amended from time to time, that are applicable to the work being performed, including but not limited to:

- 1) Section 36 (2); an employer must ensure that each employee has at least 8 consecutive hours free from work between each shift worked.
- 2) Section 39; despite any provision of this Part, an employer must not require or directly or indirectly allow an employee to work excessive hours or hours detrimental to the employee’s health or safety.

THIS Covenant made the _____ day of _____, 2019, in
_____ in the Province of British Columbia.
(City)

CONTRACTOR:

Company Name

Authorized Signatory

Appendix 8

PRIME CONTRACTOR AGREEMENT

1. The Contractor shall, for the purposes of the Workers Compensation Act, and for the duration of the Work of this Contract:
 - .1 be the "prime contractor" for the "Work site", and
 - .2 do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with the Act and its regulations, as required to ensure the health and safety of all persons at the "Work site".
- .2 The Contractor shall direct all Subcontractors, Sub-subcontractors, Other Contractors, employers, Workers and any other persons at the "Work site" on safety related matters, to the extent required to fulfill its "prime contractor" responsibilities pursuant to the Act, regardless of:
 - .1 whether or not any contractual relationship exists between the Contractor and any of these entities, and
 - .2 whether or not such entities have been specifically identified in this Contract.

As per the requirements of the Workers Compensation Act Part 3, Division 3, Section 118(1-3) which states:

Coordination of multiple-employer Workplaces

118(1) In this section:

"multiple-employer Workplace" means a Workplace where Workers of 2 or more employers are Working at the same time;

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

- (a) the directing contractor, employer or other person who enters into a written agreement with the owner of that Workplace to be the prime contractor for the purposes of this Part, or
- (b) if there is no agreement referred to in paragraph (a), the owner of the Workplace.

(2) The prime contractor of a multiple-employer Workplace must

- (a) ensure that the activities of employers, Workers and other persons at the Workplace relating to occupational health and safety are coordinated, and
- (b) do everything that is reasonably practicable to establish and maintain a system or process that will ensure compliance with this Part and the regulation in respect to the Workplace.

(3) Each employer of Workers at a multiple-employer Workplace must give to the prime contractor the name of the person the employer has designated to supervise the employer's Workers at that Workplace.

**CITY OF CAMPBELL RIVER
TENDER 19-16
WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD
DRAFT AGREEMENT**

The Contractor covenants and agrees that when performing any work for the Owner, whether directly as a contractor or indirectly as a sub-contractor, it will adhere to all of the requirements of the B.C.

Employment Standards Act (RSBC 1996), as may be amended from time to time, that are applicable to the work being performed, including but not limited to:

- 3) Section 36 (2); an employer must ensure that each employee has at least 8 consecutive hours free from work between each shift worked.
- 4) Section 39; despite any provision of this Part, an employer must not require or directly or indirectly allow an employee to work excessive hours or hours detrimental to the employee's health or safety.

I fully understand and accept the responsibilities of the prime contractor designation in accordance with the Workers Compensation Act and the B.C. Employment Standards Act while contracted by the *City* on

project location: _____ and will abide by all Workers Compensation Board Regulation requirements.

Date: _____

Project: _____

Company Name: _____

Authorized Signatory: _____

Printed Name: _____

Witness Signatory: _____

Printed Name: _____

Appendix 9

ACCEPTANCE OF BASE COURSE FOR ASPHALT PAVING PLACEMENT

FORM MUST BE COMPLETED 36 HOURS PRIOR TO ASPHALT PLACEMENT

For contracted projects, Prior to the placement of asphalt pavement, representatives from the City the Contract Administrator, the General Contractor and Tayco Paving agree to the condition, surface elevations and quality of the road base as having met the required MMCD Specifications 31 22 16 and 32 11 23

Date: _____

Owner or Contract Administrator:

General Contractor Representative:

Tayco Paving Representative:

This acceptance does not relieve the General Contractor of their responsibilities for the surface elevations and/or condition or subsequent failure of materials below the asphalt pavement. Tayco Paving will continue to be responsible for the asphalt paving relating to the asphalt material and its placement.

The general conditions and specifications for the work will apply and take the precedence over this acceptance. The "Limiting Terms and Conditions" of Tayco Paving also take precedence over this acceptance.

An acceptable method of checking elevations will be used to ensure that the road base is graded to within the specified tolerances and is ready for asphalt placement. The intention of this survey is confirm the roadbed preparations meet with the contract requirements and to ensure that asphalt tonnage does not exceed Tayco's calculated estimated tonnage by more than 5%.

Conversion from square metres to tonnage will be calculated at the rate of 125 Kg per square metre for a 50mm thickness of asphalt.



SUPPLEMENTARY GENERAL CONDITIONS

**TO BE READ WITH "General Conditions"
CONTAINED IN THE PLATINUM EDITION (printed 2009) OF THE PUBLICATION
"MASTER MUNICIPAL CONSTRUCTION DOCUMENTS"**

Reference No.: TENDER 19-16

Contract: Watermain Renewal- Painter, Garfield, Barclay

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25	Maintenance Period	6

DEFINITIONS

1.0

1.67.1

(delete clause 1.67.1 and replace as follows)

"Substantial Performance" means the stage of completion of all of the *Work*, as certified by the *Payment Certifier*, when:

- a) the *Work* is ready for use or is being used for its intended purpose; **and**
- b) the total of the incomplete, defective and deficient *Work* can be completed at an estimated cost of no more than:

3% of the first \$500,000 of the *Contract Price*
2% of the next \$500,000 of the *Contract Price*
1% of the balance of the *Contract Price*

1.79

(add new clause 1.79 as follows)

"(amend clause X.XX as follows)" preceding a supplementary clause means this clause provides additional information or restrictions to the referenced clause in the Master Municipal Construction Documents, Volume II.

1.80

(add new clause 1.80 as follows)

"(add new clause X.XX as follows)" preceding a supplementary clause means this clause provides additional requirements or information not found in the Master Municipal Construction Documents, Volume II.

1.81

(add new clause 1.81 as follows)

"(delete clause X.XX and replace as follows)" preceding a supplementary clause means this clause replaces the referenced clause in the Master Municipal Construction Documents, Volume II, in its entirety.

1.82

(add new clause 1.82 as follows)

"Payment Certifier" has the meaning set out in SGC 18.6.6.

1.83

(add new clause 1.83 as follows)

"Provide" or "Provision of" means supply and placement of an item.

1.84

(add new clause 1.84 as follows)

"Engineer" shall mean the *Owner's* engineer appointed to provide technical support during the course of the *Work*.

1.85

(add new clause 1.85 as follows)

"Critical Path Method" (CPM) means the method of scheduling a project as follows:

The essential technique for using CPM is to construct a model of the project that includes:

- (1) A list of all activities required to complete the project (typically categorized within a work breakdown structure),
- (2) The time (duration) that each activity will take to completion, and
- (3) The dependencies between the activities.

Using these values, CPM calculates the longest path of planned activities to the end of the project, and the earliest and latest that each activity can start and finish without making the project longer. This process determines which activities are "critical" (i.e., on the longest path) and which have "total float" (i.e., can be delayed without making the project longer). This determines the shortest time possible to complete the project. Any delay of an activity on the critical path directly impacts the planned project completion date (i.e. there is no float on the critical path). A project can have several, parallel, near critical paths. An additional parallel path through the network with the total durations shorter than the critical path is called a sub-critical or non-critical path.

DOCUMENTS 2.0

Interpretation 2.2.4

(delete clause 2.2.4.1 and replace as follows)

the *Contract Documents* shall govern and take precedence in the following order with the Agreement taking precedence over all other *Contract Documents*:

- (a) Agreement
- (b) Addenda
- (c) Supplementary General Conditions
- (d) General Conditions
- (e) Supplementary Specifications
- (f) Supplementary Specifications, City of Campbell River Design Standards, 2010
- (g) Specifications
- (h) Drawings listed in Schedule 2 to the Agreement
- (i) Supplementary Detail Drawings
- (j) Standard Detail Drawings
- (k) Executed Form of Tender
- (l) Instructions to Tenderers
- (m) All other Contract Documents

2.2.4.5

(add new clause 2.2.4.5 as follows)

The *Contract Drawings* will be updated post Tender and will be Issued For Construction by the *Contract Administrator* prior to the commencement of the *Work*.

CONTRACTOR 4.0

Protection of Work, Property and the Public 4.3.7

(add new clause 4.3.7 as follows)

The *Contractor* shall locate, mark and protect from damage or disturbance, any and all stakes, survey pins, monuments and markers at the *Place of the Work*.

All survey stakes, pins, monuments or markers which, in the opinion of the *Owner*, have been damaged or disturbed shall be made good following construction by a registered B.C. Land Surveyor at the *Contractor's* expense.

Good Neighbour Policy 4.3.8

(add new clause 4.3.8 as follows)

The *Owner's* Good Neighbour Policy as adopted by City of Campbell River Council on April 15, 1997 shall apply to this contract. The Policy states: "That *Contractors* working on Municipal rights-of-way or on private land where new rights-of-way are being created, be required to provide written notice to the residents in the immediate area of the works, describing what is being constructed, when the

works will occur, who to contact for more information and what precautions should be taken if necessary; and that the work-site be posted for safety reasons.”

Damage to Improvements and Utilities

4.3.9

(add new clause 4.3.9 as follows)

The *Contractor's* Work shall be confined to the *Owner's* premises, including statutory right-of-ways easements and construction permit limits, whenever possible. The *Contractor* shall not enter upon or place materials on other private premises except by written consent of the individual *Owners* and shall save the *Owner* harmless from all suits and actions of every kind and description that might result from use of private property.

Use of Working Site

4.3.10

(add new clause 4.3.10 as follows)

The *Contractor* shall confine his equipment, storage of materials and operation of Work to the limits indicated by law, permits, or direction of the *Contract Administrator*, and shall not unreasonably encumber the premises with his materials. The *Contractor* shall comply with the *Contract Administrator* instructions regarding signs, advertisements, fires and smoking.

The working site shall at all times be kept free of rubbish and unnecessary hazards to persons, materials, and equipment.

Local, Emergency Traffic and Property Access

4.3.11

(add new clause 4.3.11 as follows)

Local traffic shall be provided access to private properties at all times.

Emergency traffic such as Police, Fire, and Disaster Units shall be provided reasonable access at all times. The *Contractor* shall be liable for any damage which may result from his failure to provide such reasonable access.

Traffic Management Plan

4.3.12

(add new clause 4.3.12 as follows)

Long term road closures will not be permitted. If required, the *Contractor* shall submit a Traffic Management Plan for Approval prior to start of construction in which the extent and duration of any road closures associated with the work are identified. Two-way traffic via one open lane shall be maintained on public roads at all times unless the *Contractor* has obtained the *Owner's* approval via a Road Closure Permit. The *Contractor* is cautioned that approval of full road closures is not guaranteed. Traffic control on all roads shall be in strict accordance with the Traffic Control Manual for Work on Roadways published by the Ministry of Transportation and Highways. The *Contractor* shall only use appropriately accredited personnel for Traffic Control.

An MoTI Permit is required for the utility tie-in at Garfield Road and Hwy 19. Contractor to provide all traffic control complete with lane truck, dynamic message boards at the intersection with no Highway closure permitted. Two (2) way traffic to be maintained at all times. Refer to MoTI Traffic Management Manual for Work on Roadways.

Temporary Structures and Facilities	4.4.3	(add new clause 4.4.3 as follows) The <i>Contractor</i> shall provide clean sanitary latrine accommodations for the use of his employees as may be necessary to comply with the requirements and regulations of the Ministry of Health and other bodies having jurisdiction. The <i>Contractor</i> shall permit no public nuisance.
Construction Schedule	4.6.1	(delete clause 4.6.1 and replace as follows) The <i>Contractor</i> shall, within the time set out in the <i>Form of Tender</i> , prepare and submit to the <i>Contract Administrator</i> a time-scaled construction schedule (the " <i>Baseline Construction Schedule</i> ") prepared using the <i>Critical Path Method</i> (CPM). The schedule shall: <ul style="list-style-type: none">.1 Show all significant construction activities, shop drawing submittals and procurement activities..2 Show the dependencies between activities so that it may be established what effect the progress of any one activity has on the schedule..3 Show completion time and all specific dates and sequencing requirements. Identify activities making up the critical path..4 Show anticipated dates for all activities related to Hot-Mix Asphalt Concrete Paving. Unless specifically approved by the <i>Contract Administrator</i> , show activities on the schedule with a duration not longer than 15 working days or an assigned value not greater than \$100,000 (except activities showing only submittal, fabrication or delivery of material or equipment). Divide activities which exceed these limits into more detailed components. The schedule shall include allowances made for legal holidays and normal weather conditions. The <i>Baseline Construction Schedule</i> shall indicate completion of the <i>Work</i> in compliance with the <i>Milestone Dates</i> . The <i>Contractor</i> shall ensure that the <i>Baseline Construction Schedule</i> is in more detail than the <i>Preliminary Construction Schedule</i> so as to enable the <i>Contract Administrator</i> to compare actual construction progress during the performance of the <i>Work</i> with the <i>Baseline Construction Schedule</i> as adjusted pursuant to GC 4.6.2.
	4.6.8	(add new clause 4.6.8 as follows) The <i>Contractor</i> shall submit the <i>Adjusted Baseline Schedule</i> to the <i>Contract Administrator</i> with each <i>Monthly Progress Claim</i> .
	4.6.9	(add new clause 4.6.9 as follows) When the project requires Hot-Mix Asphalt Concrete Paving, the <i>Contractor</i> shall submit the <i>Adjusted Baseline Schedule</i> to the <i>Owner's Asphalt Paving Contractor – Tayco Paving Ltd.</i> on a monthly basis.
Fair Wages	4.8.2	(add new clause 4.8.2 as follows) The <i>Contractor</i> attests to compliance with Section 5 of the <i>Skills Development and Fair Wage Act</i> in projects where the provincial contribution to a <i>Municipal project</i> exceeds \$250,000.

Test and Inspections	4.12.4	<i>(delete clause 4.12.4 and replace as follows)</i> The Contractor shall as part of the Work perform, or cause to be performed, all tests, inspections and approvals of the Work as required in the Contract Documents or as required by the Contract Administrator as part of the Quality Control. Any reference in the specifications to inspection and testing shall mean that the Work described in the specification must be inspected and approved in a manner approved by the Contract Administrator. The Contractor shall only employ or engage, as an agent or consultant for testing, a person approved by the Owner. Where the specification indicates that the Contract Administrator will arrange for testing, the Contractor continues to be solely responsible for testing of the Work. The Contract Administrator may perform additional tests for the Owner's sole benefit. The costs of these additional tests will be the responsibility of the Owner.
Truck Routes and Disposal Sites	4.17.1	<i>(add new clause 4.17.1 as follows)</i> In hauling of material to and from the work site, the routes to be followed by trucks shall be confined to designated arterial and collector roads as shown on the road classification plan as issued by the City. Where a dumpsite can only be accessed by way of a local road, the route shall be the shortest possible way from an arterial or collector road, and shall be agreed to by the <i>Contract Administrator</i> in advance of the work. The <i>Contractor</i> shall be responsible for road cleanup along all trucking routes used in association with the work. The cost of this cleanup shall be paid by the <i>Contractor</i> and considered incidental to the work. It should be noted that a "Soil Deposition Permit" is required for any dumpsite within the City of Campbell River. The <i>Contractor</i> shall be responsible for obtaining and securing a legal dumpsite. All costs associated with that dumpsite shall be the responsibility of the <i>Contractor</i> and shall be considered incidental to the <i>Work</i> .
Disposal of Wood Debris, Organic Debris, and/or Waste Excavated Material	4.18.1	<i>(add new clause 4.18.1 as follows)</i> Prior to disposal of any wood debris, organic debris and/or waste excavated material, the <i>Contractor</i> shall submit a disposal management strategy in accordance with all applicable Laws, Bylaws and Regulations to the <i>Contract Administrator</i> for approval. Subject to the <i>Contract Administrator's</i> approval, the <i>Contractor</i> shall ensure that all wood debris, organic debris and/or waste excavated material that is removed from the work site is managed in accordance with this approved disposal management strategy. The <i>Contractor</i> shall be required to employ acceptable methods of disposal, approved disposal site location(s), and shall be required to obtain and submit copies of all relevant permits and/or approvals prior to the disposal of any wood debris, organic debris and/or waste excavated material Regardless of the aforementioned, the <i>Owner</i> reserves the right to disallow any or all of the <i>Contractor's</i> proposed disposal management strategy if it is determined that they will result in undesirable environmental impacts.
OTHER CONTRACTORS	6.0	
Coordination and Connection	6.2.2	<i>(add new clause 6.2.2 as follows)</i>

If the performance of any Contract for the project is likely to be interfered with by the simultaneous execution of some other Contract or Contracts, the *Contract Administrator* shall decide which *Contractor* shall cease Work temporarily and which *Contractor* shall continue, or whether the Work under the Contracts can be coordinated so the Contracts may proceed simultaneously. The *Owner* shall not be responsible for any damages suffered or extra costs incurred by the *Contractor*, resulting directly or indirectly from the award or performance or attempted performance of any other Contract or Contracts on the project, or caused by any decision or omission of the *Contract Administrator* respecting the order of precedence in the performance of the Contracts other than for the extension of time.

**VALUATION OF
CHANGES AND
EXTRA WORK** **9.0**

Valuation Method 9.2.1.3 **(add new clause 9.2.1.3 as follows)**
Should a lump sum method be used for determination of the value of a *Change*, the *Contractor* shall determine the value of the *Change* by calculating the cost for each item contained within the *Change* and applying a 10% mark up on all costs associated with the *Change* for Overhead and Profit. All costs are required to be supported by documentation satisfactory to the *Contract Administrator* and all applicable rates are to be satisfactory to the *Contract Administrator*.

FORCE ACCOUNT **10.0**

**Force Account
Costs** 10.1.1.4 **(delete 10.1.1.4 and replace as follows)**
Force Account Work performed by a *Subcontractor* shall be paid for in the lesser of: (i) the amount as provided by subparagraphs (1), (2) and (3) of this GC, plus a markup of 5%, or (ii) the actual amount the *Contractor* pays the *Subcontractor* including a markup of 10% on such actual cost to cover all overhead and profit.

DELAYS **13.0**

**Liquidated
Damages for Late
Completion** 13.9.1.1 **(delete clause 13.9.1.1 and replace as follows)**
as a genuine pre-estimate of the *Owner's* increased costs for the *Contract Administrator* and the *Owner's* own staff caused by such delay an amount of \$1,000 per day or pro rata portion for each calendar day that actual *Substantial Performance* is achieved after the *Substantial Performance Milestone Date*; plus

13.9.2 **(add new clause 13.9.2 as follows)**
If the *Contractor* causes the scheduled date for paving to be missed as a result of an unapproved *Change* to the *Adjusted Baseline Schedule*, the *Contractor* shall be responsible for all direct and related costs to the *Owner* as a result of a *Contractor* caused *Delay* in paving. The *Owner* shall be responsible to demonstrate any related costs to the satisfaction of the *Contract Administrator*.

PAYMENT 18.0

Supporting Documentation

18.2.3

(add new clause 18.2.3 as follows)

The *Contractor* shall provide to the *Contract Administrator* the *Adjusted Baseline Schedule* as a pre-condition of the issuance of each *Payment Certificate*.

Holdbacks

18.4.1

(delete 18.4.1 and replace as follows)

The *Owner* will retain a holdback but will not establish a Holdback Trust Account pursuant to Section 5 of the *Builders Lien Act*.

Substantial Performance

18.6.5

(delete clause 18.6.5 and replace as follows)

The *Owner* will release any builder's lien holdback on the 56th day following the date of *Substantial Performance*, or other date as required by law, but the *Owner* may holdback the amounts for any deficiencies or filed builders liens as provided in GC 18.4.2, GC 18.4.3 and 18.4.4, or the Maintenance Period Financial Security if not received by this date.

Payment Certifier

18.6.6

(delete clause 18.6.6 and replace 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 co-operate 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 with 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 or 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.

**WORKERS
COMPENSATION
REGULATIONS**

21.0

Contractor is "Prime Contractor"	21.2.2	(add new clause 21.2.2 as follows) If the <i>Work</i> is being completed as part of a project for which the <i>Owner</i> already has a <i>Prime Contractor</i> designated then the <i>Contractor</i> will be responsible to ensure that they assume direction from the <i>Prime Contractor</i> as per the requirements of the Workers Compensation Act Part 3, Division 3, Section 118(1-3).
INSURANCE	24.0	
Required Insurance	24.1.7	(add new clause 24.1.7 as follows) The <i>Contractor</i> shall ensure the following are additional named insured under this contract: <ul style="list-style-type: none">• The City of Campbell River
MAINTENANCE PERIOD	25.0	
Correction of Defects	25.1.4	(add new clause 25.1.4 as follows) The <i>Owner</i> is authorized to make repairs to defects or deficiencies if, ten days after giving written notice, the <i>Contractor</i> has failed to make or undertake with due diligence the required repairs. However, in the case of emergency where, in the opinion of the <i>Owner</i> , delay is not reasonable, repairs may be made without notice being sent to the <i>Contractor</i> . All expenses incurred by the <i>Owner</i> in connection with repairs made pursuant to GC 25 shall be paid by the <i>Contractor</i> and may be deducted from the Maintenance Security, or other holdbacks. The <i>Contractor</i> shall promptly pay any shortfall.
Maintenance Period Financial Security	25.4.1	(add new clause 25.4.1 as follows) within 10 days of the issue of the Certificate of substantial Performance deliver to the <i>Owner</i> , a Maintenance Period Financial Security in the form of cash, or a clean, irrevocable Letter of Credit in a form acceptable to the <i>Owner</i> in the amount of 5% of the Contract Price, issued by a major Canadian chartered bank which has a branch in Campbell River BC, payable to the <i>Owner</i> within the Maintenance Period.



SUPPLEMENTARY SPECIFICATIONS

TO BE READ IN CONJUNCTION WITH THE "MASTER MUNICIPAL CONSTRUCTION DOCUMENTS"

Reference No.: TENDER 19-16

Contract: WATERMAIN RENEWAL PAINTER, BARCLAY, GARFIELD

- | | | |
|-----------------------------|-----|--|
| General | 1.1 | <ul style="list-style-type: none">a) Payments will be made on the basis of the unit prices bid in the Tender, and in accordance with Article 18 of the General Conditions.b) The unit prices bid, unless specifically noted otherwise, shall include the supply of all <i>LABOUR, PLANT, MATERIAL</i> and <i>PRODUCT</i> equipment necessary to construct <i>THE WORK</i> in accordance with the specifications.c) The prices bid for supply and installation shall be full compensation for supplying, hauling, installing, cleaning, testing, and placing in service together with all other work subsidiary and incidental thereto for which separate payment is not provided elsewhere.d) Other materials on site, whether existing structures, vegetation, topsoil, gravel, sand or other excavated or piled materials, are the property of the <i>OWNER</i> or of the owner of the land on which <i>THE WORK</i> is located. Only those materials specifically noted in the specification or on drawings, as belonging to the <i>CONTRACTOR</i> shall become the <i>CONTRACTOR</i>'s property.e) Where there are excess excavated materials, unsuitable materials excavated or materials of any kind that are excavated but not used in <i>THE WORK</i>, such materials are not the property of the <i>CONTRACTOR</i> unless authorized in writing by the <i>CONTRACT ADMINISTRATOR</i> or specified to be disposed of by the <i>CONTRACTOR</i>. |
| Unit Price Contracts | 2.1 | <ul style="list-style-type: none">a) Payments will be made on the basis of the following:<ul style="list-style-type: none">.1 Unit Price items in the Schedule of Quantities and Unit Prices..2 Changes in <i>THE WORK</i> for items not covered by unit prices, in accordance with Article 7 - <i>CHANGES IN THE WORK</i> of the General Conditions. |

- b) For each item in the Schedule of Quantities and Unit Prices, the *Contract Administrator* will, in cooperation with the *Contractor*, measure the quantity of the item completed at the end of the payment period and this will be shown as a percentage of the work completed against the appropriate value for the lump sum assigned to the respective line item.
- Mobilization and Demobilization** 3.1 a) Mobilization and demobilization shall include the *Contractor's* costs of mobilization at the beginning of the project; and the costs of demobilization at the end of the project.
- b) Included in mobilization are such items as bonding, insurance, permits, moving personnel, materials and equipment to the site, setting up temporary facilities, First-Aid, Site Safety, temporary utilities and all preparation for performing *THE WORK*.
- c) Included in demobilization are preparation and submission of operation and maintenance manuals, As-Constructed Record Drawings, comprehensive Bill Of Materials, removal of all personnel, materials and equipment; and cleanup of the site and *THE WORK*.
- d) The lump sum price bid for this work shall be relative to the costs involved but shall not exceed ten percent of the Tender Price.
- e) Payment will be made as follows, as approved by the *CONTRACT ADMINISTRATOR*:
- I. 60% of the lump sum bid will be included in the first progress payment certificate;
 - II. 40% of the lump sum bid will be included in the final progress payment certificate.
- The *CONTRACT ADMINISTRATOR* may at his discretion recommend partial payment if mobilization or demobilization is not complete.
- Dust Control** 4.1 During the performance of *THE WORK*, the *CONTRACTOR* is to at all times keep the worksite and such immediate surrounding areas which it may utilize free from waste materials, debris or rubbish and is to employ adequate dust control measures. Water shall be the only material acceptable for dust suppression. If accumulation of such materials, debris, rubbish or dust constitutes a nuisance or safety hazard or is otherwise objectionable in any way, as reasonably determined by the *OWNER* or *CONTRACT ADMINISTRATOR*, the *CONTRACTOR* is to promptly remove it. If any claim, suit, losses, or action is brought by a person affected by the transportation of materials, equipment, goods or wastes to and from the worksite, the *CONTRACTOR* shall defend, indemnify and hold harmless all indemnified parties.
- Underground Utilities** 5.1 It is the *CONTRACTOR'S* responsibility wherever necessary to determine location of existing pipes, valves, conduits, vaults, or

other underground structures. Wherever it is necessary to explore and excavate to determine the location of the existing underground structures, the *CONTRACTOR*, at his own expense, shall make explorations and excavations for such purposes. The *CONTRACTOR* shall notify the *CONTRACT ADMINISTRATOR* or his representative of any conflicts.

The *CONTRACTOR* shall, at his own expense, provide for the uninterrupted flow of all watercourses, sewers, drains, and any other utility encountered during the work. Water control and siltation control shall be under the direction of a qualified environmental monitor engaged by the *CONTRACTOR*.

When any existing mains and/or service pipes, utility ducts, vaults or other utility structures are encountered, the *CONTRACTOR* shall support them to the satisfaction of the *CONTRACT ADMINISTRATOR* so as to protect them from injury. The *CONTRACTOR* shall, at his own expense, at once repair and make good any injury which may occur to any mains, service or utility pipes or ducts, or facilities, or to any electrical conductor, telephone, cable or natural gas facility or to any sidewalk, crosswalk as a result of this operation.

Support of power, telephone poles, underground mains, wiring and light standards required to complete the work, shall be the responsibility of the *CONTRACTOR* and completed in accordance with utility company standards. The *CONTRACTOR* shall schedule the work with the appropriate utility company in advance, so as not to delay the work. All costs associated with the work shall be considered incidental and no separate payment be made for this item.

Construction Surveys

- 6.1 The *CONTRACTOR is responsible for all survey layout, including stakes, hubs, and grade control.*

The *CONTRACTOR* shall survey and layout the work including, but not limited to, as-built invert elevations, offsets and stations of all grade changes, miscellaneous appurtenances, and all existing utilities exposed during construction.

The *CONTRACTOR* shall provide all stakes, hubs, nails, flagging, and including the supply of casual labour for checking of the work, as required by the *CONTRACT ADMINISTRATOR*. The *CONTRACTOR* shall provide the *CONTRACT ADMINISTRATOR* with records of the actual surveys, and "as-built" information pick-up.

No separate or additional payment will be made for this work.

General Coordination

- 7.1 The *CONTRACTOR* shall work cooperatively with B.C. Hydro, Telus, Shaw and Fortis to locate private utility ducting.

No additional payment shall be made for this work.

Supplementary Specifications

- 8.1 The following Supplementary Specifications are complementary to the MMCD.

Section	Title
01 31 00	Construction Schedule and Progress Payments
01 31 01	Project Meetings
01 55 00	Traffic Control, Vehicle Access and Parking
03 30 20	Concrete Walks, Curbs and Gutters
31 23 01	Excavating, Trenching and Backfill
31 23 23	Controlled Density Fill (CDF)
31 24 13	Roadway Excavation, Embankment & Compaction
32 01 01	General Road Repairs
32 12 16	Hot-Mix Asphalt Repair
33 11 01	Water Works

1.0 GENERAL

1.1 Description

- .1 Prepare a time-scaled network schedule using the critical path method. The schedule will provide a basis for determining the progress status of the project relative to the completion time and specific dates and for determining the acceptability of the *CONTRACTOR*'s requests for payment.

1.2 Schedules

- .1 Depict all significant construction activities, shop drawing submittals and procurement activities. Show the dependencies between activities so that it may be established what effect the progress of any one activity has on the schedule. Except for the start and finish milestones / activities each task shall have a successor and predecessor dependency.
- .2 Show completion time and all specific dates and sequencing requirements. Identify activities making up the critical path. The Critical path is to be shown as per SGC 4.6.1.
- .3 Unless specifically approved by the *CONTRACT ADMINISTRATOR*, show activities on the schedule with a duration not longer than 15 working days or an assigned value not greater than \$100,000 (except activities showing only submittal, fabrication or delivery of material or equipment). Divide activities which exceed these limits into more detailed components. Base the scheduled duration of each activity on the work being performed during the normal 40-hour work week with allowances made for legal holidays and normal weather conditions.

1.3 Submittals for Review

- .1 Within 10 days of the Notice of Award submit a construction schedule as specified herein showing in detail all procurement and on-site construction activities.
- .2 The *CONTRACT ADMINISTRATOR* will review the submitted schedule within 14 working days of its receipt. If the *CONTRACT ADMINISTRATOR* finds that the submitted schedule does not comply with the specified requirements, or does not provide an acceptable schedule detail, the deficiencies will be identified in writing to the *CONTRACTOR* for correction and re-submittal. Correct and resubmit the schedule within 10 working days after the deficiencies have been identified by the *CONTRACT ADMINISTRATOR*. The accepted schedule will become the project baseline schedule for tracking construction progress.

1.4 Schedule Revisions

- .1 Submit proposed revisions to the accepted construction schedule to the *CONTRACT ADMINISTRATOR* for review. Changes in timing for activities may be modified with agreement of the *CONTRACTOR* and *CONTRACT ADMINISTRATOR*. A change affecting the Contract Price, the completion time, or work sequencing may be made only by approved change order.
- .2 Add separate activities to the construction schedule for each approved change order.
- .3 Should the actual sequence of work performed by the *CONTRACTOR* deviate from the planned sequence indicated in the accepted schedule, the *CONTRACT*

ADMINISTRATOR may require the *CONTRACTOR* to revise the schedule to reflect changes in the actual sequence and/or the future sequence of work.

- .4 Within 20 days following approval of the *CONTRACTOR*'s testing and commissioning plan submit a schedule revision incorporating the approved plan into the construction schedule.
- .5 Submit with each schedule revision all information as called for in submitting the original construction schedule.

1.5 Progress Status Update

- .1 Submit an updated schedule on a monthly basis concurrent with the submittal of the progress payment request. Indicate on the updated schedule progress achieved to date on all activities.
- .2 Submit three-week look ahead schedules for review and discussion at each weekly project meeting.

2.0 PRODUCTS

- .1 Not Used

3.0 EXECUTION

- .1 Not Used

END OF SECTION 01 31 00

PROJECT MEETINGS

1. General

1.1 Administrative

- .1 The Contract Administrator will administer the pre-construction meeting, and regular progress meetings to be held weekly.
- .2 The Contractor's superintendent, and senior representatives of major sub-contractors to attend all meetings.
- .3 Representatives of Contractor, subcontractor and suppliers attending meetings to be qualified and authorized to act on behalf of the party each represents.
- .4 The Engineer or Contract Administrator will chair and record discussions and decisions, and circulate the minutes. The Contractor is to circulate the minutes to subcontractors and suppliers.
- .5 The Contractor is to notify the Contract Administrator in writing of any discrepancies or inconsistencies within 2 days of receipt of minutes for recording in next meeting. Failure to notify the Contract Administrator of discrepancies or inconsistencies within 2 days of receipt of minutes will be deemed acceptance of the minutes as recorded.

1.2 Preconstruction Meeting

- .1 Within 10 days of Notice to Award, the Contract Administrator will schedule a meeting to discuss administrative procedures and responsibilities.
- .2 Agenda includes the following:
 - a) Appointment of official representatives of participants in the Work.
 - b) Appointment of General Contractor as Prime Contractor.
 - c) Notice of Project, Insurances
 - d) Schedule of Work, progress scheduling.
 - e) Submittals.
 - f) Requirements for temporary facilities, offices, utilities, fences.
 - g) Traffic Management Plan
 - h) Environmental Protection Plan
 - i) Site Safety and Security.
 - j) Change Order procedures.
 - k) Record drawings.
 - l) Commissioning, acceptance, warranties.
 - m) Monthly progress payments, administrative procedures, holdbacks.
 - n) Appointment of inspection and testing agencies or firms.

1.3 Weekly Progress Meetings

- .1 The Contractor's superintendent and senior representatives of major subcontractors involved in the Work to be in attendance of weekly progress meeting to be held on site.
- .2 Agenda includes the following:
 - a) Past period progress.
 - b) Next period progress.

- c) Schedule of construction.
 - d) Anticipated changes in the work.
 - e) Approved changes in the work.
 - f) Submittal/RFI/SI status
 - g) Operations staff scheduling.
 - h) Site safety.
 - i) General information pertaining to the work.
 - i. Quality control
 - ii. Site cleanliness
 - iii. Environmental protection
 - iv. Other
- .3 Submit for information only, at each regularly scheduled progress meeting:
- a) Totals of all personnel currently on site associated with the contract, broken down by trade and subcontractor including all staff.
 - b) Totals of all major equipment currently on site, over two thousand dollar replacement value, broken down by type and subcontractor.

1.4 Special Meetings

- .1 Special meetings may be held at the request of the Contract Administrator, Owner, or Contractor to discuss specific items.

1.5 Payment

- .1 All required attendance of the Contractor and/or Contractor's major subcontractors to all Progress Meetings and any required Special Meetings shall be incidental to the contract and no separate payment will be made.

END OF SECTION 01 31 01

1.0 GENERAL

.4 *(Delete 1.4 and replace as follows)*

Give minimum 72-hour notice to Owner prior to beginning construction and comply in all respects with their requirements. The Contractor will be responsible for any and all local permits required to execute the work.

.6 *(Add 1.6)*

The Contractor is required to provide 24-hour written notice to all residents, homes and businesses including all units in a multifamily site for any service or vehicle access interruption.

.7 *(Add 1.7)*

MoTI Permit is required for the utility tie-in at Garfield Road and Hwy 19. Contractor to provide all traffic control complete with lane truck, dynamic message boards at the intersection with no Highway closure permitted. Two (2) way traffic to be maintained at all times. Refer to MoTI Traffic Management Manual for Work on Roadways.

END OF SECTION 01 55 00

1.4 Measurement and
Payment

.5 *(Delete and replace section 1.4.5 as follows)*

Payment for concrete sidewalks, in-fill strips and walkways and all concrete ramps where shown on Contract Drawings includes supply and placing of the concrete and granular base under the concrete sidewalk, in-fill strips walkways at a concrete thickness of 120mm.

.6 *(Delete and replace section 1.4.6 as follows)*

Payment for driveway crossings including granular base as shown on Standard detail C7 will be made on a square metre basis at a concrete thickness of 150mm and will extend to the centreline of each driveway or nearest control joint as a minimum. Driveway finish to match existing.

END OF SECTION 03 30 20

EXCAVATING, TRENCHING AND BACKFILLING

1.10 Measurement and
Payment

- .4 **(Amend clause 1.10.4 as follows)**
Payment for removals will be in addition to trenchwork with no deduction made from such trenchwork and shall be made as follows:
- .1 Payment for removal and off-site disposal of disused AC pipe includes all necessary means for protection of workers, and removal, testing, permitting, wrapping, transport and disposal (except dump fees) of AC pipe and all other work and materials necessary to complete the removal and disposal as shown on the Contract Drawings and specified under this Section. Payment will be made per lineal metre of pipe disposed.
 - .2 Payment of dump fees charged at disposal site will be paid separately. A markup of 5% shall be added to the dump fee and the amount shall be payable under an allowance in the Schedule of Quantities and Prices. Accurate records shall be submitted to the Contract Administrator in accordance with GC 10.3 showing all costs related to this item.
- .9 **(Add clause 1.10.9 as follows)**
Prelocating existing water service record locations where identified as unknown on the Contract Drawings will be required prior to installing new service saddles or tees and payment will be made on a per unit basis as per the *Schedule of Quantities and Prices*.
- .10 **(Add clause 1.10.10 as follows)**
CONTRACTOR is required to excavate, expose and confirm all existing underground utilities within 2 meters of the tie-in location. Confirm, elevation, slope, and relevant dimensions of existing watermain pipe for all new works to be connected to, prior to any watermain connections being scheduled. The *CONTRACTOR* is to provide to the *CONTRACT ADMINISTRATOR* proof of existing pipe dimensions and confirmation that all fittings to be used in connections to existing watermains are sized appropriately. Payment will be made on per location basis as per the *Schedule of Quantities and Prices*. Refer to *Water System Tie-in Verification Schedule WW-03*.

END OF SECTION 31 23 01

1.4 Measurement and Payment

.1 (*Delete and replace as follows*)

Payment for Controlled Density Fill (Pipe) includes removal and disposal of abandoned fittings and components such as tee's crosses, valves, hydrants, blow offs, preparation of the pipe and service connections, formwork, temporary piping, supply and placement of the Controlled Density Fill, protection during curing and all other work and materials necessary to complete the installation as shown on the Contract Drawings and specified under this Section.

Payment will be made by lineal meter of main pipe based on the size of pipe to be filled, as shown on the Contract Drawings.

2.2 Mixes

.1 (*Delete and replace as follows*)

Proportion Controlled Density Fill to meet the following design criteria:

- .1 Compressive strength: 0.5MPa at 28 days
- .2 Cement content: 25kg per m³
- .3 Slump: 150-200mm
- .4 Air entrainment: 4-6%

3.1 General

.1 (*Delete and replace as follows*)

Completely fill pipe with Controlled Density Fill. Ensure no voids are left inside pipe.

END OF SECTION 31 23 23

Roadway Excavation, Embankment & Compaction

SUPPLEMENTARY SPECIFICATIONS

1.8 Measurement and
Payment

.5 ***(Delete first paragraph and replace as follows)***
Payment for common excavation includes removal of existing, curbs and gutters, sidewalks, driveways, utilities, strips, pipes and conduits as part of the operation for common excavation. Removal of existing asphalt pavements is paid separately under this Section.

.14 ***(Add)***
Payment for removal of existing asphalt pavements includes removal and off-site disposal of asphalt pavement. Payment will be made on a square metre basis as specified in the Schedule of Quantities and Prices.

3.5 Compaction

.7 ***(Add)***
The frequency of density tests shall be one test per 250 square meter per 300mm vertical lift.

END OF SECTION 31 24 13

- 1.0 GENERAL**
- .1 Section 32 01 01 refers to those portions of the work that are unique to roadway repair beyond the extent of trenching and as directed by the *CONTRACT ADMINISTRATOR*. This section must be referenced to and interpreted simultaneously with all other sections pertinent to the works described herein.
- 1.1 Related Work**
- .1 Traffic Control, Vehicle Access and Parking Section 01 55 00
- .2 Environmental Protection Section 01 57 01
- .3 Aggregates and Granular Materials Section 31 05 17
- .4 Dust Control Section 31 15 60
- .5 Excavating, Trenching and Backfilling Section 31 22 01
- .6 Roadway Excavation, Embankment and Compaction Section 31 24 13
- 1.2 Measurement and Payment**
- .1 Payment for all road repair work undertaken beyond the extent of trenching includes removal of existing native gravels and sub-grade as directed, and supply, placement and compaction of imported granular subbase and base materials as directed. Payment will be made under Force Account.
- .2 Removal of existing asphalt pavement will be paid under Supplementary Specification 31 24 13.
- .3 For clarification, the extent of road repair work is unknown and to be determined on an as encountered basis. The scope of road repair work may be increased or decreased at the sole discretion of the *CONTRACT ADMINISTRATOR*.
- .4 Payments made under this Section are exempt from GC 9.4 Quantity Variations.
- 2.0 PRODUCTS**
- .1 Not used
- 3.0 EXECUTION**
- .1 Not used

END OF SECTION 32 01 01

- 1.5 Measurement and Payment**
- .7 **(Add to this clause 1.5.7)**
Saw cutting along the permanent reinstatement lines as per the trench and pavement reinstatement detail for pipe laying work is not permitted.
- .9 **(Add 1.5.9 as follows)**
Supply and installation of all Hot-Mix Asphalt Concrete Paving will be by *Other Contractor* for which the *CONTRACTOR* will be responsible for coordinating of all necessary *Work* effort to ensure the Hot-Mix Asphalt Concrete Paving is installed in the most efficient manner possible. Payment for this coordination effort will be lump sum as per the Schedule of Quantities and Prices.
- 3.13 Scheduling and Coordination**
- .1 **(Add clause 3.13.1 as follows)**
Scheduling and Coordination of the Owner's Paving Contractor shall include as a minimum, the following tasks:
- .1 Invite the Owner's Paving Contractor to all project meetings where asphalt paving and any related tasks will be discussed including the Pre-Construction Meeting set by the Contract Administrator
 - .2 Establish and maintain point of contact with the Owner's Paving Contractor Project Manager and Paving Superintendent
 - .3 Maintain ongoing dialogue with the Owner's Paving Contractor during the course of the project and advise of any anticipated changes in schedule dates for paving as part of the monthly issuance of the *Adjusted Baseline Schedule*
 - .4 Confirm all parties roles and responsibilities related to Appendix 9 - Base Course Acceptance are understood and executed in full conformance with the contract requirements
 - .5 In the event that the Environment Canada 7-Day Weather Forecast for Campbell River, BC suggests *Abnormal Weather* is likely to conflict with the scheduled date for paving, the *Contractor* shall immediately notify the *Contract Administrator* and the Owner's Paving Contractor and seek direction from the *Contract Administrator* on any necessary adjustments to paving dates.
 - .6 In the event that the outside temperature on the scheduled dates for paving falls below the requirements of item 3.5.3.1 of Specification 32 12 16, the *Contract Administrator* will advise if paving is to proceed or be rescheduled.

END OF SECTION 32 12 16

1.9 Measurement and Payment

.1 *(Delete 1.9.1 and replace as follows)*

Supply and installation of trees, shrubs, ground covers of the same species, and size (where applicable) to match existing landscaping arrangement for each address identified on *Contract Drawings*. Payment to including all preparatory work, supply, planting, materials, and reinstatement of irrigation components, fences, minor concrete features, edging, and other incidental specified under Section 32 93 01- Planting Trees, Shrubs, and Ground Covers including maintenance to meet Conditions of *Total Performance*.

END OF SECTION 32 93 01

WATER WORKS

- 1.6 Record Drawings .2 **(Submit for Information Only)**
Completed Waterworks Tie-In Record Form ref: WW-03 for each watermain tie-in.
- 1.7 Scheduling of Work .3 **(Replace Clause 1.7.3 with the following)**
Notify Contract Administrator, affected residents and businesses a minimum 5 days in advance of any interruption of service.

(Add the following clause)

- .6 For any work requiring City Water Department attendance, a minimum of 5 Days notice is required. Any work requiring City Water Department will not be approved until City Water Department attendance is confirmed.

- 1.8 Measurement and Payment .1 **(Add to 1.8.1 this clause)**
Payment for watermain installation will be for all depths of watermain as indicated on the *Contract Drawings*.

Typical watermain installation requires 1.00 meters of cover above the top of pipe, however where there is a conflict with other utilities, the watermain may have to be installed below or above the existing utility, but in no way will the depth of cover be less than 0.9 meters from final grade. Distance of separation from conflicting utility to be approved by Contract Administrator and comply with VIHA regulations.

Any conflicts that arise are to be brought to the immediate attention of the *CONTRACT ADMINISTRATOR* and he/she will direct on the method that will be used to avoid the conflict.

(Add to 1.8.2 this clause)

- .2 Only approved imported backfill is to be used in all trenches unless otherwise approved by *CONTRACT ADMINISTRATOR*.

(Replace clause 1.8.4 with the following)

Payment for water service connections includes all fittings to tie into the main including saddles, corporation stop, curb stops, service pipe, water meter service setter and idler, brooks box, tracer wire and tying into the existing water service at the property line as per Typical Residential Water Service Detail on drawing 16-513 sheet 4. Payment includes all applicable work described in 1.8.2.

Measurement for service connections will be for each complete service installed with no regards for length of service pipe installed.

.9 **(Amend clause 1.8.9 as follows)**

There will be no payment for thrust blocks and localized concrete required for the installation of the new watermains, temporary blow offs, or test points, or for any temporary blocks that may be required during the watermain construction. Payment for these blocks will be included in the price for watermain installations and the various fittings.

(Add to this Clause 1.8.9)

Payment for joint restraints will be by considered incidental to the Tie-in. Refer to 1.8.13.

.10 **(Add to this clause 1.8.10)**

Typically if there is a conflict between the watermain and an existing utility, wherever possible the *CONTRACTOR* is to deflect the waterline underneath the other utility. Deflections can only be made to the maximum allowable for the class of pipe, based on manufacturer's instructions. Where the pipe cannot be deflected under the existing utility, and bends are required, the bends and restraints will be paid at the appropriate unit price in the contract, but only with the approval of the *CONTRACT ADMINISTRATOR*.

.13 **(Delete 1.8.13 and Replace with this clause)**

Payment for tie-ins to existing mains where all pipework is to be undertaken by the Contractor will be as 1.8.13 of this Section, including all materials, couplers, restraints, tie-rods, trust blocks, temporary blow offs and miscellaneous parts to complete the necessary tie-in work to complete tie-in as shown on Contract Drawings will be by Lump Sum for each location.

Payment for all pipe, gate valves, tees and fittings will be as per *Schedule of Quantities and Prices*.

The *CONTRACTOR* is to advise and attain approval from the City of Campbell River at least 5 days in advance of any shut down of existing water lines and is required to follow item 3.23.2 of this Section for completion of the tie-in. Payment will be made for each individual tie-in as shown on the *Contract Drawings* and as listed in the *Schedule of Quantities and Prices*.

.14 **(Add the following clause 1.8.14)**

Payment for hydrants, Terminal City C-71P or approved equal, includes the hydrant body, lateral connections from mainline tee off watermain to hydrants, isolation valve at the mainline tee and curb valve with adjustable valve box, any necessary risers, the mainline tee, fittings and all other incidental work as shown on Standard Detail Drawing W4.

.15 **(Add 1.8.15)**

Where the watermain installation has a horizontal separation of 3.0m or less from an adjacent or perpendicular storm sewer or

sanitary sewer, the watermain joints for three (3) meters in either direction shall be wrapped with an approved product to meet the AWWA C217 or AWWA C209 standards and the Vancouver Island Health Authority (VIHA) requirements.

Where the watermain installation has a vertical separation of 0.5m or less from an adjacent or perpendicular storm sewer or sanitary sewer, the watermain joints for three (3) meters in either direction shall be wrapped with an approved product to meet the AWWA C217 or AWWA C209 standards and the VIHA requirements.

Measurement for the joint wrap will be each and must be witnessed by the *SITE INSPECTOR* before backfill.

2.2

.4.12. **(Add the following clause 2.2.4.12.1.8)**

1.8 For connection to existing asbestos concrete watermain, preferred coupling to be used is Romac Industries Inc. MACRO HP.

.4.10. **(Add the following clause 2.2.4.10.3)**

3 The use of cadmium plated Redi-Rod type tie-rods and nuts will not be permitted. Stainless 304 Redi-Rod and nuts is permitted.

2.5

Service Connections, Pipe, Joints and Fittings

.6 **(Add clause to this Specification as follows)**

Two cores tracer wire shall be RWU90, 10 gauge (AWG), single-strand, insulated copper wire with cross-linked polyethylene (XLPE) insulation, specifically manufactured for direct burial applications. The tracer wire is to be wrapped around the main at each corp stop and terminate in each service's Brooks Box as per the detail on **19-513 sheet 4**.

2.10

Exterior Bolts on Valves, Hydrants, Couplings and Fittings

.1 **(Add clause to this Specification as follows)**

All exterior bolts on valves, hydrants and couplings shall be Stainless Steel 304 or approved equivalent.

3.10

Service Connection Installation

.13 **(Add clause to this Specification as follows)**

Tracer wire shall be installed on all non-metallic water services and shall be considered incidental to the work for supply and installation the applicable water service. The wire shall be installed in such a manner as to be able to properly trace all water services without loss or deterioration of signal or without the signal migrating off the tracer wire.

Two cores of tracer wire shall be laid flat and securely affixed to each fitting and valve and to the top of the pipes at 1.0 m (40 in) intervals, and to valve boxes and chambers using non-adhesive tape. Each piece of tape shall be a minimum of 50 mm x 150 mm (2 in x 6 in), based on ¾ in (1.9 cm) or 1 in (2.5 cm) CTS pipe OD. Pipe shall be dry and cleaned of all dirt or dust where tape is to be applied.

The wire shall be protected from damage during the excavation or backfilling of the Works. No breaks or cuts in the tracer wire or tracer wire insulation shall be permitted during installation or backfill.

At water service saddles, the tracer wire shall not be allowed to be placed between the saddle and the water main.

Except for approved spliced connections, tracer wire shall be continuous and without splices from service box to water main.

Prior to cutting the tracer wire for connections, the tracer wire shall be loose and not taut to avoid stretching. The ends of the tracer wire shall be stripped the length required for the electrical connector using an appropriate wire-stripping tool. The exposed copper wire shall be free of nicks or scores.

Wire ends that will be used for connecting the tracing device shall be stripped of insulation and have waterproof caps installed.

An approved electrical connector shall be placed over the exposed area of the main tracer wire. The connecting tracer wire shall be carefully inserted into the connector up to the insulation. The connection shall be tightened and the waterproof covers sealed shut. Connections shall be snug and free from exposed copper.

Continuity tests shall be conducted by the *CONTRACTOR*. Testing shall be done in the presence of and to the satisfaction of the Engineer. Tracing wire installations that fail the continuity testing shall be corrected and retested to the satisfaction of the Engineer. The *CONTRACTOR* shall provide the Engineer with sufficient notification of any testing.

The Engineer reserves the right to reject any improper connections. Rejected connections shall be cut and redone to the satisfaction of the Engineer, at the *CONTRACTOR'S* expense.

The *CONTRACTOR* shall supply all necessary testing equipment and materials. The *CONTRACTOR* shall provide, to the Engineer, documentation verifying the testing, including the name of the person conducting the test, date and time of test, location of section being tested, and any other pertinent information.

The tracer wire system shall be tested for functionality by municipal staff only after the *CONTRACTOR* has confirmed and demonstrated that the entire tracer wire system is installed and is functioning properly. The *CONTRACTOR* shall request that

the municipality perform this functionality test prior to placement of asphalt.

3.23 Connections to Existing Mains

.2 (Add new clause 3.23.2 as follows)

Where the *CONTRACTOR* is to tie into existing mains the *CONTRACTOR* is responsible for coordinating and completing the tie-in procedure with the City Water Crew in attendance, as arranged by the *CONTRACT ADMINISTRATOR*. The steps to be followed in the tie in procedure are as presented in the attached *Water System Tie-In Verification Schedule, WW-03*, as may be amended based on the mechanical fitting employed in the *WORK*.

All thrust blocks and joint restraints are incidental to the work.

END OF SECTION 33 11 01

Painter/Barclay/Garfield Watermain Upgrades



KEY PLAN
N.T.S.

ISSUED FOR TENDER

MAY, 2019

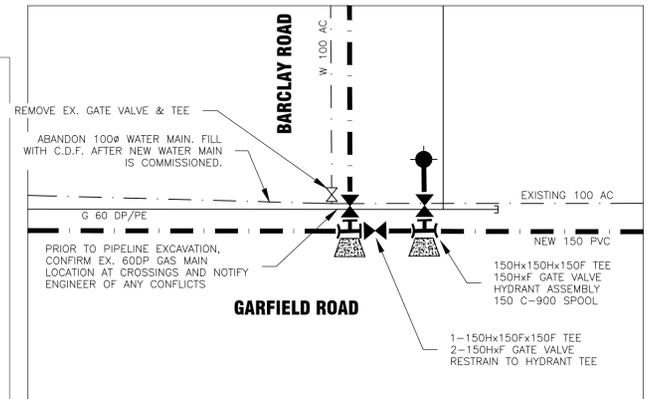
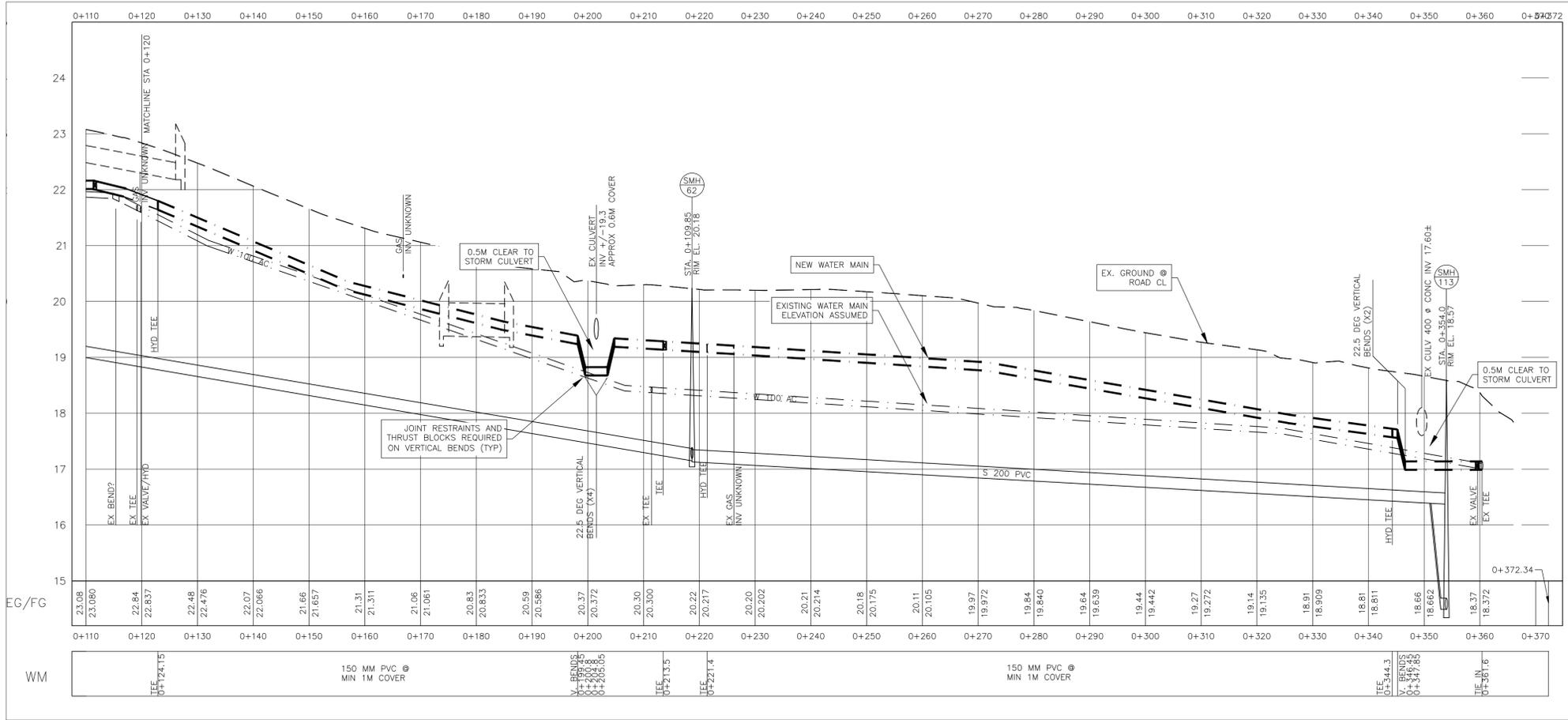
DRAWING NO.16-513

TENDER NO.19-16

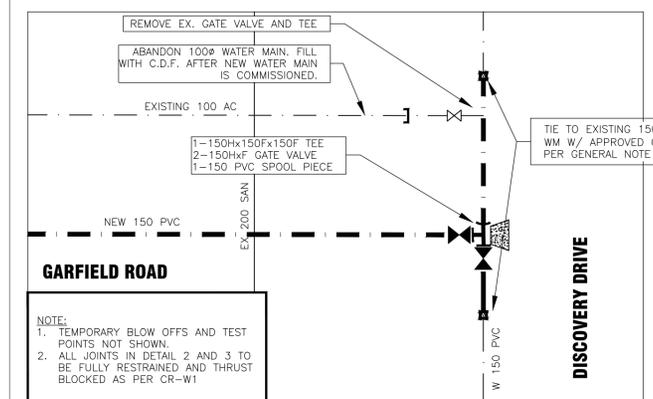
DRAWING INDEX	
COVER	DRAWING INDEX, KEY PLAN
SHEET 1	GARFIELD ROAD FROM HWY 19 TO PAINTER ROAD GENERAL NOTES
SHEET 2	GARFIELD ROAD FROM PAINTER ROAD TO DISCOVERY DRIVE
SHEET 3	PAINTER ROAD FROM PENGELLEY ROAD TO GARFIELD ROAD
SHEET 4	BARCLAY ROAD FROM PENGELLEY ROAD TO GARFIELD ROAD, DETAILS



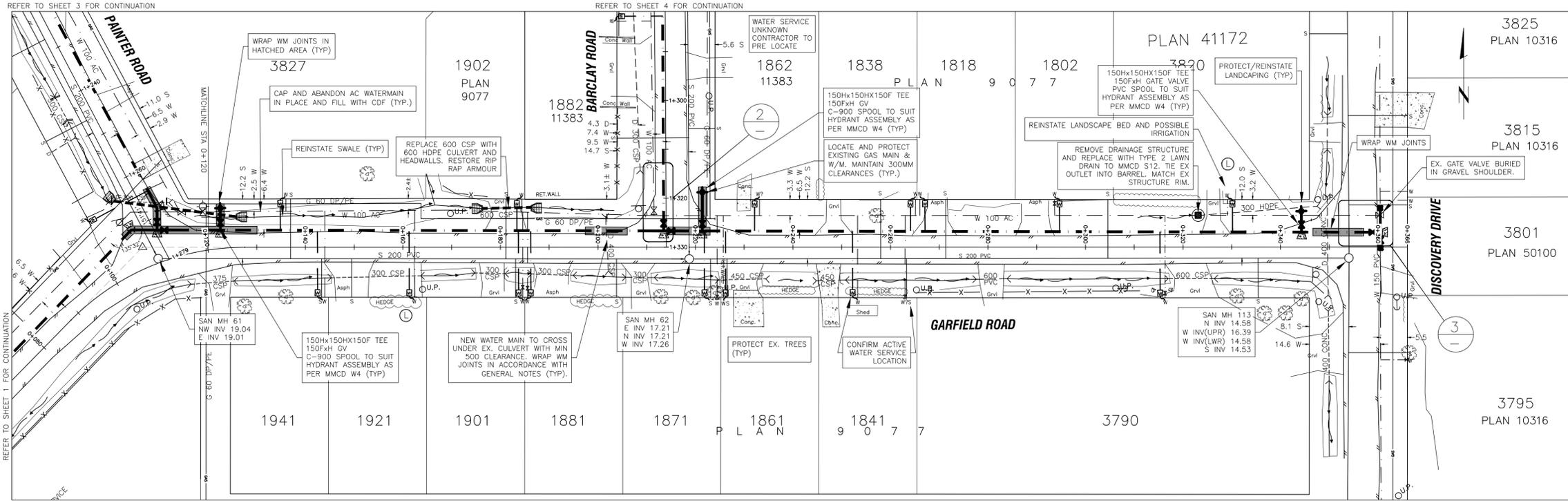
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**Campbell
River**
Capital Works Department



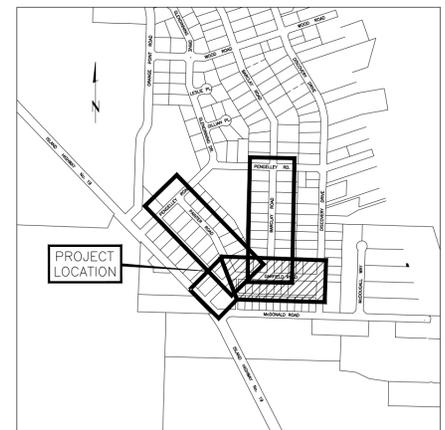
2 WATERMAIN CONNECTION DETAIL
N.T.S.



3 WATERMAIN CONNECTION DETAIL
N.T.S.



RESTORATION:
1. PROPERTIES REQUIRE ADDITIONAL LANDSCAPING RESTORATION. CONTRACTOR TO MATCH EXISTING CONDITIONS OR BETTER. DISTURBED AREAS TO BE MINIMIZED.



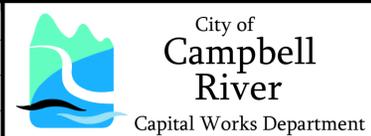
KEY PLAN
SCALE: 1:10,000



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TEL	U/G TELEPHONE	TEL	S	SANITARY SEWER	S	O.D.	OPEN DITCH	O.D.	DESIGNED:	SCALE: H:1:500 V:1:50
BCH	U/G HYDRO	BCH	D	STORM DRAIN	D	S.M.H.	SANITARY MANHOLE	S.M.H.	DD	DATE: 2019/04/10
GAS	NATURAL GAS	GAS	W	WATER MAIN	W	SIDE INLET	CATCH BASIN	SIDE INLET	DD	DATE: 16/10/20
			P	PAVEMENT	P	HYD.	FIRE HYDRANT	HYD.	JH	DATE: Y/M/DD
			C	CURB & GUTTER	C	W.V.	WATER VALVE	W.V.	???	
			S	SIDEWALK	S	U.P.	UTILITY POLE	U.P.		



TITLE:	GARFIELD ROAD PAINTER TO DISCOVERY DRIVE WATER MAIN REPLACEMENT	DRAWING NO.:	16-513
		PROJECT:	16-01
		SHEET:	2 OF 4
		REV.:	01

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Environmental Management Plan Painter Barclay Garfield Watermain Upgrades May 13, 2019

Project Description:

The City of Campbell River (CCR) is planning to replace components of the watermain system located in the Painter, Barclay and Garfield Road neighbourhoods in north Campbell River. The project is scheduled to be completed in the summer of 2019. The project involves replacing the existing water main and three culverts in the project area.

This Environmental Management Plan (EMP) has been prepared to provide environmental guidance for the construction activities, in addition to the regulatory requirements for the works.

Risk Assessment:

The proposed project is located in a previously developed residential area in north Campbell River. A review of the project area for Environmentally Sensitive Areas (ESAs) was conducted¹ and confirmed that there are no high value or sensitive habitat areas within or adjacent to the project site. Features of interest include:

- Roadside ditch network (and one catchbasin), drains to Discovery Passage at the east end of McDonald Road. No freshwater fish habitat present.
- Bald Eagle nest (BA-110-564) located approximately 215 m south from Garfield Road. Located outside of the 60m protection buffer and 160 m breeding season buffer.
- Limited areas of natural vegetation. Residential landscaping is prevalent.

Due to the absence of high value or sensitive habitats, the risk of the project works to the environment is low. All risk can be effectively mitigated through the implementation of environmental best practices.

Potential environmental impacts relating to the proposed work:

- Impacts to water quality
- Release of waste materials to the environment

¹ Newman, Jess. 2019. Memo re ESA Assessment for Painter/Barclay/Garfield Watermain Upgrades. Prepared for David Dougherty, City of Campbell River.

Regulatory Requirements:

- As the work site has storm drainage that connect to the intertidal habitat, the project will be governed by the Federal *Fisheries Act* which prohibits any work that would cause harmful alteration, disruption or destruction of fish habitat. This includes the deposit of deleterious substances that would degrade or alter water quality such that it could be harmful to fish or fish habitat² A Fisheries and Oceans Canada review of the project is not required as there is no work planned that will have a direct impact on fish or fish habitat.
- All of the drainages in the work area are man-made ditches, therefore the BC *Water Sustainability Act* requirements do not apply to this project.
- Section 34 of the BC *Wildlife Act*, provides protection for active nests of all bird species as well as inactive nests of eagles, peregrine falcons, gyrfalcons, osprey, heron or burrowing owls while the federal *Migratory Birds Convention Act* provides protection for active nests of migratory birds. No clearing of vegetation is permitted in the project area during the bird breeding window of March 15 to August 15 unless a bird nesting survey has been completed by an Appropriately Qualified Professional.
- The *Environmental Management Act* provides protection for human health and the quality of water, land and air in British Columbia. It prescribes legislative rules for hazardous wastes, contaminated site remediation, clean air provisions, and provincial enforcement power of this legislation. The management of all waste materials generated as a result of the watermain upgrades and culvert replacements must comply with the requirements of the Act, and any other relevant legislation (i.e. Transportation of Dangerous Goods).³
- The City of Campbell River Environmental Protection Bylaw.(Bylaw 3551, Section 3.3) does not apply to projects administered by the City however the principles of the bylaw specific to protecting surface drainage and stormwater will be met.
- The City of Campbell River Streamside Development Permit process does not apply to projects administered by the City however the principles of the Sustainable Official Community Plan Environmental Development Permit requirements will be met.

² Environment and Climate Change Canada:
<https://www.ec.gc.ca/Pollution/default.asp?lang=En&n=072416B9-1>

³ Environmental Management Act: [http://www.bclaws.ca/civix/document/LOC/lc/statreg/--%20E%20--/Environmental%20Management%20Act%20\[SBC%202003\]%20c.%2053/00_Act/03053_02.xml](http://www.bclaws.ca/civix/document/LOC/lc/statreg/--%20E%20--/Environmental%20Management%20Act%20[SBC%202003]%20c.%2053/00_Act/03053_02.xml)

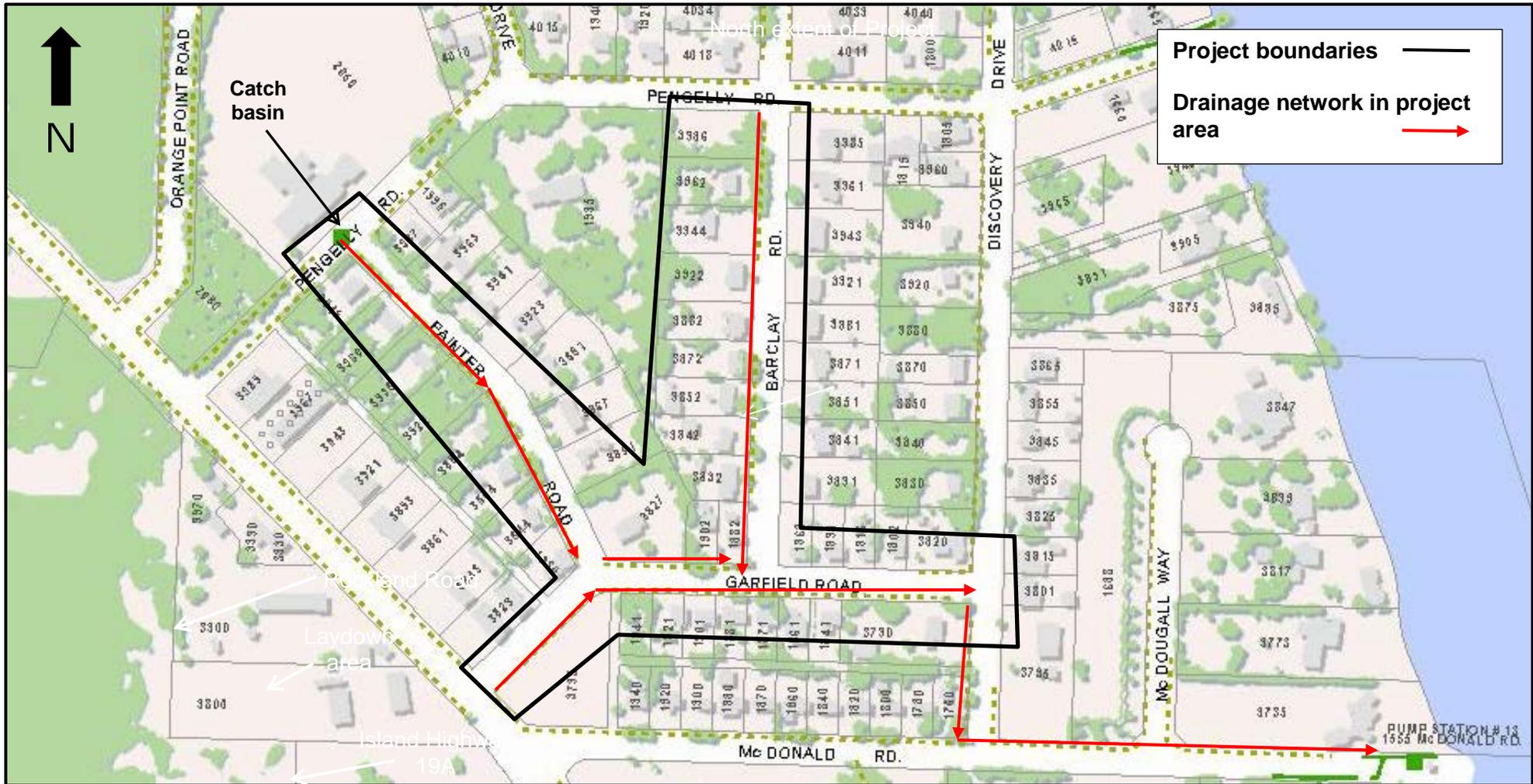


Figure 1. Drainage network in the Painter / Barclay / Garfield Watermain Upgrades project area. Map obtained from the City of Campbell River Web Map service, <http://www.campbellriver.ca/city-services/maps>.

Environmental Measures:

The project activities must be conducted in such a manner that the potential environmental impacts are fully avoided or mitigated as much as possible. The following measures are recommended:

The Contractor, City of Campbell River representative and designated EM (Mainstream Biological Consulting) must maintain communication at all phases of the project to ensure that the EM is on site at the appropriate times. This would include, but is not limited to:

- Prior to start of work
- During extreme weather (heavy precipitation / high winds)
- During or immediately following an environmental incident such as a spill of hazardous or controlled materials.
- Prior to the Contractor demobilizing from site.

The EM must have the authority to modify and / or halt any activity if deemed necessary for the protection of the environment, or to meet regulatory, City of Campbell River or other agency requirements.

Vegetation Management:

- Vegetation removal or modification requirements are expected to be minimal for this project. When possible avoid disturbance to existing vegetation (i.e. avoid mechanical damage or disturbance to root systems). Where the project plans call for tree removal or other vegetation, the requirement for an active bird nest survey will be determined by the EM.
- A mature conifer is scheduled for removal in the project area at 3842 Barclay Road but is part of work on a separate project and only noted for information purposes.
- The EM and Contractor will evaluate the extent of invasive plants in the work areas and develop a plan to contain and dispose of these waste materials in order to prevent the spread of these species.

Prevention and management of spills:

- Vehicles and equipment are to park in designated locations only.
- All heavy equipment brought to site must be in good working order, and clean and leak-free. The EM may ask that equipment that is not in satisfactory condition be removed from site.
- All equipment on site must be equipped with a spill kit with contents that are appropriate for the volume and type of fluids contained within the equipment. Any materials from the spill kits that are used during the course of the work must be disposed of appropriately and are to be replaced within one working day.
- Storm drains located in the vicinity of each stage of the project will need to be bermed or blocked for the duration of the work to avoid turbid water or other deleterious substances being discharged to the intertidal. One catch basin is identified near the Painter Road and Pengelley Road intersection. Others may be present.

- Any portable equipment positioned within 30 m of a storm drain will have adequate secondary containment to prevent the release of deleterious material to the ditch network in the event of a leak or spill.
- Equipment should be parked more than 30 m away from the storm drain or ditches when left on site overnight.
- Any fueling must occur a minimum of 15 m from any storm drains, with spill supplies on hand.
- Servicing of equipment should occur offsite. In the event of an emergency repair, servicing may occur onsite as long as appropriate containment is used.
- In the event of a spill to ground or water, the contractor is responsible for responding to contain and / or clean-up the spill if it is deemed safe to do so. Once the crew has determined that they can work safely, the responders should follow the following steps:
 1. Stop the spill (clamp hose, upright container, block hole etc).
 2. When warranted, define the spill area to prevent workers from walking / driving through the released material and spreading to other areas.
 3. Contain the spilled material (berms, pads, ditches etc).
 4. Clean-up the spill if possible. If the spill is significant, a professional spill response contractor may be required.
 5. Report the spill to the Environmental Monitor. The EM will then assist with documenting the spill conditions and response and prepare a report for submission to the City of Campbell River representative and other appropriate agencies (when required). All spills to water (including storm drains unless disconnected from the outfall to the ocean) must be reported to DFO. Spills to land will be reported according to the requirements of the Environmental Management Act. See the table at the end of the EMP for reportable substances and quantities.

All environmental incidents, regardless of significance, shall be reported by the crew to the Environmental Monitor and City representative. The following guidelines are to be followed for incident reporting.

Type of incident	Reporting contacts	Reporting timeline
Small volume release of materials to ground (i.e. hydrocarbons less than 5L)	Site Supervisor	Immediately
	Environmental Monitor	By end of work day
	City of Campbell River	By end of work day
Large volume release of materials to ground (i.e 100 L of hydrocarbons)	Site Supervisor	Immediately
	Environmental Monitor	Immediately
	City of Campbell River	Immediately
	BC Environmental Emergency Program (EMBC)	Within 24 hours
Spill to water – any volume	Site Supervisor	Immediately
	Environmental Monitor	Immediately
	City of Campbell River	Immediately
	BC Environmental Emergency Program (EMBC)	Within 24 hours

Environmental incidents involving a spill or escape of deleterious materials to water or land are to be reported to the City of Campbell River representative and EM as soon as practical once the spill is contained. Environmental incidents requiring notification to external agencies (i.e. a spill to water) will be reported to the City of Campbell River representative immediately. Other incidents will be reported by the end of the work day.

In the event of a spill or escape of a polluting substance, the following details are to be noted and included in the spill report, to be provided to the City of Campbell River and EM:

- Date and time that incident occurred
- Name of person(s) involved in incident (note if subcontractor)
- Location of incident
- Equipment involved in incident
- Type and quantity of substance spilled or released to the environment
- Estimated extent of affected area
- Description of affected area
- Spill response steps implemented and current status of spill
- Cause of incident
- Any follow up action required
- Internal and external notifications
- Photos of spill and impacted area

Concrete Management:

Concrete work will be required during the project to create thrust blocks on the watermain and to restore driveways disturbed during the work. The following measures are recommended for concrete works:

- Do not allow uncured concrete to come in contact with surface or groundwater drainage at any time. Use sealed forms when possible and pump out excavations so they are dry before concrete pours begin.
- All crew involved in concrete operations must remain attentive at all times during transfer of concrete.
- Catchment materials (poly or other impermeable material) are to be placed underneath portable mixers or other mixing equipment when positioned within 15 m of ditches.
- Any uncured concrete spilled to ground will be cleaned up immediately. Cured concrete waste materials can be disposed of at landfill.
- There will be no disposal of excess concrete on site. Excess concrete will be transported back to the concrete plant or other approved off-site disposal location. This includes any waste material from batch testing.
- There will be no wash out of concrete trucks, small mixers or hand tools used for concrete work on site. Water used to wash equipment should be contained and removed off site to a suitable disposal location.

- Trucks are to use chute bags to avoid the release of uncured concrete when leaving site and travelling back to the batch plant.

Asphalt Management:

- All debris or grinding from asphalt removal shall be cleaned up, removed from site and disposed of at an appropriate disposal facility.

Hazardous Waste Management:

- Hazardous waste is not expected within the project area but if encountered the crew will adhere to all applicable legislation with respect to the handling, transportation, and / or disposal of all materials related to this project. These regulations may include the B.C. *Hazardous Waste Regulation, Spill Reporting Regulations, WorkSafeBC Regulations, Transportation of Dangerous Goods Regulations*, and Controlled Products Regulations, etc.
- Hazardous waste will be placed in appropriate containers, and secured during handling and transportation. Hazardous materials will be taken to a suitable disposal facility by an appropriately licensed hazardous waste transportation contractor. Documentation confirming receipt of the hazardous materials by the receiving facility will be provided to the City of Campbell River.

Other Waste Management:

- The out of service watermain will be filled in place with high density filler. Any pipe or other components of the water service that are removed from service will be taken from site and disposed of at a suitable disposal facility.
- Any materials that are suitable for salvage or recycling should be separated from other waste and sent to an appropriate recycling facility.
- Non-regulated contaminated waste is to be stored in separate, labeled containers and disposed of appropriately. Proof of disposal location will be required. This includes used spill clean-up materials, contaminated soils etc.
- Waste must either be removed from site daily, or stored in secure containers to prevent dispersion of the wastes after hours (due to weather / vandalism).
- Any portable toilets brought to site are to be placed in a location at least 30 m from any watercourse or storm drain, and secured to prevent tipping. The toilets are to be removed within two days of the project being complete.
- The contractor is to maintain a tidy work area at all times. Domestic waste (lunch garbage, smoking materials etc) is to be kept in a container and not left on the ground at any time.

Erosion, sediment and drainage control:

- The Contractor must plan to handle stormwater or groundwater that accumulates in open excavations. Clean water can be pumped around work areas into the ditch network downstream. Turbid water (> 25 NTU) is to be discharged to a stable, vegetated location on City property with no connection to the ditch network (must be approved by the EM and / or City representative), or be removed with a vacuum truck and taken off-site.
- The Contractor must conduct work in such a manner that the generation of sediment laden water is minimized. Avoid working during periods of heavy rainfall

if there is risk of developing turbid surface drainage that could migrate into the ditch network. Erosion and sediment control measures must be applied when there is higher risk of erosion and sediment transport (i.e. prior to extended periods of rainfall, when working in areas of erodible soils, work in ditches etc).

- Any areas that are disturbed during the excavation work will be stabilized prior to the Contractor leaving site. This includes the areas associated with the culvert replacement sites. Sites are to be stabilized according to the project specifications (i.e. rip rap at headwalls) or using measures approved by the EM and / or City representative.
- Any spoil material or stockpiles that are to be stored on site should be located away from the ditch banks or any storm drains to reduce the risk of any run-off entering the drainage system (aim for at least 15 m away). Sediment fencing or other barrier may be required to contain any potential run-off from stockpiles or spoil. Tarps or poly sheeting should be used to cover any spoil or stockpiles in the event of heavy rainfall.

Environmental Management Plan Review:

Date:

Contractor Representative:

(Print name) _____ (Sign name) _____

City of Campbell River Representative:

(Print name) _____ (Sign name) _____

Environmental Monitor:

(Print name) _____ (Sign name) _____

Environmental Contacts:

Affiliation	Title	Name	Phone #	Email
Contractor	Owner	TBD		
	Project Manager	TBD		
	Superintendent	TBD		
Mainstream Biological	Environmental Monitor	Monica Stewardson	250-203-3516	Monica@mainstreambio.ca
City of Campbell River	Owners Representative / Contract Administrator	David Dougherty	250-286-5772/ 250-895-0556	david.dougherty@campbellriver.ca
	Project Coordinator	Trevor MacLeod	250-286-5777/ 250-895-9235	trevor.macleod@campbellriver.ca
	Client	Nathalie Viau		Nathalie.viau@campbell river.ca
	Environmental Specialist	Terri Martin	250-286-5711	terri.martin@campbellriver.ca
BC Environmental Emergency Program (EMBC)				1-800-663-3456
City – Water- Casey Clarkson				250-203-0505
Dogwood Operations- Out of Hours				250-287-7444
Fire Department				250-286-6266/911

Reportable substances and quantities as listed under the *Environmental Management Act Spill Reporting Regulation* are shown below:

Substance	Reportable quantity
Class 1 explosives as defined in section 2.9 of the Federal Regulations	50g or less if the substance poses a danger to public safety
Class 2.1 flammable gases other than natural gas as defined in section 2.14(a) of the Federal Regulations	10kg
Class 2.2 non-flammable and non-toxic gases as defined in section 2.14(b) of the Federal Regulations	10kg
Class 2.3 toxic gases as defined in section 2.14(c) of the Federal Regulations	5kg
Class 3 flammable liquids as defined in section 2.18 of the Federal Regulations	100L
Class 4 flammable solids as defined in section 2.20 of the Federal Regulations	25kg
Class 5.1 oxidizing substances as defined in section 2.24(a) of the Federal Regulations	50kg or 50L
Class 5.2 organic peroxides as defined in section 2.24(b) of the Federal Regulations	1kg or 1L
Class 6.1 toxic substances as defined in section 2.27(a) of the Federal Regulations	5kg or 5L
Class 6.2 infectious substances as defined in section 2.27(b) of the Federal Regulations	1kg or 1L or less if waste poses a danger to public safety or the environment
Class 7 radioactive materials as defined in section 2.37 of the Federal Regulations	Any quantity that could pose a danger to public safety and an emission level greater than the emission level established in section 20 of the Packaging and Transport of Nuclear Substances Regulations, 2015 (Canada)
Class 8 corrosives as defined in section 2.40 of the Federal Regulations	5kg or 5L
Class 9 miscellaneous products, substances or organisms as defined in section 2.43 of the Federal Regulations	25kg or 25L
Waste containing dioxin as defined in section 1 of the Hazardous Waste Regulation	1kg or 1L or less if the waste poses a danger to public safety or the environment
Leachable toxic waste as defined in section 1 of the Hazardous Waste Regulation	25kg or 25L
Waste containing polycyclic aromatic hydrocarbon as defined in section 1 of the Hazardous Waste Regulation	5kg or 5L
Waste asbestos as defined in section 1 of the Hazardous Waste Regulation	50kg
Waste oil as defined in section 1 of the Hazardous Waste Regulation	100L
Waste that contains a pest control product as defined in section 1 of the Hazardous Waste Regulation	5kg or 5L
PCB wastes as defined in section 1 of the Hazardous Waste Regulation	25kg or 25L
Waste containing tetrachloroethylene as defined in section 1 of the Hazardous Waste Regulation	50kg or 50L
Biomedical waste as defined in section 1 of the Hazardous Waste Regulation	1kg or 1L or less if the waste poses a danger to public safety or the environment
A hazardous waste as defined in section 1 of the Hazardous Waste Regulation and not covered under all above items	25kg or 25L