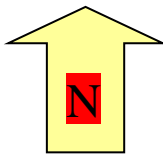


CITY OF WHITE ROCK

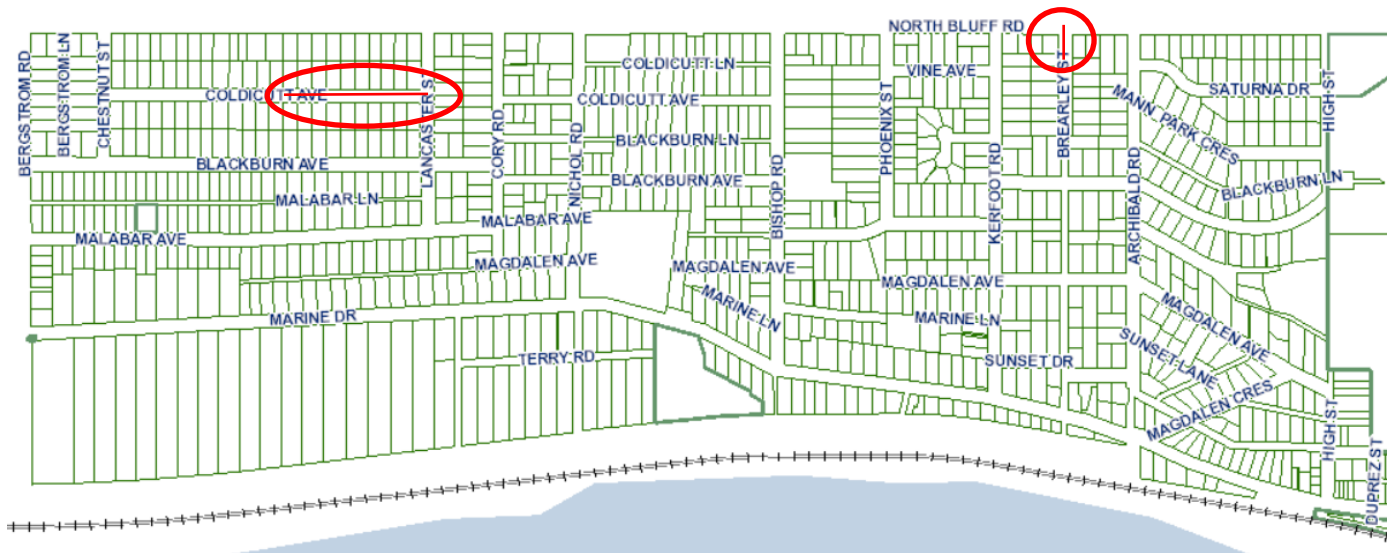


REQUEST FOR PROPOSAL (RFP) CONTRACT WR19-039

**Engineering, Design and Construction Management
Services for 2019 Water Utility Capital Works**



October 2019




 Proposed Watermain Sites

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Instructions to Proponents

SUMMARY OF KEY INFORMATION

RFP Title:	Engineering, Design and Construction Management Services for 2019 Water Utility Capital Works Use the above RFP title on all correspondence.
City Representative:	The authorized City Representative for this RFP is: Birk Madsen, AScT City of White Rock 877 Keil Street White Rock, B.C., V4B 4V6 Phone: (604) 541-2192 Email: bmadsen@whiterockcity.ca Address all correspondence to the Contact Person. Information offered from sources other than the above Contact Person is not official, may be inaccurate, and must not be relied on in any way by any party for any purpose.
Read all parts of this RFP Carefully	The recipient is solely responsible for ensuring that they have received and understood the complete RFP as described in the Table of Contents and for ensuring that they have received and understood all Addenda.
Closing Time For Proposal Submissions:	November 8, 2019 - 2:00 p.m. local time
Closing Location:	Proposals are to be delivered to: City of White Rock Operation 877 Keil Street White Rock, B.C. V4B 4V6

Instructions to Proponents

1.0 INSTRUCTIONS TO PROPONENTS

1.1 General

1.1.1 Purpose and Eligibility

The purpose of this RFP is to solicit Proposals from Proponents to enter into an agreement with the City of White Rock for **Engineering, Design and Construction Management Services for 2019 Water Utility Capital Works** (the “Project”) as described in this RFP and to carry out all Work in accordance with this RFP and the terms of the Services Agreement.

This is a Request for Proposals and is not a contract tender call. No contractual, tort or other legal obligations are created or imposed on the City by this RFP or by submission of any Proposal or by consideration of, or failure or refusal to, consider any Proposal by the City. Further, the Services Agreement, when executed, is the sole source of any contractual obligation on the City with respect to the Project.

All Proposals received in response to this RFP will be evaluated and the Proponent judged to have the “best overall Proposal” will be selected to enter into negotiations leading to a Services Agreement with the City for this Project.

Throughout this document reference is made to the “Proponent” as the entity preparing the response to the RFP including its Prime Members. The term “Consultant” is used to represent the Proponent after the Agreement is signed.

“Preferred Proponent” is the Proponent judged to have the “best overall Proposal” which is selected to enter into negotiations leading to a Services Agreement with the City. If negotiations are unsuccessful, the next highest rated Proponent may be deemed to be the Preferred Proponent and negotiations would be commenced with them.

1.1.2 Receipt of Complete RFP

It is the Proponent's responsibility to ensure that the Proponent has received a complete RFP as listed in the Table of Contents. The submission of a Proposal constitutes representation by a Proponent that it has verified receipt of a complete RFP including any and all Addenda. Each and every Proposal will be deemed to be made on the basis of the entire RFP, including any and all Addenda issued prior to the Closing Time.

This RFP package consists of the following documents, which, together with any Addenda issued, collectively constitute the RFP documents (collectively, “RFP Documents”).

- *Section 1: Instructions to Proponents*: describes certain conditions pertaining to the Proposal submission, the Proposal process to be followed, and the general Proposal submission and Evaluation requirements.
- *Section 2: Scope of Work*: defines the requirements for the design of the Project;
- *Section 3: Submission Requirements*: sets out the submission expectations.

Instructions to Proponents

- *Section 4: Evaluation Process & Criteria:* defines the requirements for the Project.
- *Appendix A - Project Requirements*
- *Appendix B – Design Specifications:* defines the functional requirements and technical standards for the work.
- *Appendix C - Schedule 1 - Proposal Form:* form of Proposal to be completed by the proponent.
- *Appendix C – Schedule 2 - Format of Prices*
- *Appendix C – Schedule 3 – Undertaking of Insurance*
- *Appendix C – Schedule 4 – Undertaking of Professional Liability Insurance*
- *Appendix C – Schedule 5 – Proponent References & Additional information.*
- *Appendix C – Schedule 6 – Disclosure of Interest*
- *Appendix D – Additional Information: the City provided additional information on each project to assist proponents to understand local conditions impacting the work and assess the level of work involved for each site.*
- *Appendix E – Service Agreement Form*
- *Appendix F – 2014 Geotechnical Report, High Street/Blackburn Crescent (Closest available geotechnical report)*

1.1.3 Proponent's Clarification

The Proponent must review the entire RFP prior to submitting a Proposal. Any requests for clarification of issues related to the RFP must be transmitted in writing to the City Representative. Unless otherwise expressly permitted by the City Representative in writing, requests for clarification of the subject matter of this RFP must be transmitted in writing to the City Representative no later than five (5) days before the Closing Time.

The City Representative will distribute copies of all RFP clarification requests and the corresponding responses to such requests to all Proponents with the exception of issues raised in commercial in confidence meetings.

By submitting a Proposal, the Proponent indicates acceptance of the entire RFP and waives any further right to rectify, clarify, or qualify any aspect of the RFP.

1.1.4 Addenda

Written Addenda are the only means of changing, amending or correcting this RFP. The City Representative may change, amend or correct this RFP by issuing an Addendum by posting to BC Bid at www.BCBid.gov.bc.ca or on the City of White Rock web site at www.whiterockcity.ca. No employee or agent of the City other than the City Representative is authorized to change, amend or correct the RFP or issue any Addenda.

Information pertaining to this RFP that is offered by or obtained from sources other than the City Representative is not official, may not be accurate, and must not be relied on in any way by any Proponent for any purpose associated with this RFP.

Instructions to Proponents

No questions will be responded to within 5 days of the close of this RFP.

1.1.5 Additional Information Supplied by the City

The City has arranged to make additional information described in **Appendix D** available to Proponents.

Without derogating from the obligations of a Proponent to investigate and satisfy itself of every condition affecting the Project, unless otherwise expressly indicated in writing in this RFP, the City assumes responsibility for the accuracy of data supplied in this RFP, but does not assume responsibility for the sufficiency or interpretation of that data or that the data provided is necessarily representative of anticipated or actual conditions.

No warranty or guarantee as to accuracy, sufficiency, or relevance is made by any party for any other information, unless otherwise explicitly stated in this Section 1, Instructions to Proponents.

1.1.6 Proponent's Investigation

By submitting a Proposal, a Proponent is deemed to have:

- investigated and satisfied itself of every condition affecting the Work, including but not limited to the Site conditions, labour supply conditions, and resources to be provided;
- based its investigation on its own examination, knowledge, information, and judgement, and not upon any statement, representation, or information made or given by or on behalf of the City other than information contained in this RFP;
- assumed all risks regarding conditions affecting the Work, including but not limited to all risks associated with sub-surface geotechnical conditions, whether or not those conditions are revealed by any information available to or investigations undertaken by the Proponent; and
- been provided with the opportunity to request any additional information it may have required in order to prepare its Proposal.

1.1.6.1 Access to the Site

For the purposes of conducting inspections, testing, or investigations of the Sites prior to the Closing Time, the City will, to the best of its ability, allow Proponents to have access to those Sites owned either by the City or other governments and public agencies, subject to environmental and time constraints.

Proponents must not engage in any physical activities on the Sites without the prior approval of the City Representative. If the Proponent wishes to conduct any testing or sub-surface investigation, written requests for Site access must be received by the City Representative a

Instructions to Proponents

minimum of two (2) days prior to the requested date(s) stating the details of the requested access.

As a condition of entering the Site, Proponents irrevocably accept full responsibility for any and all events arising from the Proponent's access to the Site and the Proponent will be solely liable for any injury or damage caused to any person or property arising out of the Proponent's Site access.

1.1.6.2 Licenses and Permits

The Proponent assumes full responsibility for obtaining and holding any and all rights, permits, licences, consents, approvals, and authorities issued by any level or agency of government or private party that are required to conduct any Site investigations prior to the Closing Time.

1.1.7 Compliance with the Services Agreement

Proponents acknowledge that by submitting a Proposal, the Proponent who is selected to be the Preferred Proponent will be required to enter into the Services Agreement as shown in Appendix E, and to perform the Work in strict accordance with the Services Agreement.

1.2 Responsibilities of the City

The City will manage the procurement and delivery of the Project and will be responsible for the acquisition of all lands required for the Project. Pursuant to the provisions of the Services Agreement, the City will monitor the design of the Project as a knowledgeable owner and may perform quality audits to verify the Consultant's delivery of quality, durable, and environmentally acceptable infrastructure in accordance with the Services Agreement.

The City will, during the execution of the Work, monitor the progress of the Work to verify that the Consultant is conforming to the Services Agreement. The City will review the Consultant's conformance to the Services Agreement, accept payment requests, issue payments, accept Substantial Performance of the Project and issue the Completion Certificate subject to the procedures defined in the Services Agreement.

For clarity, nothing in this section creates any contractual or other legal obligation on the City. The Services Agreement, when executed, is the sole source of any contractual or other obligation on the City with respect to the Project.

1.3 Responsibilities of the Consultant

Responsibilities of the Consultant include, but are not limited to, all responsibilities for engineering, design, environmental protection, quality control, and construction management to deliver the Project in accordance with the requirements of the RFP documents. The Consultant's responsibilities are defined, but in no way limited to, the requirements of the RFP and the Services Agreement.

The Consultant will be responsible for dealing with all agencies having jurisdiction over the Consultant and the Project, adjacent landowners, with the general public, and for resolving all issues that arise from its execution of the Work.

Instructions to Proponents

The Consultant will be responsible for securing all Governmental Approvals and Permits required for the Project from those agencies having jurisdiction over the Project, unless noted otherwise in the Services Agreement.

1.3.1 WorkSafe Requirements

The Consultant warrants and represents that it will comply with the relevant WorkSafe BC requirements in the provision of the services. The Consultant is responsible for the carrying and paying for WorkSafe coverage for itself and all employees, contractors and others engaged in the provision of the services listed in this Request for Proposals (RFPs). They must also have a safety program acceptable to WorkSafe BC and must ensure that WorkSafe BC safety rules and regulations are observed during the performance of this agreement. Proof of WorkSafe BC registration may be required at each progress payment.

Any safety incidents occurring during the performance of the work of this RFP are to be reported to the City Representative listed on page 1-1 within 24 hours.

1.4 Responsibilities Table

One of the objectives of the City is to obtain an appropriate allocation of responsibilities and risks of the Project. The City has carefully examined the various risks involved in this Project and has reflected this analysis in this RFP.

Proponents are advised that the details of the risks associated with the Project and the Proponent's responsibilities for such risks are contained in this RFP and that Table 1, on the next page, is included for convenience only and is not intended to be, nor should it be construed to be, a comprehensive description of allocation of the Proponent's responsibilities and risks applicable to this Project.

Instructions to Proponents

Table #1 – Risk Allocation Outline

The responsibilities are allocated between the City and the Proponent as follows:

Risks / Ownership	City	Consultant
<u>Site and Land</u>		
▪ Topographic Survey		✓
▪ Legal Survey	✓	
▪ Underground Utilities/Review of Topographic and Legal Survey		✓
<u>Project Design</u>		
Planning and Development of the Site		✓
▪ Supplied data	✓	✓ (sufficiency, interpretation)
▪ Regulatory Filing		✓
Detailed Design		✓
▪ Design error		✓
Changed conditions		✓
▪ Patent infringement		✓
▪ <u>Project Administration</u>		
▪ Insurance / Surety		✓
▪ Quality Management / Quality Assurance / Safety		✓
▪ Public communications	✓	
▪ Ability to achieve Project parameters		✓
▪ Consultant insolvency		✓
▪ Delays by City of White Rock	✓	
▪ Force majeure		✓
▪ Project acceptance	✓	

1.5 Proposal Process and Schedule

1.5.1 Proposal Schedule

The anticipated schedule for the Request for Proposal phase of the Project is as follows:

Instructions to Proponents

Anticipated Date	Action
October 11, 2019	Issue RFP to proponents
November 8, 2019	RFP Closing Time
	Selection of Preferred Proponent
November 19, 2019	Proposal Acceptance (Subject to Change)
	Proposed Schedule
November 2, 2020	Substantial Performance of the Project (Works are constructed)

1.5.2 City Representative

The authorized contact person for this RFP is the “City Representative”:

Birk Madsen, AScT.
City of White Rock
877 Keil Street
White Rock, B.C., V4B 4V6

Tel: (604) 541-2192

Fax: (604) 541-2190

Information given orally by the City, or by City staff members, will not be binding on the City and will not be considered in any form or manner in the evaluation of the Proposals.

1.5.3 In Confidence Meeting(s)

All Proponents may request, in writing, In Confidence meeting(s) for the purpose of discussing in private the viability of their Proposal with the City prior to submitting its Proposal, and for the purpose of discussing any other commercially sensitive issues relating to the Proponent’s Proposal(s). Proponents must submit written questions to the City Representative at least three (3) days in advance of the scheduled In Confidence meeting(s). These questions should be clearly marked “In Confidence”, and will not be distributed to other Proponents. Minutes of any In Confidence meeting(s) will not be distributed. The City reserves the right to issue copies of any In Confidence questions to any Proponents if this is necessary in the interests of fairness.

In Confidence meetings will be held at the sole discretion of the City.

Instructions to Proponents

1.5.4 Submission of Proposals

In order to be compliant, the Proponent shall submit a Proposal that addresses all of the documentation requirements of this RFP.

Proposal deliverables shall be kept to a minimum to avoid unnecessary expenditures of effort by all Proponents, but while still being sufficient for the City to conduct a fair, thorough, and objective evaluation.

During the Evaluation Process, the City may require additional information or clarification by the Proponent

The Proponent must ensure that a complete, clearly labelled and securely sealed Proposal is received at the Closing Location by the Closing Time. The City will assume no responsibility for timely receipt of any Proposal. Each Proponent must ensure that its Proposal is clearly marked on the outside as follows:

"Proposal: Engineering, Design and Construction Management Services for 2019 Water Utility Capital Works"

Birk Madsen, Engineering Technologist
City of White Rock
877 Keil Street
White Rock, B.C. V4B 4V6

CONFIDENTIAL - DO NOT OPEN

and must be accompanied by a transmittal form clearly listing the number and description of each item contained in the Proposal package. It is the Proponent's sole responsibility to ensure that its Proposal is received on time. **Emailed proposals package are not accepted.**

1.5.5 Execution of Proposal

By the submission of its Proposal, the Proponent is deemed to represent and warrant that its Proposal has been duly authorized and validly executed.

1.5.6 Proposal Acceptance

The City plans to advise Proponents of the selection of the Preferred Proponent within thirty (60) days of the Closing Time. The Preferred Proponent's Proposal will be accepted, subject to successful post-selection negotiations, within sixty (60) days after the Closing Time.

The City reserves the right to negotiate changes to the Preferred Proponent's Proposal and the Services Agreement with the Preferred Proponent prior to acceptance.

If negotiations are not successfully concluded with the Preferred Proponent, the City may, at its sole discretion, cease negotiations with the Preferred Proponent and commence negotiations with the next highest ranked Proponent, or may terminate the RFP process.

Instructions to Proponents

1.5.7 Execution of Services Agreement:

Upon conclusion of negotiations, the City will provide the Preferred Proponent with two (2) copies of the Agreement required for execution by the Preferred Proponent. A copy of the Services Agreement is included in Appendix E for review by proponents.

Within fourteen (14) days of the Preferred Proponent's receipt of these documents, the Preferred Proponent will return them to the City Representative, fully executed, together with the Securities and Insurance as defined in the Services Agreement.

1.6 Right Not to Accept Proposals

The Proposal that scored the highest, or any Proposal, will not necessarily be accepted. The City reserves the right to reject any or all Proposals. If the City determines that all Proposal Prices submitted by all Proponents are too high, or that all of the Technical Proposals are unacceptable, or the City decides in their sole and absolute discretion that they do not, for any reason, wish to continue with this RFP process, then the City may reject all of the Proposals. In the event the City rejects all of the Proposals, the City reserve the right to call for tenders or call for proposals for the same or similar Work.

1.7 Acceptance

1.7.1 Form of Proposal Acceptance

A written Notice of Proposal Acceptance is the only valid form of acceptance of any Proposal.

1.7.2 Signing of the Services Agreement

By submitting a Proposal, a Proponent agrees that, upon the Proposal Acceptance, the Proponent, if selected as the Preferred Proponent, will execute the Services Agreement, within fourteen (14) days of the written Notice of Proposal Acceptance. The Preferred Proponent's Proposal or any portion thereof, if accepted by the City, will form a part of the Services Agreement.

1.7.3 Prior to Commencement of Work

The Consultant must, within fourteen (14) days of the receipt of the Notice of Acceptance, and prior to commencement of Work on the Site, obtain and deliver to the City:

- A valid Workers' Compensation Board registration number;
- Evidence of compliance with the Insurance requirements in this RFP;
- Executed Services Agreement.

Instructions to Proponents

1.8 Dispute Resolution and Limitation of Damages

Each Proponent, by submitting a Proposal, irrevocably agrees that:

- the Proponent will, within fourteen (14) days of first becoming aware of any issues in dispute arising out of this Proposal, submit written notice to the City Representative of any such disputes which call for any action or decision by the City;
- all disputes not resolved through negotiation between the City representative and the Proponent shall be referred to:
 - a Manager for the City and the Agent of the Contractor identified herein, and if not resolved will be escalated and referred to
 - the Chief Administrative Officer for the City and Senior Executive, Contractor, and if not resolved will be referred to
 - and finally resolved by binding arbitration in accordance with the *Commercial Arbitration Act*, unless the City and the Proponent otherwise agree; and
- if the City elects to reject any Proposal or all Proposals, they will not be liable to any Proponent for any claims, whether for costs, damages, loss of anticipated profit, or any other matter whatsoever.

1.9 Freedom of Information and Protection of Privacy Act

All documents and other records pertaining to the Project that are in the custody of or under the control of the City are subject to the *Freedom of Information and Protection of Privacy Act*. Subject to the limitations of the *Freedom of Information and Protection of Privacy Act*, all documents and other records submitted in response to this RFP will be considered confidential.

1.10 Collusion

Proponents will not discuss or communicate with one another the preparation of their Proposals. Each Proponent will ensure that its participation and that of its Team Members, in the RFP process is conducted without collusion or fraud. Failure to comply with this requirement may lead to disqualification without further notice or warning.

1.11 No Lobbying

All Proponents are expressly forbidden from lobbying any member of the City, including elected leaders regarding this proposal call. Failure to comply with this requirement may lead to disqualification without further notice or warning.

1.12 Exclusivity

No Proponent, or any of its Prime members, will have any interest whatsoever in any other Proponent's Proposal, either directly or indirectly, nor will it enter into any agreement with another Proponent before the Closing Time that could create such an interest. If it is subsequently determined that such an interest does exist, that will constitute sufficient cause in the City's discretion to terminate the Services Agreement.

Instructions to Proponents

2.0 SCOPE OF WORK

This section of the RFP describes the scope of the Project that the Consultant, unless identified otherwise, will be responsible to deliver. The scope of work includes the provision of the full and complete design and all materials and performance of all work necessary or appropriate for the construction of the Project as described in this Section and as provided in the Services Agreement.

2.1 Background

The City of White Rock is a unique, ocean-side community of 20,000 citizens known for its sunny weather, expansive beach, historic pier, delightful restaurants, and sense of community. The City is located half an hour south of Vancouver on the shore of Semiahmoo Bay.

2.2 Project Requirements

The Project Requirements are described in Instruction to Proponents. The Proponent shall read these requirements in conjunction with Appendix B - Design Specifications. Regardless of the exact scope of the infrastructure proposed by the Proponent, the Proponent's proposed design must meet the intent of the Project Requirements.

The Key Project Objectives are to:

- Realize an innovative financial and technical solution that will deliver the Project in the most efficient and cost effective manner, and will result in broad public acceptance of the proposed solution;
- Replace and install new watermain that minimize maintenance for the Water Utility.
- Design the Project to standards that will result in an operationally safe, efficient and high quality infrastructure;
- Preferred completion of the Project by **date specified in 1.5.1.**
- Provide engineering, design and construction management for watermain construction on;
 - Site 1: Coldicutt Avenue (Refer to page D-1)
 - Site 2: Brearley Street (Refer to page D-2)
- Proponents are encouraged to propose their best solution which meets or exceeds the requirements described in this RFP.
- Refer to Appendix D for a summary of each of the construction sites. Also refer to the Capital Project List in **Table 7-10** of the *2017 Water System Master Plan Update* for Coldicutt Avenue watermain. This can be found on the City web site at; <https://www.whiterockcity.ca/314/White-Rock-Water-System-Master-Plan>

Instructions to Proponents

2.2.1 Engineering Design Services:

Scope of Works:

The following Engineering Services Design tasks will form part of this design assignment. This list is provided for reference and may not be a complete list. Please note that tendering and construction support services are required under this assignment.

1. Start up and design coordination meeting with City staff (allow for 4 meetings);
2. Prepare agendas and take minutes of meetings;
3. Review The City of White Rock 2017 Water System Master Plan Update;
4. Review The City of White Rock Water Bylaw 2117, Consolidated;
5. Review City of White Rock Sewer and Drainage Master Plans 2013;
6. Review City of White Rock Strategic Transportation Plan (STP) 2014;
7. Review current conditions;
8. Review current conditions of storm and sanitary mains within project limits;
9. Full design of water main and service connections;
10. Location of new fire hydrants as required;
11. Design of road reconstruction as required;
12. Confirm topographic surveys includes all relevant information to perform the work. Survey beyond property lines will be conducted as required and a legal base plan will be provided.
13. Geotechnical assessment and recommendations as required;
14. Develop one conceptual layout with typical roadway cross sections for each of the sites for review by the City;
15. Develop roadwork design including detailed grading along the affected property frontage;
16. Develop detailed property impact and restoration strategy to affected properties;
17. Coordinate outside utility identification, preservation and relocation;
18. Prepare detailed cost estimate including associated utility relocation costs by others;
19. Develop detailed project specification for construction.

Deliverables

1. Preliminary Design and Cost Estimate Report
2. Geotechnical Assessment (Provisional)
3. Full Design of watermain and fittings. (Includes fire hydrants)
4. Design for Road Reconstruction (As required)
5. Plan and Profile design drawings c/w cross sections as required
6. Detailed Cost Estimate and Specifications
7. Tendering, addendums and Construction Schedule
8. Half time inspection during construction
9. Provide Q/A and Q/C during construction
10. Provide weekly reports during construction
11. Attend regular Construction meetings and prepare agendas and distribute minutes
12. As-Constructed Drawings

Design Criteria

- 1.) Design shall be in accordance to the MMCD Design Guidelines, Water Services Bylaw 2117, TAC standards, Transport Canada requirements or any other related standard or guide.

Instructions to Proponents

2.2.2 General

- **Data Acquisition and Management**

The proponent shall provide a detailed inventory of the existing water utility assets. This asset data shall be collected and processed in general conformance with acceptable industry standards.

- **Drawings/Plans/Maps**

All study mapping shall be developed in a GIS format compatible with current City software systems. This special data shall include appropriate layering standards and be geo-referenced to NAD 83 Zone 10.

City GIS data can be downloaded at the open data portal <http://data.whiterockcity.ca/> and enter the desired utility (i.e.: water, storm, sanitary) to list the assets and pick the desired format required. Any GIS related questions should be directed to Mr. Boris Zanic, GIS Specialist at 604-541-2194.

- **Document Formats**

The proponent shall prepare all pertinent information and documentation in electronic formats and statistical information shall be in Microsoft Windows 10 format (Word/Excel).

- **Reference Information**

The following information is available on the City web site;

1. All City bylaws such as;
 - a. Street and Traffic Bylaw
 - b. Noise Bylaw
 - c. Water Services Bylaw (2017)
 - d. Official Community Plan Bylaw (2017)
2. 2017 Water System Master Plan Update, by Kerr Wood Leidal
3. Strategic Transportation Plan (2014)

- **City Supplied Information**

The City will provide to the successful Proponent, for their exclusive use to complete the work, the following information;

- a. Previous studies; and
- b. Plan of the city and water system in PDF format (36"x102");
- c. City water meter location records if requested by the proponent.

The City may provide specific third-party personal information to the successful proponent where provision of such information is necessary for the performance of the successful proponent's duties. The successful proponent will not further disclose or use such information for any purpose without explicit permission from the City or the specific individual third party(ies) to which the personal information belongs.

Instructions to Proponents

2.3 Design Specifications

The Proponent's proposed design must meet or exceed the Design Specifications as described in **Appendix B**. This section defines the minimum standards that will be met by the Proponent-prepared designs and the minimum quality for materials that will be used. Any deviation from the design criteria, standards or quality defined by this Section must be clearly identified as an alternative and must be justified by the Proponent and submitted in addition to its compliant Proposal. No such deviation shall be considered, permitted, or accepted unless specifically identified to the City and expressly approved by the City, in writing.

Instructions to Proponents

3.0 SUBMISSION REQUIREMENTS

3.1 General Submission Requirements

Proposals must be submitted by qualified Proponents in order to be considered. The City reserves the right to disqualify any Proponent at any time, if, in the opinion of the City there has been a material change in any of the information contained in the Proponent's Expression of Interest which led to its selection as a Proponent.

Any Proposal that is not complete in any way or that does not comply with all of the requirements of this RFP will be subject to disqualification at the sole discretion of the City.

Information provided by the City on any form that is part of this RFP must not be altered or contradicted in any way.

The following components are required:

- Proposal Form
- Schedule of Prices
- Proposed Management Work Plan
- Authorization Letters
- Proposed Project Plans

In order to be compliant, the Proposal must address all of the documentation requirements set out in this Section. The Proposal sections should be numbered to correspond to the order of the sections described.

If a letter of submittal is provided, it should only address the Proposal documents being submitted as part of the Proposal and in what format. For example, oversized drawings may be submitted as separate folded drawings or possibly as roll plans.

Information presented in one or more of the sections of the Technical Proposal, which is related to another section of the Technical Proposal should be clearly cross-referenced in the latter section to facilitate Proposal evaluation.

3.2 The Proposal

3.2.1 Proposal Form

A signed Proposal exactly in the form provided in **Appendix C - Schedule 1** (Proposal Form) must be included in this section of the Financial Submission.

By signing the Proposal Form the Proponent declares;

- 1) that it has carefully examined the Site, has read and examined the RFP package and the City supplied supporting documents and has conducted such other field investigations and additional design development, which are prudent and reasonable in preparing the Proposal, and hereby offers to furnish all plant, labour, technical and professional services, supervision, materials, tools, supplies and equipment, and to discharge all duties and obligations necessary to design and construct the Project in accordance with the provisions stated in the RFP.

Instructions to Proponents

- 2) the Proponent certifies that it has examined and is fully familiar with all of the provisions of the Services Agreement; that it has carefully checked all the facts and figures and all statements made in this Proposal; that it has conducted such other field investigations and additional design development which are prudent and reasonable in preparing this Proposal, including a thorough review of the RFP supporting documents; that it has satisfied itself with respect to the actual conditions of the Site and the nature and location of the Project, the general and local conditions to be encountered in the performing the Work, and other matters which in any way affect the Project or the Project Cost; and that it has notified the City of any deficiencies in or omissions from any RFP documents or other documents provided by the City and of any unusual Site conditions observed prior to the date hereof.
- 3) The Proponent warrants that this Proposal constitutes a firm offer to the City which cannot be withdrawn for 90 calendar days from and after the Proposal Due Date or until the Services Agreement is executed and delivered by the City and another Consultant, whichever is earlier.
- 4) The Proponent understands that if this Proposal is accepted by the City, it must execute the Services Agreement and deliver it to the City within 14 business days after having received the Services Agreement in executable form from the City. The Consultant will proceed with the Work upon receipt of the fully executed Services Agreement from the City.
- 5) Enclosed herewith is evidence of the good standing of the Proponent, whether it is a corporation, joint venture or Partnership, and evidence that the person(s) signing this Proposal Form is/are authorized to bind the Proponent (and each member of any joint venture or Partnership forming the Proponent) to this Proposal and to the Services Agreement resulting from this Proposal.
- 6) The Proponent further certifies that it has not discussed or communicated with any of the other Proponents about the preparation of their Proposals and that its participation in this RFP process has been conducted without collusion or fraud.

The Proposal submitted by each Proponent must be signed by an Authorized Signatory of the Proponent.

3.2.2 Schedule of Prices

A completed Schedule of Prices in the form provided in **Appendix C – Schedule 2** must be included in this section of the Financial Proposal.

The accumulated amount identified in the Schedule of Prices must equal the Total Price provided.

The proposed work forms part of the city's 2019 Capital Improvement Work. As such the scope of work for each site will need the cost allocated to each site. The proponent should list the proponents cost for each site separately.

10% will be deducted from progress payments as hold back until as-constructed documentation is received.

3.2.3 Project Management

This section will address all Work required to be performed to satisfy the Proponent's obligations, duties and responsibilities for the Project. Specific information to be provided includes the following:

- (a) Organizational Structure
- (b) Project Manager
- (c) Project Personnel
- (d) Schedule and Cost Control
- (e) Quality Management
- (f) Safety Management
- (g) Coordination

(a) Organizational Structure

Describe the Proponent's organizational structure for the complete Project and the relationships between all functions in the organization including reporting requirements and proposed interfaces with the City and sub-consultants. The organizational structure must address the following basic functions and responsibilities:

- Project management
- Design, including significant contributors and backup for each discipline such as project engineers and design technicians
- Quality control / quality assurance
- Communications

The Proponent shall identify the professionals who will be directly responsible for signing-off on each of the above functions.

In all cases the sub-contracted organizations, including designing sub-Consultants, must be shown and their relationships with the Proponent's organization described. The Proponent must indicate how the individual organizations listed above will interface with each other to coordinate the delivery of Project requirements.

Provide a description of the Work to be performed by the Proponent's own resources, and Work proposed to be performed by Sub-contracted organizations.

(b) Project Manager

Identify the Project Manager responsible for performing the duties and obligations as defined in the Services Agreement. Describe the Project Manager's authority to represent the Proponent and the Project Manager's responsibility in discharging the obligations of the Services Agreement. Provide suitable information in support of the appointment of the Project Manager to properly manage this Project.

Instructions to Proponents

Provide a signed undertaking that the proposed Project Manager will be maintained in place for the duration of the Project. Substitutions or changes made after Proposal Acceptance will not be accepted unless due to circumstances beyond the Proponent's control.

If a different Project Manager is identified, the Proponent must provide full justification for such a change and must prove that the newly-appointed Project Manager is as qualified or better qualified to perform the function of the Project Manager. Substitution of the Project Manager must be approved by the City prior to submission of the Proposals.

(c) Project Personnel

Provide the names and resumes showing all personnel within each area of Work as described in the proposed Organizational Structure. For each individual show the time available when required during the execution of the different stages of the Project's implementation.

All significant contributors to the design and construction of the Project such as project engineers, design technicians, project superintendents and foremen shall be provided. Alternates for each significant contributor shall be provided in the event of vacation or sickness.

Provide a signed undertaking that the personnel filling the following positions will be maintained in place for the duration of the Project. Substitutions after Proposal Acceptance will only be accepted when required due to circumstances beyond the Proponent's control. Any substitutions must be as qualified or better qualified to perform the function as the original personnel. The City reserves the right to accept or reject any candidate.

(d) Schedule and Cost Control

Provide a description of the Proponent's scheduling and cost control mechanisms. The Proponent will provide a fully detailed Project schedule and monthly progress reports with invoice to the City Representative for the term of the Project.

(e) Quality Management

Provide an outline of the Quality Management Plan for this project that ensures the design specifications in Appendix B are met.

As the first component of this plan, the Proponent should provide an outline description of the "Quality Management Process" that the Proponent would commit to put in place to ensure the delivery of quality design. This would include any practices, resources or particular sequence of activities the Proponent would use in its engineering and design activities.

The second component would include an outline description of the "Quality Assurance Process" that the Proponent would put in place to ensure the Quality Management Plan would be followed and managed appropriately. This would include any checks and balances the Proponent would use to ensure that all Quality Management issues are remedied and documented in an orderly manner.

Instructions to Proponents

The Proponent should provide a description of both the Quality Control and Quality Assurance procedures the Proponent would implement including various procedures that would address all testing, inspection and monitoring to ensure the end product met the Design Criteria.

An organization chart showing reporting relationships between the Proponent and the City, and identifying by name the Quality Manager and his/her inspection staff and sub-consultants would be considered important and relevant information.

(f) Coordination

Provide a description of the Proponent's plan to integrate sub-contracted activities into its Project scheduling and reporting systems. Provide a description of how the Proponent will approach re-scheduling of its own and sub-Consultant's activities to achieve recovery of the schedule, if required, and how the Proponent enforces this approach with its sub-Consultants.

The proponent should also include an order of tasks and how each task relates to subsequent task.

3.2.4 Authorization Letter

- A letter signed by an officer of the company stating that he/she:
 - ✓ has read the Proposal;
 - ✓ understands and is fully aware of the commitments made on their behalf in the Proposal;
 - ✓ has authorized the Proponent to make the commitments set out in the Proposal;
 - ✓ confirms that neither the Proponent nor the team member have had any interest whatsoever in the Proposal of any other Proponent, either directly or indirectly, nor have they entered into any agreement before the Closing Time that could create such an interest.

Instructions to Proponents

4.0 Evaluation Process and Criteria

4.1 Evaluation Process

4.1.1 Process

The City will evaluate the Proposals in the manner and sequence described below. The criteria described below and shown on the Evaluation are the only factors that will be used to evaluate Proposals.

4.1.2 Clarification and Rectification

If a Proposal is determined to be unclear or deficient in some aspects but these deficiencies are capable of being clarified or remedied, the City Representative may prepare a list of questions for the Proponent to provide the Proponent with an opportunity to clarify or remedy its Proposal. If these clarifications and amendments do not overcome the deficiencies, the City may, in its sole discretion, decide to reject the Proposal.

4.1.3 Disqualification

If any Proposal contains a deficiency or fails in some way to comply with any requirement of the RFP, which in the opinion of the City is not material, the City may waive the defect and accept the Proposal. The determination of whether or not to disqualify or otherwise remove any Proposal from the evaluation process will be made in the sole discretion of the City.

The City may disqualify any Proposal which, in their opinion, contains figures in its Schedule of Prices that do not reasonably reflect the cost of performing the Work, or contain a proposed Project Schedule that does not accurately reflect the time required to perform the Work.

4.1.4 Completeness Review (Step 1)

Proposals must be complete in accordance with Section 4.2.1. Proposals that are not complete may be subject to Disqualification.

4.1.5 Technical Proposal Rated Criteria Evaluation (Step 2)

Technical Proposals will be evaluated in accordance with Section 4.2.2.

The Item Prices and Proponent's Price calculated by the City in accordance with Section 4.2.3 and will be deemed to be the basis of the Proponent's offer and will be binding on the Proponent.

Points for Proponent's Net Price will be allocated in accordance with the evaluation.

4.1.6 Final Evaluation (Step 3)

The final scoring of each Proposal will be determined in accordance with the evaluation outlines in 4.2.3.

Instructions to Proponents

Once the Preferred Proposal has been identified, the City may enter into discussions with that Proponent to clarify any outstanding issues and to identify and finalize those portions of the Proposal, including negotiation of any changes that will form part of the Agreement.

If discussions are unsuccessful, the City reserves the right to enter into discussions with the next highest rated Proponent or to decide not to accept any Proposals.

4.2 Evaluation Criteria

4.2.1 Completeness Review

The Proposal submissions will be reviewed to ensure they meet all the mandatory requirements, policies and procedures as stated in this RFP. The following are the mandatory requirements:

- Proposal received at Closing Location prior to Closing Time
- 4 hard copies received in a sealed envelope:
 - ✓ Proposal Form
 - ✓ Schedule of Prices
 - ✓ Project Management
 - ✓ Authorization Letters
 - ✓ Project Schedule
- Digital file of the proposal in PDF format on a USB storage device

4.2.2 Technical Evaluation

The Evaluation Team will evaluate the Proposal in accordance with the Evaluation and the descriptions provided below. The City will only award points where the Proponent's Proposal exceeds the basic objectives of the RFP, or is superior to the other Proposals. Points will only be allocated in accordance with the Evaluation.

Both quantitative and qualitative indicators and measures may be used to evaluate each Proposal. The following will be considered in applying the evaluation criteria and allocating available points:

- thoroughness and clarity in demonstrating an understanding of each individual issue and objective;
- experience performing directly related projects;
- integration and compatibility of the various elements of the Proposal;
- adaptability and flexibility;
- degrees of innovation; and
- apparent or potential value to the City of the anticipated Work to be undertaken.

The Proposals will be reviewed for completeness and an approach that meets the purpose, intent and requirements of this RFP. If, in the opinion of the City, the Proposals are deficient in one or more areas, the City may request the Proponent to clarify its Technical Proposal.

Instructions to Proponents

If, in the opinion of the City the Proponent does not sufficiently clarify its Proposal so it is complete and meets the purpose, intent and requirements of the RFP, the City may disqualify that Proposal.

Proposals will be evaluated based on their proposed commitment to the following:

✓ **Project Management**

- demonstrates a clear understanding of the Project's management requirements in order to plan and coordinate progress, and identify, manage and control risks that would impact the Project's success through cost, quality, schedule, resource and safety issues;
- provides for delegation of authority to key personnel to enable decisive management of higher risk activities;
- experience of key personnel is consistent with their deemed responsibilities and authorities.

✓ **Authorization Letters**

- Letters demonstrating the requirements are outlined in section 3.2.4 of the Submission Requirements.

✓ **Project Schedule:**

- Demonstrated a clear understanding and schedule to meet the milestone dates prescribed in the RFP.
- The consultant is requested to provide a detailed breakdown of costs with the associated tasks.
- A schedule of unit prices for additional work.

4.2.3 Final Evaluation

Evaluation Criteria

The following criteria, and weightings, will be used to evaluate proposals:

- (30%) Completeness of Design Team
 1. ensure that all necessary disciplines have been accounted for
 2. Include Organization Chart.
 3. CV's are to be included for all project members.
 4. Previous experience
- (20%) Completeness of Work Plan/Method of Work
- (20%) Proposed Fast Tracked Design Schedule (with milestones)
- (30%) Pricing

PROJECT REQUIREMENTS

The Project Requirements are described in the following section. The Proponent shall read these Project Requirements in conjunction with the Design Specifications outlined in Appendix B. Regardless of the exact scope of the infrastructure proposed by the Proponent, the Proponent's proposed design must meet the intent of the Project Requirements.

The City will carry out compliance reviews during the Project design development. These reviews will include all the design disciplines and will confirm that the Proponent's design complies with the standards, specifications and criteria as set out in the RFP.

Before proceeding with the final design, the successful proponent will present 50% complete design drawings to the City for review. The City will review the submitted plans and specifications and provide comments within five (5) business days before the Proponent may proceed with final design. The Proponent will be responsible for obtaining other approvals as necessary.

The next review by the City will be at the 95% design stage. This review will assure that the design drawings have been completed in accordance with the approved preliminary design (50% complete design drawings) and the RFP requirements. The City will review the completed drawings within five (5) business days and before the Proponent begins construction except in the case where the Proponent has made alternate arrangements with the City.

1. Engineering Services:

- Overall Project Management
- Survey
- Preliminary Engineering
- Detailed Design
- Specifications and Cost Estimate Preparation
- Project coordination and Construction Supervision
- QA/QC

2. Roadway Facilities

The scope of the road work shall include, but not be limited to, the following:

- Restoration of existing road conditions;
- Trench cuts across existing roads are to be patched at the end of each day;
- Design of road to MMCD and TAC Standards;
- Design road markings as per Geometric Design Guide for Canadian Roads, and BC Ministry of Transportation and Infrastructure;

3. Access Management

The Proponent's design shall incorporate safe access management that meets the Design Specifications as stated in [Appendix B](#) of this RFP.

Appendix A – Project Requirements

4. Utilities

The scope of the road and utilities Work includes, but is not necessarily limited to, design of the following:

Existing Utilities

- Identified existing utilities “in-service” that are in any way affected by the Project;
- liaison, coordination with and obtaining approvals from all utility owners that are in any way affected by the Project;
- provide as-built drawings or other information to the utility owners following relocation or adjustment;
- confirm the in-field location of all utilities.
- design of utilities to MMCD and City Bylaws.
- City Water Works staff are to supervise all tie-ins to the city distribution network.

Identify all utilities that require relocation and secure all necessary arrangements with the utility owner to affect the relocation.

The Proponent shall utilize the “BC1 Locate Call Before You Dig” service which can be contacted at: 1-800-474-6886.

5. Drawings and Documentation

The Consultant shall, at completion of the Project, provide all documentation as defined in **Appendix A - Design Requirements**.

6. Project Schedule

It is the City’s intent that the Substantial Completion of all constructed works will be achieved prior to **the date specified in 1.5.1**, unless otherwise stipulated in the proponents proposal. The Consultant shall provide a fully detailed Proposed Project Schedule updated on a **monthly** basis, to the City Representative for the Term of the Project.

7. Municipal Bylaws and Permits

The Consultant shall ensure that all Municipal Bylaws, such as, but not limited to, the Highway and Traffic Bylaw and Noise Bylaw, will be adhered to and that all permits and licenses will be obtained prior to commencing Work.

8. Work By Others

Work may be performed by others within or near the Project Limits. This Work may include, but will not be limited to, the following:

- BC Hydro
- Fortis BC

Appendix A – Project Requirements

- Telus
- Shaw Cablevision
- Rogers Communications

The Consultant will cooperate fully with others working in the Project area and coordinate its Work accordingly.

DESIGN CRITERIA and PERFORMANCE SPECIFICATIONS

1. General

The Project will be designed in accordance with the Scope of Work outlined in Section 2.0, the City of White Rock's current directives, accepted standards, specifications, practices, policies and procedures in effect at the date of execution of the Services Agreement. The Technical Standards and Specifications, together with the design criteria presented in this section, define the minimum standards that will be met by the Proponents prepared designs and the minimum quality for materials that will be used.

Any deviation from the design criteria, standards or quality defined by the Technical Standards and Specifications must be clearly identified as an alternative and must be justified by the Proponent and submitted in addition to its compliant Proposal.

No such deviation shall be considered, permitted, or accepted unless specifically identified to the City and expressly approved by the City in writing.

2. Performance Responsibility

2.1 Standards

Unless otherwise noted, the City of White Rock Subdivision and Land Development Bylaw 1980, No. 777 together with other reference documents in **Appendix B** will provide technical standards, specifications and guidelines for compliance on the Project.

2.2 Methodology

The methods of work proposed by Proponents shall be provided and set out in a manner that can be designed and constructed within the target completion date. The methodology should address the composite works and specific details for the work at each of the project locations.

2.3 Schedule

Proponents shall provide a detailed activity schedule.

3. Design Criteria

Unless otherwise noted, the following manuals together with other reference documents will provide technical standards, specifications and guidelines for compliance on this Project:

- All City of White Rock Bylaws (current edition);
- Equipment and materials to be CSA certified;
- Ministry of Transportation and Highways Traffic Control Manual for Work on Roadways;
- Geometric Design Standards for Canadian Roads and Street (1999 Edition) Canadian Roads and Transportation Association (TAC);
- Master Municipal Construction Document (MMCD) Specifications (Platinum edition);

Appendix B – Design Specifications

All of these documents are incorporated by reference into this RFP. Copies of City of White Rock Bylaws are available on the City web site located at;
<https://www.whiterockcity.ca/176/Bylaw-Enforcement>

Watermain Design Criteria

- Minimum pipe diameter is to be 100mm
- Pressure zones (HGL)
 - High Zone: 142.3m (This zone will be split into 2 pressure zones in the future)
 - Low Zone: 103.0m
- Pipe sizes 100mm to 300mm are to be AWWA C900 PVC watermain pipe. Alternative material will NOT be considered.
- Cathodic protection to be included per MMCD.
- Only gate valves to be used on distribution mains.
- No concrete thrust blocks to be used. All fittings to be restrained.

Pavement Design Criteria

General

- The Project includes the restoration of pavement structures within the Project area.
- Only asphalt pavements will be accepted.
- Pavement on the existing roadways within the Project corridor shall be overlaid where lane-marking eradication has been performed or when utility trench cuts across the road pavement.
- Details for pavement shall be designed in accordance with good practice and final lift is to be keyed 200mm over existing pavement per MMCD detail G5.

Installation

Pavement markings shall be applied to all new asphalt surfaces.

Existing pavement markings shall be eradicated and replaced in order to fully facilitate the new traffic flow.

The Consultant shall provide survey layout for final pavement markings. The survey layout shall be provided in adequate detail to allow paint line crews to apply markings without supplementary measurement or survey.

Obtain City approval of the pavement marking layout prior to application of the paint lines.

Environmental Design Criteria

The DFO/MELP Land Development Guidelines shall be used for environmental design.

The Consultant shall avoid or, where avoidance is not possible, minimize to the fullest extent any adverse environmental impacts associated with the Project to the satisfaction of the environmental agencies.

Appendix B – Design Specifications

Materials and Construction Design Specifications

All materials incorporated into the Project and all construction practices shall be in accordance with the Master Municipal Construction Documents (MMCD) Specifications (latest edition).

Material requirements specific to the City of White Rock are;

- All fittings to use stainless steel bolts.
- All saddles to be double strap stainless steel.
- Valve boxes to be MR-6, Nelson or Mueller
- Hydrants are to be Mueller Super Centurion A423
- The City preference is to use Mueller A-2361 gate valves however Terminal City, Clow and others are acceptable.

Final Documentation

Completed final documentation shall be as defined in this section and certified by the Engineer of Record. Substantial Completion will be withheld until final documentation has been completed to the satisfaction of the City. Refer to 3.2.2.

Final documentation shall comprise of all required deliverables. The City will carry out reviews of the deliverables prior to granting Substantial Completion. In all cases the City's review comments will be provided no later than one month after submission of the required documentation.

Warranty

Certification that all deficiencies shall be addressed prior to Final Completion.

Insurance and Bonds

Copies of insurance and bonds with the City as named insured.

Design Folders

Design folders shall be provided and shall have indexes and sectional dividers. The folders shall include:

- Pertinent correspondence arranged in chronological order by subject matter;
- Design calculations and backup information;
- Product data and letter confirming that entire installation as it pertains to each system has been installed to manufacturer's instructions;
- Any other pertinent information.

Record Drawings/Reports

Letters of Assurance signed by the professional of the appropriate discipline confirming all works have been constructed in accordance with the design requirements, shall be supplied.

Provide Record Drawings in accordance with the following:

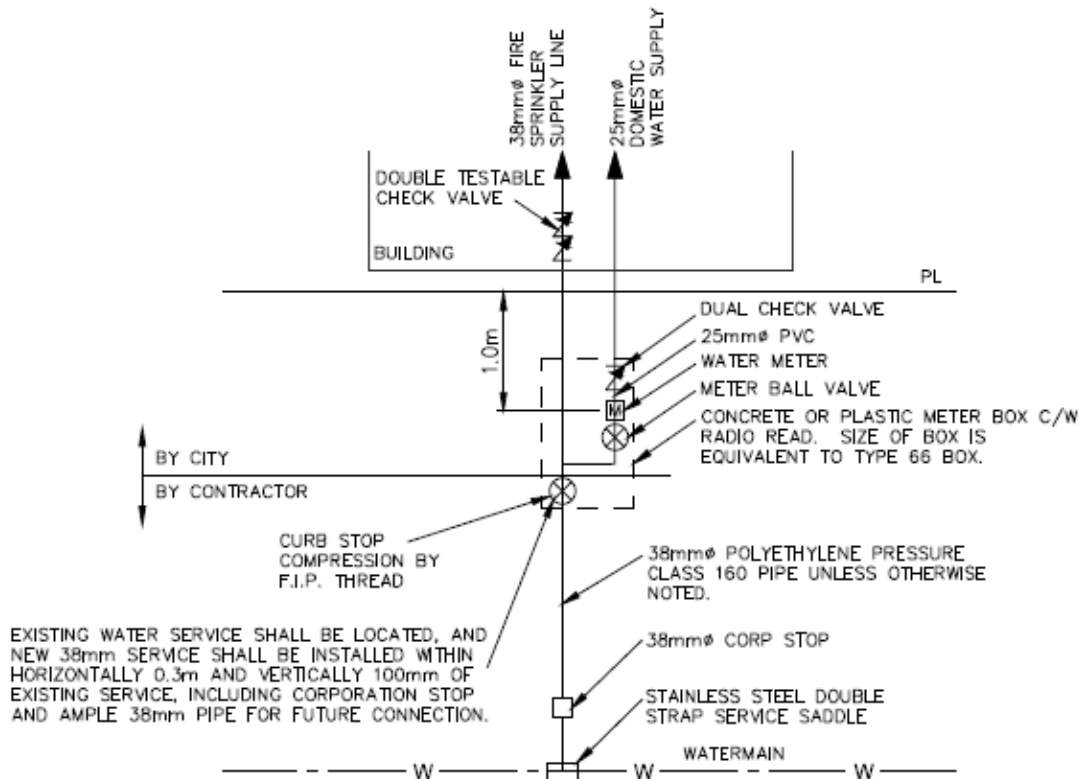
- One set of full size original plot paper prints and one set of 11"x17" half size original plot paper prints clearly marked as-built drawings, signed and sealed record drawings;
- One set of AutoCAD digital drawings and one complete set of PDF files on CD/USB or other approved portable digital media;
- The drawings shall be plotted on standard drawing sheets with waterproof ink (BC Supplement to TAC Geometric Design Guide Section 1200 Contracts and Drawings Chapter)
- Record drawings shall, as a minimum, include the following:
 - Design plans, profiles and typical cross-sections;
 - Right-Of-Way Acquisition plans;
 - Supplemental drawings and details;
 - Geometrics and laning;
 - Underground utility plans;
 - Final record cross-section and material types on all roadways;

The Consultant shall provide two (2) sets of clearly marked reports and other documentation including the following:

- All quality control folders showing test data and location;
- Environmental reports (if applicable);
- Utility company "turn-over" letters stating that utility requirements have been incorporated in the Project;
- Environmental agency "turn-over" letters and permits stating that environmental permit requirements have been incorporated into the Project;
 - Title Page;
 - Table of Contents;
 - Consultant's Team;
 - Inspection reports;
 - Executive Summary;
 - Photograph index, including pre and post construction. May be submitted on CD/USB or approved portable digital media.

Appendix B – Design Specifications

SUPPLEMENTAL STANDARD DETAIL DRAWINGS



NOTES:

- SERVICE LINES SHALL BE INSTALLED FROM WATER MAIN TO PROPERTY, AND FINAL CONNECTIONS AT PROPERTY SHALL BE MADE FOR DOMESTIC AND FIRE SPRINKLER LINES UNDER SUPERVISION OF CITY OF WHITE ROCK.
- DEPTH OF DOMESTIC SERVICE LINE ARRIVING NEAR PROPERTY LINE SHALL BE 0.45m (MINIMUM FROST PROTECTION). DEPTH OF FIRE SPRINKLER LINE SHALL BE 0.60m MINIMUM AND 0.90m MAXIMUM.
- FINAL GRADE ELEVATION REFERENCE MARK SHALL BE SUPPLIED FOR METRE PIT INSTALLATION.
- CONSTRUCTION ZONE FOR METER BOX AND CONNECTIONS SHALL BE FREE OF OBSTRUCTIONS AND EASILY ACCESSIBLE TO CITY OF WHITE ROCK STAFF.
- ALL CITY OF WHITE ROCK MAINS, METER BOXES AND OTHER FACILITIES SHALL BE ON CITY-OWNED ROAD RIGHT OF WAY.
- ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH BC BUILDING CODE, MMCD SPECIFICATIONS, FEDERAL AND PROVINCIAL PLUMBING CODES, AND OTHER APPLICABLE ACTS, REGULATIONS, OR BYLAWS (CURRENT VERSIONS).
- NEW SERVICES SHALL BE INSTALLED TO CURB STOP AND PLACED 2x4 VERTICALLY WITH END PAINTED BLUE.
- SERVICES TO BE INSTALLED PERPENDICULAR TO UTILITY MAINS.

DRAWING TITLE:

**38mm RESIDENTIAL
WATER SERVICE**

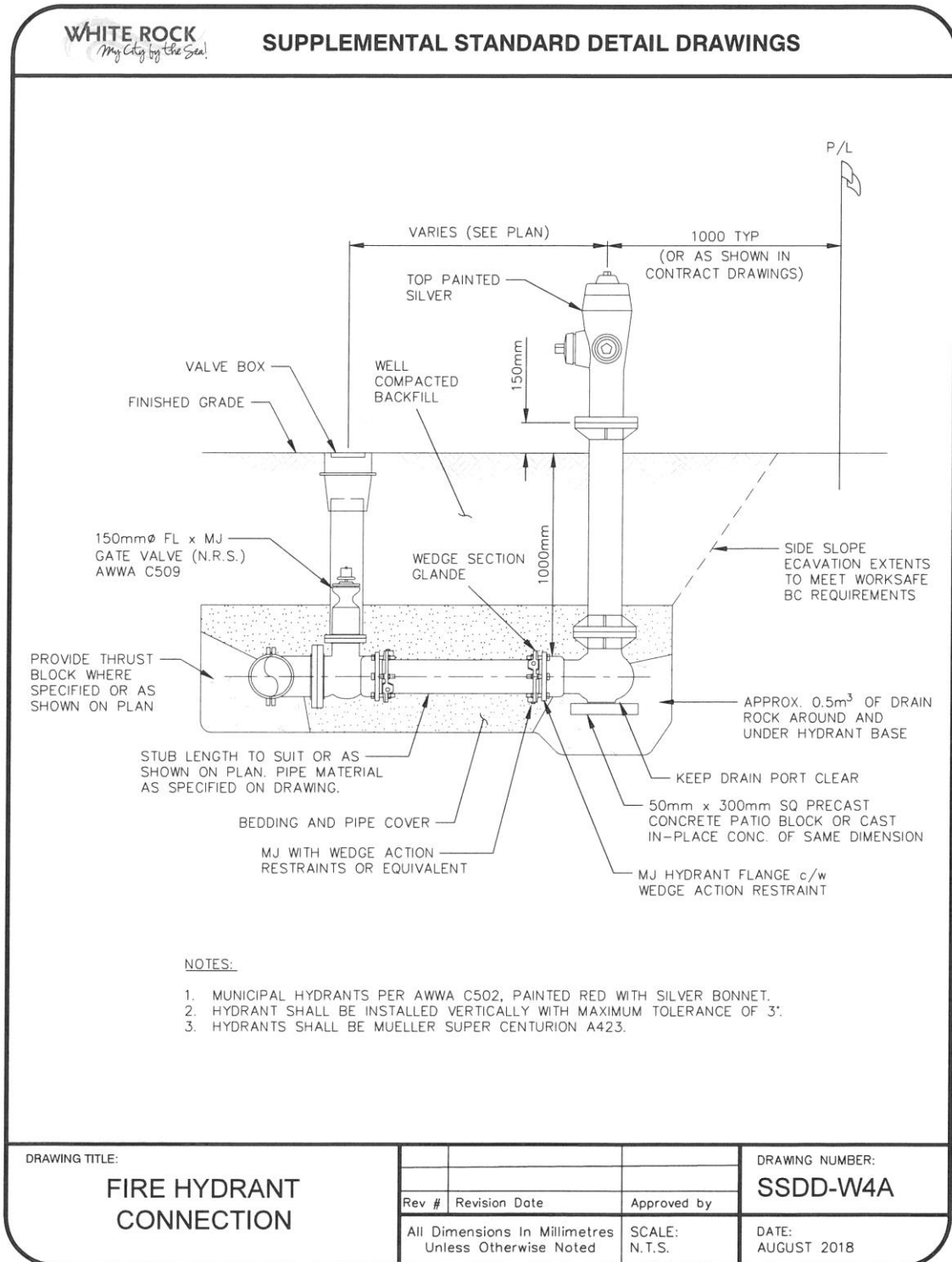
Rev #	Revision Date	Approved by
	All Dimensions In Metres Unless Otherwise Noted	SCALE: N.T.S.

DRAWING NUMBER:

SSDD-W12

DATE:
November 2017

Appendix B – Design Specifications



Appendix C – Financial Submission

SCHEDULE 1 - PROPOSAL FORM

Consultant for the City of White Rock

**Engineering, Design and Construction Management Services for 2019 Water Utility
Capital Works**

Closing: 2:00pm on Friday November 8, 2019

This form must be completed, signed and included with the submission.

The undersigned confirms that their submission is in response to the Request for Proposal for
“Engineering, Design and Construction Management Services for 2019 Water Utility Capital Works” for
the City of White Rock.

Name of Firm: _____

Phone: _____ Fax: _____

Email: _____

Contact Name: _____

Position: _____

Direct Phone: _____

Email: _____

Workers' Compensation Board Registration Number: _____

I have received _____ addendums.

Authorized Signature

Name and Title (Print)

Date

Appendix C – Financial Submission

SCHEDULE 2 - FORMAT OF PRICES

Payment of the Total Guaranteed Maximum Price for the **Engineering, Design and Construction Management Services for 2019 Water Utility Capital Works** will be made based on the items included in the attached Schedule of Prices Table:

Prices are inclusive of all items required to complete the project including but not limited to design services, construction administration, bonds and insurance, quality management, project record submission and two year maintenance period and are generally described in Section 2.0 "Scope of Work" of this document and further divided into the following categories:

Required format;

Phase Site	Description	Project Manager	Staff 1 (Rate)	Staff 2 (Rate)	Staff 3 (Rate)	...	Subtotal (Hours)	Cost
1.1	Task 1							
1.2	Task 2							
1.3	Task 3							
...	...							
	Site 1 Totals							
2.1	Task 4							
2.2	Task 5							
2.3	Task 6							
...								
	Site 2 Totals							
...								
...								

The sum of the prices for the individual elements identified above together with the prices for all other elements of the Work equals the Total Guaranteed Maximum Price and represents full and final price for the construction of the Work to the Consultant.

Appendix C – Financial Submission

SCHEDULE 3 – UNDERTAKING OF INSURANCE

UNDERTAKING OF GENERAL LIABILITY INSURANCE

We, the undersigned, as authorized representatives on behalf of (**NAME OF INSURANCE COMPANY**) do hereby undertake and agree to provide Comprehensive (Commercial) General Liability insurance in the amount of **TWO MILLION DOLLARS (\$2,000,000.00)** if a contract is awarded to (**NAME OF CONSULTANT**). This insurance will provide coverage, terms and conditions that comply with the insurance specifications and requirements in the contract documents for the (**Name of Project**) Project.

We further undertake to provide to the City of White Rock, signed, certified copies of such policy(ies) and attached endorsements no later than ten (10) days before the commencement of work under the Contract.

Dated at: _____

This _____ day of _____, 2019.

SIGNED: _____

Duly Authorized Representative of Insurance Company

Appendix C – Financial Submission

SCHEDULE 4 – UNDERTAKING OF PROFESSIONAL LIABILITY INSURANCE

REQUEST FOR PROPOSAL

We, the undersigned, as authorized representatives on behalf of _____

_____,
do hereby undertake and agree to provide Professional liability insurance as specified in the contract insurance specifications in the amount of **Two MILLION DOLLARS (\$2,000,000.00)**, if a contract for the **(Name of Project)** Project is awarded to **(Name of Consultant)**.

We further undertake to provide to the City of White Rock signed, certified copies of such policies and attached endorsements within fourteen (14) days after the date the Contract is signed and prior to commencement of any work on the Project.

Dated at _____

This _____ day of _____, 2019.

SIGNED: _____

Duly Authorized Representative of Insurance Company

Appendix C – Financial Submission

SCHEDULE 5 – PROPONENT REFERENCES & ADDITIONAL INFORMATION

REFERENCES

The Proponent is to provide 3 municipal and 3 company references which will be contacted by the City.

	<u>Municipal</u>	<u>Contact Name</u>	<u>Telephone</u>
1)	_____	_____	_____
2)	_____	_____	_____
3)	_____	_____	_____

	<u>Company</u>	<u>Contact Name</u>	<u>Telephone</u>
4)	_____	_____	_____
5)	_____	_____	_____
6)	_____	_____	_____

ADDED VALUE

The City encourages creative solutions / bid responses. Describe any additional opportunities or added value that you wish to include with your proposal which may include a review of corporate bylaws, policy, records management retention review, contract or agreements, seminars, Council orientation.

Appendix C – Financial Submission

SCHEDULE 6 – DISCLOSURE OF INTEREST

In accordance with the approved policy of the City, all proponents shall, as a condition of supplying services to the City as a result of this proposal make full disclosure of any business relationships within the last FIVE (5) years including any donations/gifts in excess of ONE HUNDRED Dollars (\$100), with any members of the City and Council, or immediate relatives of any members of the City and Council.

If the proponent fails to disclose an interest and/or the interest is falsely or insufficiently reported, the City reserves the right to terminate or cancel any Agreement of any kind which may have been entered into with a proponent.

As part of the proposal process, completion and return of the Disclosure of Interest form is mandatory. Sign and return the form even if there is nothing to disclose.

If additional space is required, please add an attachment to this form.

Disclosure

Company Name _____

Authorized Signature _____ Date _____

Print Name _____ Print Title _____

Appendix D – Additional Information

Two (2) capital projects in the 2019 Capital Works plan are to be grouped together as one contract to achieve efficiencies. A summary of the scope for each project below, provides a description of the scope of work.

1. Coldicutt Avenue: 13751 Coldicutt Avenue to 150mm cast iron (CI) watermain on Lancaster Street

Scope of Work: Install approximately 270m of 150mm diameter PVC watermain from the valve at 13751 to the 150mm diameter cast iron watermain on Lancaster Street. This is project #17 that is listed in the 2017 Water System Master Plan Update and is to remove the cast iron pipe that is prone to premature corrosion that has an extensive break history. This watermain will allow for future elimination of the rear yard watermain south of Coldicutt Avenue.



Dashed red line indicates the extent of the proposed 150 PVC watermain.

The existing residential services will be tied into the new 150mm watermain with all work to be within the road right-of-way. The existing water services on the south side of Coldicutt Avenue are to be coupled to the 38mm saddle and service within the trench excavation.

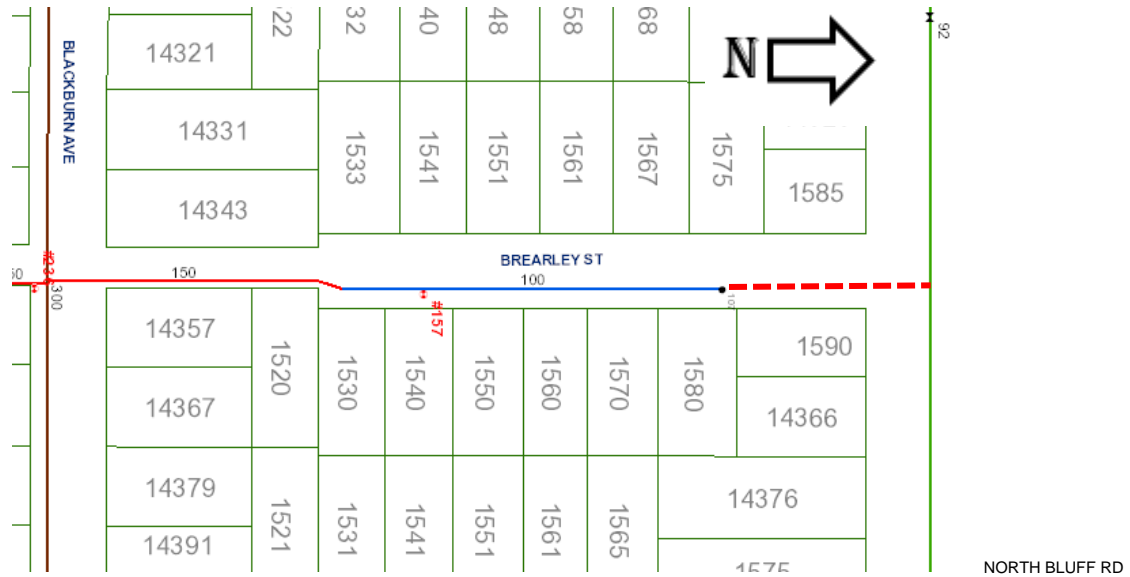
Design of the works is to incorporate cathodic protection, and all fittings necessary per MMCD and standard watermain construction. The alignment would ideally be in the boulevard to minimize construction costs however the successful proponent would need to determine the best alignment in consultation with City staff.

This work is to be tendered for construction and therefore construction management is to be included in proposals.

Appendix D – Additional Information

2. **Brearley Street:** End of the 100mm ductile iron (DI) to 200mm CI pipe on North Bluff Road
Scope of Work: Install approximately 60m of 150mm PVC watermain to remove the dead end pipe.

Design of the works is to incorporate cathodic protection, and all fittings necessary per MMCD and standard watermain construction. One (1) fire hydrant is required on the south side of North Bluff Road.



Dashed red line indicates the extent of the new 1500 PVC watermain.

This work is to be tendered for construction and therefore construction management is to be included in proposals.

Appendix E - Services Agreement

CITY OF WHITE ROCK

PROFESSIONAL SERVICES AGREEMENT

Project Name: Engineering and Design Services for 2017 Water Utility Capital Works
City Contract No: WR17-009

THE AGREEMENT dated for reference this ____ day of _____, _____.

BETWEEN:

[Consultant's Name]
[Consultant's Address 1]
[Consultant's Address 2]

(the “**Consultant**”)

AND:

THE CITY OF WHITE ROCK
15322 Buena Vista Avenue
White Rock, BC V4B 1Y6

(the “**City**”)

GIVEN THAT:

- A. The City wishes to engage the services of the Consultant as an independent Consultant to perform consulting services as more particularly described below, and
- B. The Consultant agrees to provide such services on the terms and subject to the conditions set out in this agreement,

IN CONSIDERATION OF the sum of one (\$1.00) dollar paid by the City to **[Consultant's name]**, and the mutual agreements and covenants under this agreement, and as a condition of the City retaining the Consultant, the receipt and sufficiency of which consideration is hereby acknowledged, the parties to this agreement agree as follows:

1.0 Interpretation

1.1 In this Agreement, the following words shall be defined as follows:

- (a) “**Agreement**” means this agreement, including the recitals and schedules hereto, each as supplemented or amended from time to time;
 - (b) “**City Liaison**” has the meaning detailed in section 5.6 of this Agreement;
 - (c) “**Confidential Information**” has the meaning detailed in section 14.2 of this Agreement;
 - (d) “**Contract Price**” means the amounts to be paid to the Consultant for the Services in accordance with part 6 and as detailed in Schedule B;
 - (e) “**Consultant Liaison**” has the meaning detailed in section 5.7 of this Agreement;
 - (f) “**Designated Personnel**” means the persons deployed by the Consultant to provide the Services as detailed in Schedule E’
 - (g) “**Designate(s)**” has the meaning detailed in section 5.6 of this Agreement;
 - (h) “**Force Majeure**” has the meaning detailed in section 18.1 of this Agreement;
 - (i) “**Insurance**” means the Consultant’s insurance coverage under part 13 of this Agreement and as detailed in Schedule D of this Agreement;
 - (j) “**Services**” means the services detailed in Schedule A of this Agreement;
 - (k) “**SubConsultant**” means any sub-consultant retained by the Consultant to provide the Services as detailed in Schedule C or otherwise approved in writing by the City;
 - (l) “**Term**” has the meaning detailed in section 3.2 of this Agreement.
- 1.2 Every reference to each party is deemed to include the heirs, executors, administrators, corporate successors, servants, employees, agents, Consultants, officers, licensees and invitees of such party, wherever the context so requires or permits.
- 1.3 Wherever the singular or masculine or neuter is used in this Agreement, the same shall be construed as meaning the plural, the feminine or body corporate where the context or the parties so require.
- 1.4 Unless otherwise specified in this Agreement, all references to currency are in Canadian dollars.
- 1.5 The headings included in this Agreement are for convenience only and do not form part of this Agreement and will not be used to interpret, define or limit the scope or intent of this Agreement.

- 1.6 Unless otherwise indicated in this Agreement, any reference to an enactment shall mean an enactment of British Columbia and shall include any amendments or re-enactments.

2.0 Schedules Incorporated

- 2.1 The following are Schedules to, and form an integral part of, this Agreement:

Schedule A – Services to be provided by the Consultant

Schedule B – Contract Price and Payment for Services

Schedule C – SubConsultants

Schedule D – Insurance

Schedule E – Designated Personnel

Schedule F – Security

Schedule G - Additional or Modified Terms

3.0 Effective Date and Term

- 3.1 This Agreement takes effect immediately upon execution by all of the parties.
- 3.2 The term of this Agreement is for *[insert length of term]* commencing on *[insert commencement date]* and ending on the completion of the Services which shall be no later than *[insert end date]* unless terminated earlier in accordance with part 11 of this Agreement or extended by the written agreement of the parties.
- 3.3 The City does not warrant or guarantee any future business under this or any other agreement and there is no automatic renewal of Term for this Agreement.

4.0 Authority and Qualifications of Consultant and Consultant Warranties

- 4.1 The Consultant represents and warrants to the City that it has the authority to enter into this Agreement and carry out its Services and all necessary resolutions and procedural formalities have been completed and the persons executing this Agreement on its behalf are duly authorized to do so.
- 4.2 The Consultant warrants and represents to the City that the Consultant is qualified and has sufficient expertise and experience to perform expeditiously and efficiently all of the Services in a proper and professional manner.
- 4.3 The Consultant warrants that the Services will be free of all defects, deficiencies, and problems arising from workmanship for a period of twelve (12) months from the date of approved final completion of the Services by the City and in accordance with the following:

- (a) if, in the sole opinion of the City defects, deficiencies or problems appear during the warranty period, the Consultant shall immediately remedy, replace, re-perform or correct the Services at no cost to the City within a time fixed by the City;
- (b) if the Consultant fails to respond or remedy, replace, re-perform or correct the Services within the time fixed by the City, the City may remedy, replace, re-perform or correct the Services, and, any damage arising from it, by whatever means it chooses and the cost of same shall be paid by the Consultant;
- (c) the Consultant further warrants that any Services which have been repaired, replaced, re-performed, remedied or corrected shall be free of defects, deficiencies or problems arising from faulty workmanship for a further period of twelve (12) months from the date of completion of the required repair, re-performance, remedy or correction.

5.0 Services

- 5.1 The City hereby retains the Consultant as an independent Consultant to provide the Services described in Schedule A.
- 5.2 The Consultant shall provide the Services strictly in accordance with the terms and conditions set out in this Agreement and in accordance with the following:
 - (a) the Consultant shall provide the Services during the Term regardless of the date of execution or delivery of this Agreement unless an extension of the time period is agreed to in writing by both parties;
 - (b) the Consultant shall undertake and perform all Services with such degree of care, skill and diligence as would reasonably be expected from a person or entity qualified in British Columbia to perform services similar in scope, nature and complexity to the Services;
 - (c) the Consultant further agrees to assign a competent, adequate and skilled work force to perform the Services; and
 - (d) the Consultant shall determine the method by which the Services are performed, subject to such reasonable instructions as the City may provide from time to time.
- 5.3 It is understood that the Consultant must perform the Services based, in part, on information furnished by the City and the Consultant shall be entitled to rely on such information; however, the Consultant is given notice that the City will be relying on the accuracy, competence and completeness of the Services provided by the Consultant in utilizing the results of the Services.
- 5.4 The Consultant shall advise the City in writing of the Designated Personnel to perform the Services. Should the Consultant designate any other personnel to perform the Services, it shall do so only with the prior written consent of the City and upon the City's consent, those personnel shall become Designated Personnel under this Agreement. In the event that any of the Consultant's Designated Personnel do not perform the Services to the full satisfaction of the City, the City reserves the right to request the Consultant to

make a change in personnel at the Consultant's expense. The Consultant agrees to remove and replace any person whom the City deems to be unfit in any way.

- 5.5 The City reserves the right to amend or vary the Services upon notice in writing to the Consultant, or, as may be agreed between the City and the Consultant from time to time, provided that the amendment or variation of the Services shall be subject to the parties' agreement on an amended Contract Price, if applicable.
- 5.6 The Consultant's liaison with the City respecting the Services shall be the City's *[Insert name of position]* or such other person as the City may designate (the "**City Liaison**"). In addition, the City may designate from time-to-time, in writing, one or more of its employees having on the City's behalf, authority to deal with the Consultant in connection with the Services and to make decisions binding on the City falling within the scope of this Agreement (the "**Designate(s)**").
- 5.7 The City's liaison with the Consultant respecting the Services shall be the Consultant's *[Insert name of position]* or such other person as the Consultant may designate (the "**Consultant Liaison**").
- 5.8 The Consultant shall provide the City Liaison and/or Designate(s), upon request, with reports regarding the work done, and to be done, in connection with the performance of the Services.

6.0 Compensation and Contract Price

- 6.1 During the Term of this Agreement the City shall pay the Consultant the Contract Price for the Services at the rates and times described in Schedule B, plus all applicable taxes.
- 6.2 The Consultant shall submit written statements of account to the City and accompanying documentation as may be reasonably requested by the City at least 30 days in advance of any payments under this Agreement. The statements shall provide details of the Services performed, the person(s) performing each of the Services, the time spent and the fee for each of the Services. Invoices should be submitted in duplicate to the City Liaison and/or Designate(s) for approval subject to the following:
 - (a) if the City approves of the Services which are the subject of the invoice, the City shall pay the Consultant the amount of the approved invoice or part thereof thirty (30) days following the date of the City's approval; and
 - (b) if the City does not approve of the Services or part of them which are the subject of the invoice, the City shall advise the Consultant in writing of the reasons for non-approval and the Consultant shall remedy the problem at no additional cost to the City before the City shall be obliged to pay the invoice or any part of it, as the case may be.
- 6.3 The Consultant shall be reimbursed only for expenses that are detailed in Schedule B and which are accompanied by sufficient and substantiated documentation acceptable to the City.
- 6.4 The City shall not pay the Consultant for any fees or expenses in excess of any limit specified in Schedule B, except where that is agreed to in writing by the parties. The City

will not be liable for and will not pay any unapproved expenses or fees. The Consultant is expressly agreeing to complete all the described Services for the consideration expressed herein.

- 6.5 The Consultant is a GST registrant and its GST registration number is *[insert Consultant's GST #]*. The Consultant will remit all GST and other taxes as required under the *Excise Tax Act* (Canada) and other applicable enactments and shall indemnify and save harmless the City from any claims therefor. The Consultant's invoices will clearly show the amount of tax as a separate tax.
- 6.6 The Consultant shall be responsible for the payment of all income and other taxes attributable to any payments made under this Agreement. The Consultant agrees to indemnify and save harmless the Company from and against any and all manner of actions, claims and demands which may be made against it in respect of any fees, assessments, levies, rates, taxes or other charges made, demanded, assessed or otherwise claimed by any provincial or federal government or other body of competent jurisdiction in respect of any monies paid to the Consultant under this Agreement.
- 6.7 The Consultant shall apply for and, immediately upon receipt, remit to the City any refund or remission of federal or provincial tax or duty available with respect to any Services provided in connection with this Agreement.

7.0 Consultant's Obligations

- 7.1 In carrying out its obligations under this Agreement, the Consultant shall:
- (a) supply and pay for all labour and materials necessary or advisable to provide the Services;
 - (b) be responsible for all applications, permits or other approvals necessary or advisable to provide the Services;
 - (c) maintain time records and books of account, invoices, receipts, and vouchers for all expenses incurred, in form and content satisfactory to the City;
 - (d) upon request, fully inform the City of all work done in connection with providing the Services; and
 - (e) comply with the City's instructions regarding the performance of the Services, but is not required to do so regarding the manner in which those instructions are carried out, except as specified in this Agreement.
- 7.2 The Consultant shall, when necessary, provide and supervise a sufficient number of workers to enable timely and proper performance and completion of the Services, and shall ensure that all such workers are competent, work efficiently and are qualified by education, training and experience to carry out the tasks to which each is assigned and in accordance with the following:
- (a) all workers hired by the Consultant to perform the Services shall be the employees of the Consultant and shall not be the employees of the City;
 - (b) the Consultant shall refrain from doing anything that would result in workers hired by the Consultant being considered the employees of the City;

- (c) the Consultant shall reassign, replace or remove a worker who is does not meet the requirements described above, or who has behaved or is likely to behave in a manner detrimental to the provision of the Services, or has violated or is likely to violate the confidentiality provisions of this Agreement;
- (d) the Consultant shall pay and discharge all wages, fees, salaries, charges, costs and expenses due and accruing due to any of its employees, agents, suppliers and subConsultants and shall make and remit to the proper authorities all deductions therefrom required by law;
- (e) the Consultant shall bear all expenses and responsibilities with respect to its officers, employees, agents and Consultants, including all expenses and responsibilities for its Designated Personnel, and any costs associated with replacing any of them; and
- (f) nothing in this Agreement restricts the right of the Consultant to terminate its employee's employment, or renders the Consultant liable for an employee's voluntary termination, or for any labour strike or lockout involving the Consultant's employees.

7.3 In carrying out its obligations hereunder, the Consultant shall familiarize itself and agrees to continuously conform to and to ensure its officers, employees and agents continuously conform to, all applicable enactments and requirements of all governmental and other regulatory authorities and shall obtain all necessary licences, permits and registrations as may be required by law. If the City requests, the Consultant shall furnish evidence of such compliance to the City forthwith.

8.0 Relationship of parties and Conflicts of Interest

8.1 The Consultant and the City expressly acknowledge that they are independent Consultants and no agency, partnership, joint venture or employer-employee relationship is intended or created by this Agreement.

8.2 The Consultant warrants, represents and agrees that:

- (a) it has no financial interest, directly or indirectly, in the business of any third party that would be or be seen to be a conflict of interest in carrying out the Services; and
- (b) neither it nor any person related to or affiliated with the Consultant has any relation to or affiliation with any faculty or staff of the City which may in any way be seen (in the City's sole and unfettered discretion) to create a potential conflict between the loyalties owed by such faculty or staff to the City and loyalties owed directly or indirectly to the Consultant, except as disclosed by the Consultant to the City;
- (c) in the event an interest is acquired or the Consultant should be found to be in a potential conflict of interest during the performance of the Services, the Consultant shall be required to advise and cure the conflict forthwith to the City's satisfaction or shall be disentitled to any compensation under this Agreement.

- 8.3 The Consultant may provide services to other persons or organizations during the Term of this Agreement, provided such services could not reasonably give rise to a conflict of interest with respect to the Consultant's duties under this Agreement.

9.0 Subcontracting

- 9.1 The Consultant shall not subcontract any obligation under this Agreement, other than to SubConsultants listed in Schedule C of this Agreement, without prior written consent of the City.
- 9.2 The City may, for reasonable cause, object to the use of a proposed SubConsultant and require the Consultant to retain another qualified SubConsultant.
- 9.3 No subcontract, whether consented to or not, shall relieve the Consultant of any obligations under this Agreement.
- 9.4 The Consultant shall ensure that every SubConsultant fully complies with this Agreement when performing the subcontracted Services.

10.0 Non-Compliance and City's Right to Suspend Services

- 10.1 If the Consultant fails to observe, perform, or comply with any provision of this Agreement, then the City may, at its sole discretion:
- (a) allow the Consultant to continue to provide the Services with a time limit for compliance, rectification or both; or
 - (b) suspend all or part of the Services, including payments in whole or in part, and give the Consultant a time limit for compliance, rectification or both.
- 10.2 If the City has set a time limit for compliance, rectification or both and the Consultant has fails to meet the time limit, the City may employ whatever means necessary to rectify that non-compliance, including performance of the Consultant's obligations on the Consultant's behalf and/or termination of this Agreement, and the Consultant shall pay an amount equal to all costs reasonably incurred by the City in rectifying the non-compliance.
- 10.3 The City may at any time in its sole discretion suspend the Services for a specified or unspecified time by written notice to the Consultant and:
- (a) upon receiving notice of suspension, the Consultant shall immediately suspend all operations except those which in the City's opinion are necessary to preserve, care for and protect the Services; and
 - (b) the Consultant shall be entitled to be reimbursed for its reasonable, proper and actual expenses incurred in protecting, caring for and preserving the Services.

11.0 Termination

- 11.1 The City may terminate this Agreement at any time, and without cause, by giving *[insert number and written form (e.g. thirty (30))]* days' written notice of termination to the Consultant and paying the Consultant an amount equal to that portion of the Contract Price that are payable for the Services as at the time of termination under this section 11.1.
- 11.2 The City may terminate this Agreement if the Consultant fails to comply with any of the terms, covenants and agreements that the Consultant must observe or perform under this Agreement and that failure continues for *[insert number and written form]* days after receipt by the Consultant of notice in writing from the City specifying the failure.
- 11.3 The Consultant may terminate this Agreement by providing *[insert number and written form]* days' written notice of termination to the City.
- 11.4 Without limiting any of the provisions in this part 11, the City reserves the right at its exclusive option to immediately and without further notice, cancel this Agreement, or part thereof, without further liability of any kind in any of the following circumstances:
 - (a) for failure by the Consultant to complete the Agreement in a timely fashion;
 - (b) for failure by the Consultant to meet described milestone events as required by the Agreement;
 - (c) for poor workmanship by the Consultant;
 - (d) for repeated or persistent faulty work or performance by the Consultant;
 - (e) for failure by the Consultant to remedy defects or deficiencies after being given notice to do so;
 - (f) if the Consultant is adjudged bankrupt or makes a general assignment for the benefit of creditors, or a receiver, trustee in bankruptcy or similar officer is appointed to take charge of all or part of its property; and such conditions are not cured within thirty (30) days of notice thereof from the City to the Consultant;
 - (g) for any breach of condition of the Agreement by the Consultant;
 - (h) for any Force Majeure event which lasts longer than thirty (30) days; or
 - (i) for its convenience at any time without cause, penalty or damages.
- 11.5 The City expressly reserves all legal rights and remedies available under general laws of British Columbia, Canada in the event of termination including the right of set off.
- 11.6 Upon termination of this Agreement, the Consultant agrees that all files, information, data and documents pertaining to the City's business including any software developed in part or in whole during the performance of the Services, shall remain the property of the City, and shall promptly be delivered by the Consultant to the City's office, and no photo static copy, duplication or reproduction of any kind whatsoever shall be made of such files, information, documents or software without the express written consent of the City.

12.0 Materials and Equipment

- 12.1 Any material or equipment that the City provides to the Consultant, or to a SubConsultant hired by the Consultant, shall remain the exclusive property of the City.
- 12.2 The Consultant shall deliver to the City any material or equipment provided to the Consultant or the Consultant's SubConsultant immediately following expiration or termination of this Agreement, or as requested by the City, and the material or equipment shall be returned in the same condition that it was supplied to the Consultant, except for loss or damage resulting from reasonable wear and tear associated with the performance of the Services.

13.0 Insurance

- 13.1 The Consultant shall, at its own expense, maintain at all times during the Term of this Agreement Insurance, including general liability insurance coverage and such other Insurance as the City reasonably requires on such terms, amounts and with deductibles as described in Schedule D, including, without limitation, the following:
 - (a) commercial general liability Insurance with a limit of not less than \$2,000,000 inclusive per occurrence for bodily injury, (including death) and damage to property including loss of use thereof. Such insurance shall include coverage for broad form property damage, contractual liability, completed operations and product liability. The City shall be named as an additional insured on the policy, but only with respect to the operations of the Consultant in the performance of this Agreement;
 - (b) automobile liability insurance for a limit of not less than \$5,000,000 for all owned, leased or rented licensed vehicles used in the performance of the contract;
 - (c) where applicable, property Insurance for the value of Consultant's property, shall be maintained and shall include a waiver of subrogation in favour of the City; and
 - (d) professional Liability in an amount not less than \$1,000,000 insuring the Consultant's liability resulting from errors and omission in the performance of professional services under this Agreement.
- 13.2 The Insurance required under section 13.1 shall be subject to the advance approval of the City and shall have deductible amounts and other terms which are acceptable to the City.
- 13.3 Maintenance of such insurance and the performance by the Consultant of their obligation under this clause shall not relieve the Consultant of liability under the indemnity provisions set forth herein.
- 13.4 Maintenance of such insurance and the performance by the Consultant of their obligation under this clause shall not relieve the Consultant of liability under the indemnity provisions in this Agreement.

- 13.5 In addition to the foregoing insurance, the Consultant agrees that it is responsible for carrying and paying for Workers Compensation coverage for itself and all its employees, Consultants and others engaged in providing the Services in accordance with the *Workers Compensation Act* and regulations. The Consultant further agrees that:
- (a) it is the principal Consultant for the purposes of the *Workers Compensation Act* and regulations and the Consultant may, at its own expense, provide additional insurance for its members to augment Work Safe BC coverage; and
 - (b) it shall comply with all conditions of the *Workers Compensation Act* and regulations, and will be responsible for all fines, levies, penalties and assessments made or imposed under the *Workers Compensation Act* and regulations relating in any way to the Services, and shall indemnify and save harmless the City, its employees and agents, from and against any such fines, levies, penalties and assessments.
- 13.6 At the request of the City, the Consultant shall provide to the City, a Certificate of Insurance evidencing the required Insurance is in force and effect and that all coverages shall provide for thirty (30) days prior written notice to be given to the City in the event of cancellation or material changes. With the prior consent of the City, should any portion of the Services performed be sub-contracted, the Consultant will ensure that each sub-Consultant also maintains during the course of this Agreement insurance coverage which is in like form and with limits as those to be carried by the Consultant.

14.0 Confidentiality

- 14.1 The City shall make available to the Consultant all information in its possession that the City considers relevant to the Consultant's performance of the Services.
- 14.2 The Consultant acknowledges that in the performance of its responsibilities hereunder, the Consultant may have access to confidential information and records and the Consultant shall maintain strict confidentiality concerning any information, data, reports, instructions or directions received from or delivered by the City in connection with the providing of any Services under this Agreement (the "**Confidential Information**").
- 14.3 During and after the Term of this Agreement, the Consultant shall not, directly or indirectly, disclose Confidential Information to any person or use any Confidential Information, except:
- (a) as required in the course of performing the Services and then only to staff of the City on a need-to-know basis; or
 - (b) with the prior written consent of the City.
- 14.4 All Confidential Information which the Consultant shall prepare or use or come in contact with shall be and remains the City's sole property and shall not be removed from the City's premises without its prior written consent, except as required in the normal course of performing the Services under this Agreement.
- 14.5 The Consultant agrees to return to the City all the Confidential Information provided by the City and any copies of such material in its possession forthwith upon demand.

- 14.6 The Consultant agrees that it will cause any worker, before commencing his or her duties, to sign a written confidentiality agreement and the Consultant shall be liable to the City for any breach of any such agreement by the worker.
- 14.7 The Consultant agrees that, upon request of the City, or in the event that the Consultant ceases to require use of the Confidential Information, or upon expiration or termination of this Agreement, the Consultant will turn over to the City all data, documents, specifications, drawings, reports, software, disks or other computer media, or other material in the possession or control of the Consultant that:
- (a) may contain or be derived from ideas, concepts, creations, or trade secrets and other proprietary and Confidential Information; or
 - (b) is connected with or derived from the Consultant's Services to the City.
- 14.8 The Consultant agrees and acknowledges that the Confidential Information is of a proprietary and confidential nature and that any failure to maintain the confidentiality of the Confidential Information in breach of this Agreement cannot be reasonably or adequately compensated for only in money damages and would cause irreparable injury to the City. Accordingly, the Consultant agrees that the City is entitled to, in addition to all other rights and remedies available at law or in equity, an injunction restraining the Consultant and any agents of the Consultant, from directly or indirectly committing or engaging in any act restricted by this Agreement in relation to the Confidential Information.
- 14.9 Notwithstanding this part 14, the the Consultant acknowledges that this Agreement is subject to the *Freedom of Information and Protection of Privacy Act*.
- 14.10 The Consultant shall obtain the prior written approval of the City prior to issuing any news release, undertaking any interview or issuing any information about this Agreement or the Services to any journalist, media or the public.

15.0 Intellectual Property

- 15.1 The Consultant agrees that any documentation or deliverables developed by the Consultant for the purposes of this Agreement are the property of the City and any copyrights, ownership rights or any other rights to such documentation or deliverables remain solely with the City.
- 15.2 Without limiting section 15.1, any and all information, reports, documents, data, computer software, or other items of any nature whatsoever, in any form, prepared by the Consultant pursuant to this Agreement whether completed or not, together with all designs or materials capable of intellectual property protection, prepared, developed or created by the Consultant, its employees or agents during the performance of and/or pursuant to this Agreement shall automatically become the property of the City.
- 15.3 The Consultant acknowledges the proprietary interest of the City in all names, trademarks, crests, or logos owned by the City and shall not use any City name, trademark, crest or logo without the written consent of the City.

16.0 Notices

16.1 Any notice permitted or required to be given by a party hereunder shall be given in writing, and may be delivered by hand, sent by facsimile transmission, or forwarded by first-class prepaid registered mail to the addresses and fax numbers set forth below, or to such other addresses as may from time to time be provided by the parties in writing. Any notice delivered by hand or sent by facsimile shall be deemed to be given and received at the time of sending. Any notice that is sent by prepaid or registered mail shall be deemed to have been received by the party to whom it is addressed on the fourth (4th) business day (Saturdays, Sundays and Statutory Holidays excluded) following the date of posting, provided that Canada Post service is not interrupted by strike or lock-out at the time of posting or within four (4) business days thereafter, in which case the notice shall only be effective once it is actually delivered.

16.2 Notices under this Agreement are to be delivered as follows:

To the City:

City of White Rock
15322 Buena Vista Avenue
White Rock, BC V4B 1Y6
Attention: [City contact name]
Fax: [fax number]

To the Consultant:

[Name]
[Street Address]
[Town/City], [Province], [Postal Code]
Attention: [Consultant contact name]
Fax: [fax number]

17.0 Dispute Resolution

17.1 In the case of any dispute arising between the City and the Consultant, as to their respective rights and obligations under the terms and conditions of this Agreement and subsequent documents, either party shall be entitled to give the other written notice, within ten (10) working days of that party's awareness of such a dispute.

17.2 In the event that a mutually agreeable resolution is not reached in a reasonable period of time, the parties agree to the following procedure:

- (a) disputes will be referred to the City Liaison and the Consultant's Liaison who will meet and work to resolve the dispute. If a resolution cannot be reached within ten (10) days, or such time as agreed to by both parties, the dispute will be escalated to the second level detailed in subsection (b);

- (b) the City's Chief Administrative Officer and the Consultant's designated senior executive will work to resolve the dispute. If a resolution still cannot be reached the dispute will be escalated to the third level detailed in subsection (c);
 - (c) the matter in dispute may be referred to the British Columbia International Commercial Arbitration Centre ("BCICAC") for commercial mediation, pursuant to its rules; and
 - (d) in the event the commercial mediation process is unsuccessful, the parties may agree to have the BCICAC will appoint an arbitrator and if so agreed by the parties, the decision of any arbitrator shall be final and binding upon the parties, including any decision of the arbitrator with respect to the costs of arbitration.
- 17.3 Unless the parties agree to binding arbitration under subsection 17.2(d), any efforts by the parties to resolve a dispute shall not preclude either of them from commencing legal proceedings or in accessing any other rights under law.

18.0 Force Majeure

- 18.1 For the purposes of this Agreement, the term "**Force Majeure**" is defined as an Act of God, an act of a public enemy, war, labour disruptions and other extraordinary causes not reasonably within the control of the Consultant.
- 18.2 If the Consultant is rendered unable, wholly or in part, by Force Majeure to provide the Services then the Consultant shall provide to the City notice of the Force Majeure as soon as reasonably possible, and to the extent that the Consultant's performance is impeded by the Force Majeure it shall not be in breach of its obligations under this Agreement.
- 18.3 The parties acknowledge and agree that during an event of Force Majeure, the Consultant's obligations pursuant to this Agreement shall be reduced or suspended as the case may be, but not longer than the continuance of the Force Majeure, except for a reasonable time period after if required by the Consultant to resume its obligations.
- 18.4 In the event Force Majeure occurs, the Consultant shall give prompt notice to the City and shall take all reasonable steps to eliminate the cause.

19.0 No Assignment

- 19.1 The Consultant may not assign any of its rights or interests in this Agreement.

20.0 Remedies Cumulative and No Waiver

- 20.1 No reference to or exercise of any specific right or remedy by the City prejudices or precludes the City from any other remedy, whether allowed at law or in equity or expressly provided for in this Agreement. No such remedy is exclusive or dependent upon any other such remedy, but the City may from time to time exercise any one or more of such remedies independently or in combination. Without limiting the generality of the foregoing, the City is entitled to commence and maintain an action against the

Consultant to collect any sum not paid when due, without exercising the option to terminate this Agreement.

- 20.2 Waiver by the City of any breach of any term, covenant or condition of this Agreement by the Consultant is not a waiver of any subsequent default by the Consultant. Failure by the City to take any action in respect of any breach of any term, covenant or condition of this Agreement is not a waiver of such term, covenant or condition.

21.0 Indemnity and Release

- 21.1 The Consultant shall indemnify, release and save harmless the City and its elected and appointed officials, officers, employees, agents, Consultants, successors and assigns from any and all liabilities, actions, damages, claims, losses, orders, fines, penalties, costs and expenses, including the full amount of all legal fees and expenses (the “**Claims**”) that may be brought against, or suffered or incurred by, the City or any of its elected and appointed officials, officers, employees, agents, Consultants, successors and assigns, in any way directly or indirectly arising from or in connection with the activities, actions or omissions of the Consultant or any of its employees, SubConsultants, agents, licenses, servants, invitees or anyone for whom the Consultant is in law responsible, in relation to the Services or in connection with this Agreement. The indemnities set out in this paragraph do not include Claims arising from the negligence or wilful or malicious misconduct on the part of the City or a person for whom the City is responsible at law.
- 21.2 The provisions of section 21.1 are paramount to any Insurance requirements herein and shall survive the Term of this Agreement.
- 21.3 The Consultant releases the City from and against all liabilities, claims, demands, damages, costs, expenses, suits and actions which the Consultant may at any time have against the City in respect of the Services, this Agreement and related matters. The obligations of the Consultant under this section survive the expiry or earlier termination of this Agreement.

22.0 Powers Preserved

- 22.1 Except as expressly set out in this Agreement, nothing in this Agreement shall prejudice or affect the rights and powers of the City in the exercise of its powers, duties or functions under the *Community Charter* or the *Local Government Act* or any of its bylaws, all of which may be fully and effectively exercised as if this Agreement had not been executed and delivered.

23.0 General

- 23.1 Time is of the essence of this Agreement.
- 23.2 Parties may by written agreement amend this Agreement
- 23.3 This Agreement enures to the benefit of and is binding upon the parties and their respective successors and permitted assigns, notwithstanding any rule of law or equity to the contrary.

- 23.4 This Agreement shall be governed and construed in accordance with the laws of the Province of British Columbia.
- 23.5 If any portion of this Agreement is held invalid by a court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder of this Agreement.
- 23.6 This Agreement may be executed in one or more counterparts, each of which will be deemed an original and all of which together will constitute one and the same instrument.
- 23.7 The provisions in this Agreement constitute the entire agreement between the parties and supersede all previous communications, representations, warranties, covenants and agreements whether verbal or written, between the parties with respect to the subject matter of this Agreement.

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

THE CITY OF WHITE ROCK, by its)
authorized signatories:)

)
)
_____)

Name:)

Date signed: _____)

)

_____)

Name:)

Date signed: _____)

[Consultant's Name], by its authorized)
signatories:)

)

)

_____)

Name:)

Date signed: _____)

)

_____)

Name:)

Date signed: _____)

SCHEDULE A
SERVICES TO BE PROVIDED BY CONSULTANT

Engineering Services for Contract WR16-045, 2017 Water System Master Plan Update.

SCHEDULE B
CONTRACT PRICE AND PAYMENT FOR SERVICES

[Insert relevant payment information. The following is provided as a guide.]

The Consultant shall be paid for its Services under this Agreement as follows (check applicable item(s)):

☐ **All inclusive Fee:** \$ _____

<input type="checkbox"/> Hourly Fee:	<u>Position/ Name</u>	<u>Hourly Rate</u>	\$ _____
			\$ _____
			\$ _____
			\$ _____
			\$ _____
			\$ _____
			\$ _____
			\$ _____

<input type="checkbox"/> Other Fee(s):	<u>Details</u>	\$ _____
		\$ _____
		\$ _____
		\$ _____

☐ **Disbursements:** Details

The schedule for payment of the Consultant's Fees shall be as follows (check applicable item(s)):

<input type="checkbox"/> Retainer:	\$ _____
<input type="checkbox"/> Monthly:	Payable on the ____ day of every month
<input type="checkbox"/> Annual:	Payable on the ____ day of every year
<input type="checkbox"/> Other:	Details:

SCHEDULE C
SUBCONSULTANTS

[Insert names of subConsultants, if applicable.]

SCHEDULE D INSURANCE

THIS CERTIFICATE IS ISSUED TO

AND CERTIFIES THAT POLICIES OF INSURANCE AS HEREIN DESCRIBED HAVE BEEN ISSUED TO THE INSURED NAMED BELOW AND ARE IN FULL FORCE AND EFFECT

INSURED	NAME ADDRESS				
CO-INSURED	NAME ADDRESS				
OPERATIONS INSURED	PROVIDE DETAILS				

TYPE OF INSURANCE	COMPANY AND POLICY NO.	EXPIRY DATE			LIMIT OF LIABILITY/AMOUNT
		YR.	MO.	DAY	
COMPREHENSIVE GENERAL LIABILITY					INCLUSIVE LIMIT \$
					OR
					BODILY INJURY: EACH PERSON \$
					EACH OCCURRENCE \$
AUTOMOBILE LIABILITY (OWNED OR LEASED VEHICLES)					PROPERTY DAMAGE: EACH OCCURRENCE \$
					INCLUSIVE LIMIT \$
					OR
					BODILY INJURY: EACH PERSON \$
AUTOMOBILE LIABILITY (NON-OWNED VEHICLES)					EACH OCCURRENCE \$
					PROPERTY DAMAGE: EACH OCCURRENCE \$
					INCLUSIVE LIMIT \$
					OR
UMBRELLA LIABILITY					BODILY INJURY: EACH PERSON \$
					EACH OCCURRENCE \$
					PROPERTY DAMAGE: EACH OCCURRENCE \$
					LIMITS \$
CONTRACTOR'S EQUIPMENT					EXCESS OF \$
BUILDER'S RISK OR INSTALLATION FLOATER					\$
EMPLOYER'S LIABILITY					SITE \$
					OTHER LOCATION \$
					TRANSIT \$
OTHER					EACH PERSON \$
					EACH ACCIDENT \$
OTHER					DETAILS

These policies comply with the insurance requirements of the governing contract to perform work for the co-insured. It is understood and agreed that thirty (30) days notice of any alteration, transfer, assignment, or cancellation of any of the policies listed herein, either in whole or in part, will be given by the insurers to the holder of the certificate.

SIGNED ON BEHALF OF THE CONTRACTOR

DATE

SIGNED ON BEHALF OF THE CONTRACTOR'S INSURERS

DATE

SCHEDULE E
DESIGNATED PERSONNEL

Name

Position

SCHEDULE F
SECURITY FOR PERFORMANCE OF SERVICES

Not Applicable

SCHEDULE G
ADDITIONAL OR MODIFIED TERMS

[Insert details of additional or modified terms, including any other agreements or documents that are incorporated by reference.]

APPENDIX F -
CLOSEST AVAILABLE GEOTECHNICAL REPORT

GEOTECHNICAL ASSESSMENT

1450 High Street
White Rock, British Columbia



Prepared for:
Epcor Utilities Inc.
2000 – 10423 101 Street NW
Edmonton, AB T5H 0E8

Prepared by:
Stantec Consulting Ltd.
Metrotower 1
2400-471 Kingsway
Burnaby, BC V5H 4M2
Tel: (604) 436-3014
Fax: (604) 436-3752

Project No.: 1117-00444

February 4, 2014

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GEOTECHNICAL ASSESSMENT

Introduction
February 4, 2014

1.0 Introduction

Stantec Consulting Limited (Stantec) has completed a geotechnical assessment for the proposed development located at 1450 High Street, White Rock, British Columbia, herein referred to as the "Site". The purpose of this assessment was to characterize the subsurface soil conditions and provide geotechnical recommendations for the design and construction of the proposed new structure and other pertinent site features. Recommendations are provided for site preparation for the proposed building, foundation design and temporary excavations. The scope of work for the assessment comprised of a subsurface investigation, engineering analysis and preparation of this report.

2.0 Site Description

The High Street site is bordered by High Street to the west and by Centennial Park to the north, east and south. An existing well pump and associated electrical equipment are housed within a subsurface concrete vault near the east end of the property. The site dimensions and property lines have not been provided to Stantec at this time. The above description is based on discussions with an Epcor Utilities Inc. (Epcor) representative while on-site to complete the subsurface investigation.

The Site is generally flat and is approximately the same elevation as the adjacent High Street road grade. A steep ravine exists to east of the site in Centennial Park.

The majority of the Site is vegetated with an existing clearing from High street extending to the existing subsurface vault. A chain link fence and gate is located along the west property line. The location of the proposed building footprint is in a currently vegetated area.

3.0 Proposed Development

It is understood that Epcor is proposing to construct a small, at-grade, 1-storey chemical building with a control room. The proposed structure is 7.10 m long (east-west) by 3.60 m wide (north-south), as shown on Drawing 1 in **Appendix B**. The proposed new structure would be located to the north west of the existing subsurface vault. No new paved driveway areas or access roads are proposed for the site.

4.0 Site Investigation

A geotechnical subsurface investigation was completed by Stantec on November 8, 2013. The geotechnical subsurface investigation consisted of one test hole to a depth of 3.05 m, located as shown on Drawing No. 1 (**Appendix B**). The test hole was completed with a solid stem auger with a

GEOTECHNICAL ASSESSMENT

Soil and Groundwater Conditions
February 4, 2014

Dynamic Cone Penetration Test (DCPT) completed adjacent to the test hole location. The presence of trees prevented the completion of the test hole within the proposed building footprint.

The fieldwork was carried out under the full-time inspection of a Stantec field engineer, who located the test hole, logged the soil conditions encountered, recorded the results of the DCPT, and collected soil samples for further examination and testing in our Burnaby, BC soils laboratory.

5.0 Soil and Groundwater Conditions

5.1 SOIL CONDITIONS

The soil conditions at the test hole location consisted of a 0.6 m thick layer of compact to dense granular fill material overlying a dense native sand with some silt, overlying very dense grey sandy silt (till).

The proposed building area is currently covered with mature trees and the fill layer encountered at the test hole location is likely not present in the proposed building location. A 50 mm to 75 mm layer of loose brown silty sand with some organics layer (Topsoil) was observed on-site at the location of the proposed new structure.

The test hole log is included in **Appendix C**, with general details regarding the soils provided below.

Fill

From the ground surface to a depth of 0.6 m, a layer of compact to dense brown silty sand fill with varying amounts of gravel was encountered. The water content of the fill ranged from 12% to 19%.

As previously noted, mature trees and a topsoil layer with a thickness of 50 mm to 75 mm was observed at the location of the proposed new structure and it is not likely that the fill layer encountered at the test hole location is present within the proposed building area.

Sand

Beneath the fill, a layer of brown sand with some silt and traces of gravel and organics was encountered. The sand layer measured 0.9 m in thickness and was compact to very dense.

Glacial Till

Grey glacial till consisting of sandy silt was encountered beneath the sand deposit. The sandy silt is generally very stiff to hard with some clay, and contains traces of gravel. A DCPT result in excess of 100 blows for a penetration of 6 inches was observed immediately at the top of the till layer. The water content for the sandy silt ranged from 10% to 17%. The test hole was terminated in the glacial till deposit.

GEOTECHNICAL ASSESSMENT

Discussions and Recommendations
February 4, 2014

5.2 GROUNDWATER

At the time of the geotechnical field investigation, groundwater water was not observed in the test hole.

6.0 Discussions and Recommendations

6.1 GENERAL

Based on the soil conditions encountered at the test hole location, we consider that the proposed at-grade structure can be supported on conventional spread footings and have a slab-on-grade floor, provided adequate site preparation is undertaken.

Additional details regarding recommendations for site preparation, foundation design, temporary excavations, and seismic considerations are provided below.

Terminology and specifications for aggregates, granular materials and asphalt pavement used in subsequent sections of this report are in accordance with the Master Municipal Construction Document (MMCD) Volume II, 2009 edition, developed jointly by the Consulting Engineers of BC, the BC Road Builders and Heavy Construction Association, and the Municipal Engineers Division of the Association of Professional Engineers and Geoscientists of BC.

6.2 SITE PREPARATION

Within the footprint of the proposed new structure, topsoil, vegetation, and debris should be removed to expose the underlying native sand. The exposed surface should then be inspected by a qualified geotechnical engineer, and any loose or soft areas will need to be adequately compacted or sub-excavated and replaced with compacted structural fill.

For sub-excavated zones, structural fill should be placed in lifts not exceeding 0.3 m in thickness and compacted to at least 100% Standard Proctor Maximum Dry Density (SPMDD) to achieve the design grades.

It is anticipated that excavated native granular soil would be suitable for re-use as structural fill; however, the topsoil fills observed in the site investigation would not be suitable for this purpose. Excavated topsoil fills may be suitable for re-use in non-structural areas such as landscaping areas.

6.3 STRUCTURAL FILL

Where filling is required at sub-excavated areas, or to bring the site to design grade, structural fill should consist of pre-approved, engineered 75 mm (3 inch) minus pit run sand and gravel (MMCD, Section 31 05 17, Item 2.3). Structural fill should be placed in maximum 300 mm lifts and compacted to at least 100% Standard Proctor Maximum Dry Density (SPMDD) within building areas and pavement areas.

GEOTECHNICAL ASSESSMENT

Discussions and Recommendations
February 4, 2014

6.4 FOUNDATIONS

The proposed structure can be supported on conventional spread footings founded on the native sand or on structural fill on native sand. Pad and strip footings founded on the native sand or on structural fill on native silty sand should be designed for a Serviceability Limit States design (SLS) bearing resistance of 150 kPa. Stantec recommends a factored Ultimate Limit States (ULS) bearing resistance of 200 kPa for pad and strip footings founded on the silty sand soil deposits. The factored ULS bearing resistance includes a geotechnical resistance factor of 0.5.

In all cases, minimum strip and pad footing widths of 0.45 m and 0.6 m, respectively, should be maintained. All exterior footings should be founded at least 450 mm below final grade for protection against frost action.

For foundations designed as discussed above, and site preparation completed as recommended in Section 6.2, Stantec estimates that total post-construction settlement would be less than 25 mm under the SLS condition, and corresponding differential settlements would not exceed 15 mm over a distance of 12.5 m.

6.5 SLAB-ON-GRADE

The slab-on-grade for the proposed structure should be grade supported with a minimum 150 mm thick slab base course comprising of 19 mm Granular Base (MMCD, Section 31 05 17, Item 2.10). The slab base course should be compacted to a minimum of 100% SPMDD.

6.6 EARTHQUAKE CONSIDERATIONS

The 2010 NBCC seismic design procedures are based on ground motion parameters having a 2% probability of exceedance in 50 years (i.e., the 2,475 year return period earthquake event). The design PGA for the City of White Rock is 0.57g (g = acceleration due to gravity), for "very dense soils".

For the soil deposits encountered at the subject site, it is appropriate to classify the seismic site response as Site Class "C", corresponding to "very dense" soils, in accordance with the *2012 BC Building Code*.

While some damage to the building would be expected under the influence of the 2010 NBCC design earthquake event, it is not anticipated that collapse of the proposed building addition due to foundation failure would occur, thus the intent of the *2012 BC Building Code* would be met.

The spectral acceleration values for White Rock for a site with a Site Class C designation are summarized in Table 6.1.

GEOTECHNICAL ASSESSMENT

Discussions and Recommendations
February 4, 2014

Table 6.1 Spectral Acceleration Values for White Rock, BC; Site Class C

Sa (0.2)	Sa(0.5)	Sa(1.0)	Sa(2.0)
1.1	0.76	0.35	0.18

6.7 PERMANENT DRAINAGE

Groundwater was not encountered at the test hole locations during the subsurface investigation. However, it is understood that a perimeter drainage system is desired at the base of the foundations.

It is recommended that a perimeter drainage system, consisting of at least 150 mm diameter slotted or perforated rigid wall pipe, be placed at foundation base elevation around all portions of the building slab below a level 150 mm above average final site grades. The drainage pipes should be surrounded by a minimum of 300 mm of 25 mm drain rock or 25 mm clear crush gravel (MMCD, Section 31 05 17, Item 2.6) encapsulated in filter fabric. The perforated pipe should be installed with perforations at 60 degrees off the base of the pipe. Perimeter drains should be provided with permanent clean-outs. Note that "Big O" type pipe is not considered to be suitable for building drainage purposes.

The perimeter drainage system should be designed to direct water by gravity flow into a permanent storm water drain or collector sump. The roof and surface runoff should be collected and directed to a storm sewer in a solid-wall pipe, separate from the perimeter drainage. Final ground surfaces around the structure should be graded to direct surface runoff away from building areas.

6.8 EXCAVATIONS AND GROUNDWATER CONSIDERATIONS

The native sand and glacial till deposits are competent to sustain near-vertical unsupported excavated cuts for utility trenches and foundations up to a maximum depth of 1.2 m. Deeper temporary trenches in the native till or trenches excavated in the existing site fill should be sloped no steeper than 1H:1V. All excavations should be carried out in accordance with the WorkSafeBC, and reviewed on a regular basis, during and before worker entry.

Excavated material should be stockpiled no closer than 2 m from the crest of the excavation slopes. Equipment should also be kept a minimum of 2 m from the crest of excavations.

GEOTECHNICAL ASSESSMENT

Construction Field Reviews
February 4, 2014

7.0 Construction Field Reviews

Stantec should be retained to provide part-time field review during construction in order to verify that the soil conditions encountered are consistent with our design assumptions and that the intent of our recommendations is being met. The field and engineering review as outlined below will fulfill the obligations specified in the Letters of Assurance as required by the City of White Rock.

- Inspection of subgrade soil within building area
- Density testing to verify compaction of site grading fills, where required
- Verification soil bearing at footing locations
- Density testing to verify compaction below slab-on-grade

8.0 Closure

This report was prepared for the exclusive use of Epcor Utilities Inc. and their agents. Any use of this report or the material contained herein by third parties, or for other than the intended purpose, should first be approved in writing by Stantec.

The recommendations contained in this report are based on assumed continuity of soils with that of our test hole, and assumed structural loads. Stantec should be provided with final architectural and structural drawings when they become available in order that we may review our design recommendations and advise of any revisions, if necessary.

Use of this report is subject to the Statement of General Conditions provided in **Appendix A**. It is the responsibility of Epcor Utilities Inc., who is identified as "the Client" within the Statement of General Conditions, and its agents to review the conditions and to notify Stantec should any of these not be satisfied. The Statement of General Conditions addresses the following:

- Use of the report
- Basis of the report
- Standard of care
- Interpretation of site conditions
- Varying or unexpected site conditions
- Planning, design or construction

GEOTECHNICAL ASSESSMENT

Closure
February 4, 2014

This report has been prepared by Joel Pineau, P.Eng. and reviewed by Wayne Quong, P.Eng. We trust the above information meets your present requirements. Should you have any questions or require additional information, please do not hesitate to contact the undersigned.

Regards,

Stantec Consulting Ltd.

Joel Pineau, P.Eng.
Geotechnical Engineer
Joel.Pineau@stantec.com

Wayne Quong, M.A.Sc., P.Eng.
Senior Associate
Wayne.Quong@stantec.com

JP/WQ/bd

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GEOTECHNICAL ASSESSMENT

Appendix A Statement of General Conditions
January 31, 2014

Appendix A Statement of General Conditions

Statement of General Conditions

USE OF THIS REPORT: This report has been prepared for the sole benefit of the Client or its agent and may not be used by any third party without the express written consent of Stantec Consulting Ltd. (Stantec) and the Client. Any use which a third party makes of this report is the responsibility of such third party.

BASIS OF THE REPORT: The information, opinions, and/or recommendations made in this report are in accordance with Stantec's present understanding of the site specific project as described by the Client. The applicability of these is restricted to the site conditions encountered at the time of the investigation or study. If the proposed site specific project differs or is modified from what is described in this report or if the site conditions are altered, this report is no longer valid unless Stantec is requested by the Client to review and revise the report to reflect the differing or modified project specifics and/or the altered site conditions.

STANDARD OF CARE: Preparation of this report, and all associated work, was carried out in accordance with the normally accepted standard of care in the state or province of execution for the specific professional service provided to the Client. No other warranty is made.

INTERPRETATION OF SITE CONDITIONS: Soil, rock, or other material descriptions, and statements regarding their condition, made in this report are based on site conditions encountered by Stantec at the time of the work and at the specific testing and/or sampling locations. Classifications and statements of condition have been made in accordance with normally accepted practices which are judgmental in nature; no specific description should be considered exact, but rather reflective of the anticipated material behavior. Extrapolation of in situ conditions can only be made to some limited extent beyond the sampling or test points. The extent depends on variability of the soil, rock and groundwater conditions as influenced by geological processes, construction activity, and site use.

VARYING OR UNEXPECTED CONDITIONS: Should any site or subsurface conditions be encountered that are different from those described in this report or encountered at the test locations, Stantec must be notified immediately to assess if the varying or unexpected conditions are substantial and if reassessments of the report conclusions or recommendations are required. Stantec will not be responsible to any party for damages incurred as a result of failing to notify Stantec that differing site or sub-surface conditions are present upon becoming aware of such conditions.

PLANNING, DESIGN, OR CONSTRUCTION: Development or design plans and specifications should be reviewed by Stantec, sufficiently ahead of initiating the next project stage (property acquisition, tender, construction, etc), to confirm that this report completely addresses the elaborated project specifics and that the contents of this report have been properly interpreted. Specialty quality assurance services (field observations and testing) during construction are a necessary part of the evaluation of sub-surface conditions and site preparation works. Site work relating to the recommendations included in this report should only be carried out in the presence of a qualified geotechnical engineer; Stantec cannot be responsible for site work carried out without being present.

GEOTECHNICAL ASSESSMENT

Appendix B Drawings
January 31, 2014

Appendix B Drawings

U:\PC 1117 Surrey, BC\111700444 - Epcor_Detail_design\drawing\cad\figures\highest_site\111700444 D01 R0_highst.dwg
2013/11/20 4:52 PM By: Huynh, Gordon

ORIGINAL SHEET - ANSI B



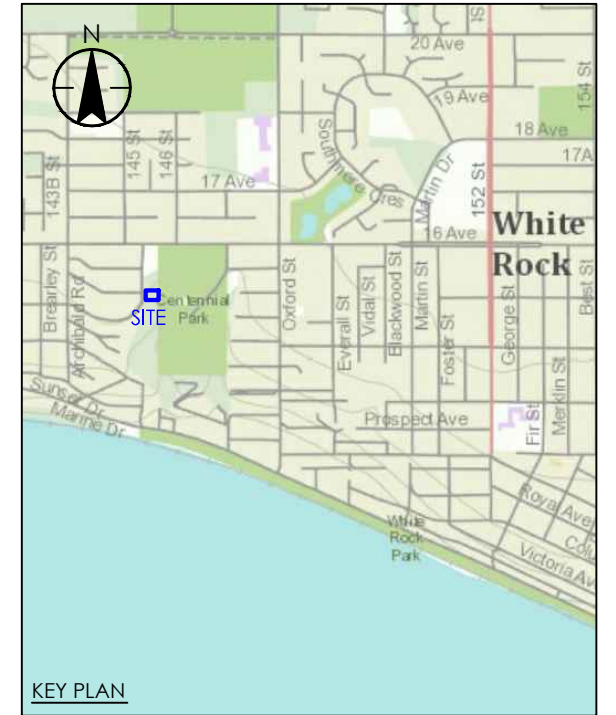
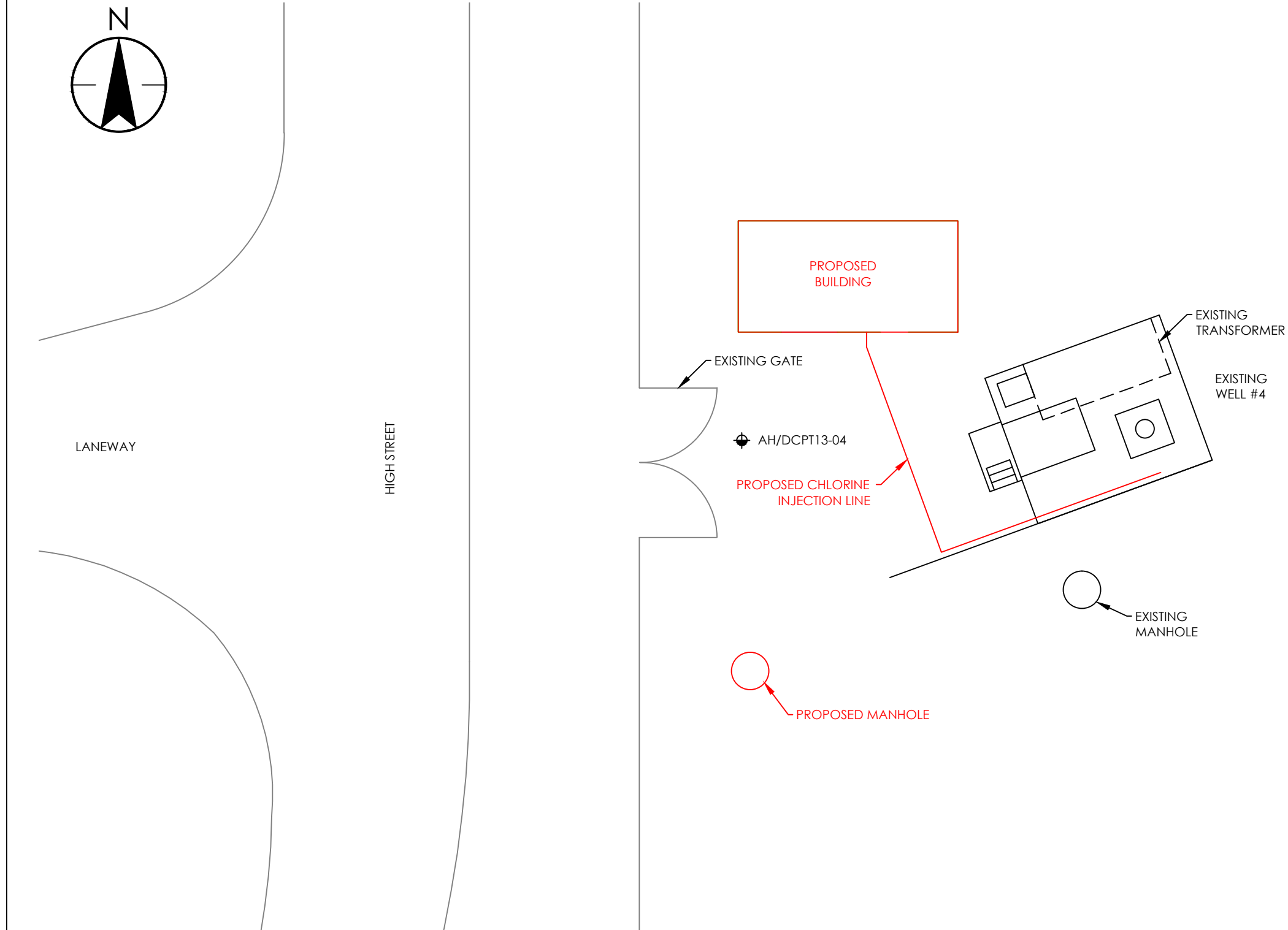
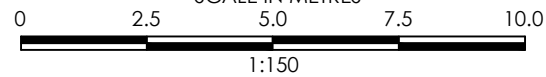
4370 Dominion Street
Burnaby, BC Canada, V5G 4L7
www.stantec.com

Legend



TEST HOLE LOCATION

SCALE IN METRES



Client/Project

EPCOR UTILITIES INC.
GEOTECHNICAL SITE ASSESSMENT
HIGH STREET, WHITE ROCK, BC

Figure No.

1

Title

TEST HOLE LOCATION PLAN

13-Nov-19
111700444

GEOTECHNICAL ASSESSMENT

Appendix C Test Hole Logs
January 31, 2014

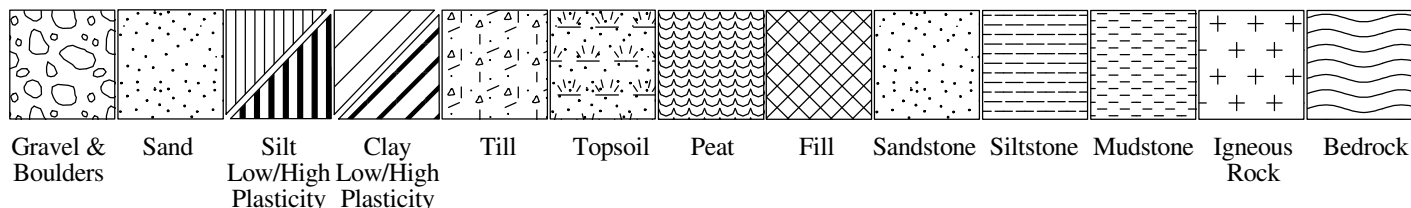
Appendix C Test Hole Logs



Stantec

SYMBOLS AND TERMS USED ON BOREHOLE AND TEST PIT RECORDS

STRATA PLOT



Initial water level reading

Long term water level reading
(date)

SOIL DESCRIPTION

Terminology used for describing soil strata based upon the proportion of individual particle sizes present:

less than 10%	Trace	20-35%	Adjective (e.g. silty or sandy)
10-20%	Some	35-50%	And (e.g. silt and sand)

The standard terminology to describe cohesionless soils includes the state of packing, as determined by laboratory test or by the Standard Penetration Test 'N' -value: the number of blows of 140 pound (64kg) hammer falling 30 inches (760 mm), required to drive a 2 inch (50.8mm) O.D. split spoon sampler one foot (305 mm) into the soil. The state of packing approximately relates to the SPT 'N' value as follows:

State of Packing	'N' Value	Relative Density %	State of Packing	'N' Value	Relative Density %
Very Loose	<4	<15	Dense	30-50	65-85
Loose	4-10	15-35	Very Dense	>50	>85
Medium Dense	10-30	35-65			

The standard terminology to describe cohesive soils includes the consistency, which is based on undrained shear strength as measured by insitu vane tests, penetrometer test, unconfined compression tests, or occasionally by standard penetration tests.

Consistency	Undrained Shear Strength kips/sq.ft.	kPa	'N' Value	Consistency	Undrained Shear Strength kips/sq.ft.	kPa	'N' Value
Very Soft	<0.25	<12.5	<2	Stiff	1.0-2.0	50-100	8-15
Soft	0.25-0.5	12.5-25	2-4	Very Stiff	2.0-4.0	100-200	15-30
Firm	0.5-1.0	25-50	4-8	Hard	>4.0	>200	>30

SAMPLES



GS... Grab Sample



RC... Rock Core



NR... No Recovery



AS... Auger Sample



ST... Shelby tube or thin wall tube



UNDIST .. Undisturbed Sample



SS... Split spoon sample
(Obtained by performing the
Standard Penetration Test)



Ps... Piston Sample

BOREHOLE RECORD

AH13-04

CLIENT EPCOR PROJECT No. 111700444
 PROJECT EPCOR DATUM NORTHING
 LOCATION High St. and North Bluff Rd. ELEVATION EASTING
 DRILLING DATE Nov 13, 2013 DRILLING CO. Downrite Drilling DRILLING METHOD Solid Stem Auger

