



**REQUEST FOR QUOTATION 4674Q  
SUPPLY AND DELIVERY OF PUMP TUBES  
FOR THE WILLIAMS & NO.1 RD PUMP STATIONS**

Quotations will be received at the Information Counter, Main Floor, Richmond City Hall, addressed to the Purchasing Section, 6911 No. 3 Road, Richmond, BC, V6Y 2C1,

**until 3:00 pm, local time on Wednesday, August 1<sup>st</sup>, 2012**

**NOTES:**

1. Three (3) copies of Quotations shall be in a sealed envelope or package marked with the Bidder's Name, the Request for Quotation Title and Number.
2. The Closing time will be conclusively deemed to be the time shown on the clock used by the City for this purpose.
3. Faxed quotations will not be received or considered.

All queries related to the Request for Quotation shall be submitted in writing to the attention of:

Contractual:

Kerry Lynne Gillis - Buyer II, Contracting Specialist  
email: [purchasing@richmond.ca](mailto:purchasing@richmond.ca)

Technical queries:

Mile Racic, Project Manager  
Engineering Design and Construction  
e-mail: [mracic@richmond.ca](mailto:mracic@richmond.ca)

Telephone: 604-247-4655

The deadline for all enquiries is 5:00 pm, local time on **Friday, July 27, 2012.**

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**REQUEST FOR QUOTATION 4674Q**

**SUPPLY AND DELIVERY OF PUMP TUBES (FOR THE WILLIAMS & NO.1 RD PUMP STATIONS)**

Name of Bidder: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

Province: \_\_\_\_\_

Postal Code \_\_\_\_\_

Telephone Number: \_\_\_\_\_

Contact Person: \_\_\_\_\_

Title: \_\_\_\_\_

Email Address: \_\_\_\_\_

Fax Number: \_\_\_\_\_

## PART A – INSTRUCTIONS TO BIDDERS

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### PART A – INSTRUCTIONS TO BIDDERS

#### **1.0 Description of Requirement**

- 1.1 Quotations are invited for Supply and Delivery of Pump Tubes (for the Williams & No.1 Rd Pump Stations) as set out herein, for the City of Richmond (the “City”).
- 1.2 Bidders are required to submit a Quotation for the full requirement only. Partial responses will be put aside and given no further consideration.

#### **2.0 Contract Term - Intentionally Omitted**

#### **3.0 Pricing**

- 3.1 Prices quoted will be in Canadian currency and exclusive of H.S.T. and F.O.B. Destination to the Sites named herein as applicable, with all freight, unloading at destination, import duties, brokerage, royalties, handling, overhead, profit and all other costs included.

#### **4.0 Inquiries and Clarifications**

- 4.1 It is the sole responsibility of the Bidder to thoroughly examine these documents and satisfy itself as to the full requirements of this RFQ. Inquiries are to be in written form only, faxed or e-mailed to the contact person shown on the cover page. If required, an addendum will be published on the following websites:
  - a) BC Bid: <http://www.bcbid.gov.bc.ca/open.dll/welcome?language=En>
  - b) City’s website: <http://www.richmond.ca/busdev/tenders.htm>
- 4.2 The City, its agents, consultants and employees shall not be responsible for any information given by way of oral or verbal communication.

#### **5.0 Inspection of Site**

- 5.1 Where applicable, Bidders shall inspect the Work Site(s) and make allowances in its Quotation for such conditions as in the sole opinion of the Bidder are warranted. The City makes no representation or warranties as to the condition of the sites. No consideration will be given for extras resulting from conditions that would have been evident during a routine site inspection.

#### **6.0 Submission of Quotation**

- 6.1 The response to this RFQ with all accompanying schedules, appendices, amendments or addenda submitted by the Bidder will be received up to the closing time on the date and

## PART A – INSTRUCTIONS TO BIDDERS

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in the place shown on the title page of this RFQ (the “Closing Time”). The Quotation shall be submitted on the forms provided in a sealed envelope or package, marked with the Bidder’s name and the RFQ title and number.

- 6.2 Quotations received after the Closing Time or in locations other than the address indicated, may not be accepted and may be returned unopened.
- 6.3 The Bidder shall submit Three (3) copies of its Quotation in accordance with the instructions stated herein.
- 6.4 The Bidder must enter its corporate or legal business name on the final page of the Quotation Form. The Quotation Form must be signed in the place provided by an officer or employee having authority to bind the Bidder to the terms and conditions of this RFQ. All other pages of the Quotation Form should be initialled by the authorized signatory.
- 6.5 Amendments to a Quotation may be submitted if delivered in writing prior to the Closing Time in a sealed envelope or package, marked with the Bidder’s name and the RFQ title and number.
- 6.6 Quotations may be withdrawn by written notice only, provided such notice is received at the Purchasing Section office prior to the Closing Time.
- 6.7 All costs associated with the preparation and submission of the Quotation, including any costs incurred by the Bidder after the Closing Time, will be borne solely by the Bidder.
- 6.8 By submitting a Quotation, the Bidder acknowledges and agrees that the City will not be responsible for any costs, expenses, losses, damages (including damages for loss of anticipated profit) or liabilities incurred by the Bidder as a result of or arising out of submitting a Quotation for the proposed Contract, or due to the City’s acceptance or non-acceptance of their Quotation or any breach by the City of the Quotation contract between the City and each of the Bidders or arising out of any contract award not made in accordance with the express or implied terms of the Quotation documents.

### **7.0 Conflict of Interest**

- 7.1 By submitting a Quotation, the Bidder warrants that neither it nor any of its officers or directors, or any employee with authority to bind the Bidder, has any financial or personal relationship or affiliation with any elected official or employee of the City or their immediate families which might in any way be seen by the City to create a conflict.

### **8.0 Evaluation of Quotations**

- 8.1 Quotations will be evaluated on the basis of the overall best value to City based on quality, service, price and any other criteria set out herein including, but not limited to:

## PART A – INSTRUCTIONS TO BIDDERS

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- a) the Bidder's ability to meet the Requirements, qualifications and competencies set out herein;
  - b) financial offer including but not limited to prices, operating and maintenance costs, warranty, and any life cycle considerations;
  - c) the Bidder's business and technical reputation and capabilities; experience and where applicable, the experience of its personnel; track record; and references of current and former customers;
  - d) financial stability, through reporting provided by Dun & Bradstreet and other sources;
  - e) equipment quality, configuration, age and condition; and
  - f) any other criteria set out in the RFQ.
- 8.2 Prior to Contract award, the Bidder may be required to demonstrate financial stability. Should the City so request, the Bidder will be required to provide annual financial reports or a set of financial statements prepared by an accountant and covering the last two (2) fiscal years.
- 8.3 The City may, prior to Contract award, negotiate changes to the scope of the Work, the materials, the Specifications or any conditions with any one or more of the Bidders without having any duty or obligation to advise any other Bidders or to allow them to vary its prices as a result of changes to the scope of Work, the materials, the Specifications, or any conditions, and the City shall have no liability to any other Bidder as a result of such negotiations or modifications.
- 8.4 All sub-contractors of the Bidder will be subject to the same evaluation process. It is the responsibility of the Bidder to guarantee that all its sub-contractors will comply with all the Requirements and terms and conditions set out herein.
- 8.5 Preference may be given to Quotations offering environmentally beneficial products or services.

### **9.0 Acceptance and Rejection of Quotations**

- 9.1 Notwithstanding any other provision in the Quotation documents, the City has in its sole discretion, the unfettered right to:
- a) accept any Quotation;
  - b) reject any Quotation;
  - c) reject all Quotations;
  - d) accept a Quotation which is not the lowest Quotation;
  - e) accept a Quotation that deviates from the Requirements, Specifications or the conditions specified in this Quotation;

## PART A – INSTRUCTIONS TO BIDDERS

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- f) reject a Quotation even if it is the only Quotation received by the City;
  - g) accept all or any part of a Quotation; and
  - h) split the Requirements between one or more Bidders.
- 9.2 All Quotations shall be irrevocable and remain open for a minimum of sixty (60) days after the Closing Time, whether or not another Quotation has been accepted.
- 9.3 The City may waive any non-compliance with the RFQ, the Requirements, the Specifications, or any conditions of this RFQ and may elect to retain for consideration Quotations which are non-conforming, which do not contain the content or form required by the RFQ or which have not complied with the process for submission set out herein.

### **10.0 Award of Contract**

- 10.1 Award of a Contract is contingent on funds being approved and the contract award being made by the appropriate City authority.
- 10.2 The purchase order, the Quotation, the RFQ and such other documents including all amendments or addenda, shall form the basis for the Contract between the Contractor and the City. In the event of a conflict between any of the Contract Documents, the following documents will take precedence and govern over each other in the following order of priority from highest to lowest:
- a) The General Conditions of the Contract, including any mutually agreed to amendments between the Bidder and the City;
  - b) The City's purchase order including the standard purchase order terms and conditions;
  - c) The Quotation; and
  - d) The RFQ and any subsequent amendments or addenda.
- 10.3 Where the head office of the Successful Bidder is located within the City of Richmond and/or where the Successful Bidder is required to perform the Service at a site located within the City of Richmond, the Successful Bidder is required to have a valid City of Richmond business license prior to Contract execution.
- 10.4 The City is not under any obligation to award a Contract and may elect to terminate this RFQ at anytime.
- 10.5 The City's Manager, Purchasing shall have the conduct of the Request for Quotation and the Contract.



## PART A – INSTRUCTIONS TO BIDDERS

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### **11.0 Publication of the Results of the Request for Quotation**

- 11.1 The City will publish the name of the Successful Bidder on the websites listed in section 4.1. No other notices will be issued by the City. Bidders shall visit these websites to obtain the results of this Request for Quotation.

### **12.0 Quantities**

- 12.1 Any quantities stated herein are the City's best estimates of its Requirements and should not be relied on. Actual quantities may vary.

### **13.0 Brand Names – Intentionally Omitted**

### **14.0 Alternates and/or Variations to Specifications**

- 14.1 Except where stated otherwise herein, the Requirements describe what is considered necessary to meet the performance requirements of the City; and Bidders should Quotation in accordance with such Requirements, or if the Bidder cannot meet the Requirements, the Bidder may offer an alternative which it believes to be the equivalent.
- 14.2 If in addition to bidding on goods, materials, equipment and/or services that meet the Requirements, the Bidder wishes to offer an alternative, the alternative Quotation shall be submitted separately in the same format as the initial Quotation.
- 14.3 The City is not obligated to accept any alternatives.
- 14.4 The City will determine what constitutes allowable alternatives and/or variations.

### **15.0 Freedom of Information and Protection of Privacy Act (BC)**

- 15.1 Bidders should note that the City of Richmond is subject to the Freedom of Information and Protection of Privacy Act (British Columbia), which imposes significant obligations on the City's contractors to protect all personal information acquired from the City in the course of providing any service to the City.

### **16.0 Confidentiality**

- 16.1 Information about the City obtained by Bidders must not be disclosed unless prior written authorization is obtained from the City.
- 16.2 The Contractor agrees that this obligation of confidentiality will survive the termination of the Contract between the Contractor and the City.

### **17.0 Insurance and Undertaking of Surety**

- 17.1 The Contractor may be required to Indemnify and Insure the City as shown in the General Conditions of the Contract.

## PART A – INSTRUCTIONS TO BIDDERS

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17.2 Bidders should have the Undertaking of Liability Insurance Form Letter within the Part D of the document completed and submitted with their Quotations

17.3 All policies and certificates shall be submitted to the Purchasing Section before a contract is issued to carry out the work.

### **18.0 Form of Agreement**

18.1 Bidders are advised that the form of agreement consists of the terms and conditions identified in Part B *General Conditions of the Contract* of this RFQ document.

## PART B – GENERAL CONDITIONS

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### PART B – GENERAL CONDITIONS OF THE CONTRACT

#### 1.0 Definitions

- 1.1 The following words and terms, unless the context otherwise requires, shall have the meanings set out below. Words including the singular number include the plural and vice versa.
- a) “Act of God” means a cataclysmic phenomenon of nature, including earthquake, flood or cyclone. Rain, snow, wind, high water or any other natural phenomenon, which might reasonably have been anticipated from historical records of the general locality of the City, shall be deemed not to be acts of God;
  - b) “Bidder” means the individual, partnership, corporation or combination thereof, including joint venturers, who or which sign the Quotation form set out in Part D of, and submit a Quotation in response to, this RFQ;
  - c) “City” means the municipal corporation, generally known as the City of Richmond.
  - d) “City’s Designated Representatives” means the City’s employees or representatives who are authorized in writing to deal with the Contractor on behalf of the City in connection with the goods, materials, equipment and services or to make decisions in connection with the Contract;
  - e) “Closing Time” means the closing date, time, and place as set out on the title page of this RFQ;
  - f) “Contract” means the agreement formed between the City and the Contractor as evidenced by the purchase order issued to the Contractor by the City;
  - g) “Contract Documents” means the purchase order, the Contractor’s Quotation, the RFQ and such other documents as listed in the purchase order, including all amendments or addenda agreed between the parties;
  - h) “Contractor” means the successful Bidder individual, partnership, corporation or combination thereof, including joint venturers, who or which is awarded the Contract;
  - i) “Delivery Date” means the date the City requires the Contractor to deliver the goods to the City’s Delivery Site;
  - j) “F.O.B.” means all costs of freight, insurance, brokerage, customs duties and all other costs of delivery to the site named as F.O.B. will be borne by the Contractor and that ownership and title to all goods, materials, and

## PART B – GENERAL CONDITIONS

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equipment are transferred to the City when same are delivered by the Contractor to the City and the risk of loss or damage to the goods, materials and equipment transfers to the City only at such time as same are received and accepted by the City at the site named as “F.O.B.”;

- k) “H.S.T.” means the harmonized sales tax administered under the Excise Tax Act (Canada) and any successor tax or levy therefor in force from time-to-time;
- l) “OHS Regulation” means the *Workers Compensation Act* (British Columbia), including without limitation, the Occupational Health & Safety Regulation (BC Regulation 296/97, as amended by BC Regulation 185/99) enacted pursuant to such Act, all as such Act or Regulations are amended or re-enacted from time to time.
- m) “Owner” means the same as “City”
- n) “Quotation” means the Bidder’s offer made on the Quotation form set out on Part D of this RFQ with all appendices or addenda submitted by the Bidder in response to the RFQ;
- o) “RFQ” means this Request for Quotation including, but not limited to: Part A - Instructions to Bidders; Part B - General Conditions; Part C- Requirements (including the specifications provided by MPDA) and Part D – Quotation Form;
- p) “Requirements” means all of the specifications, requirements and services set out in the RFQ that describes the general requirements that the goods, materials, equipment and services must meet and that the Contractor must provide;
- q) “Work” means all the labour, materials, equipment, supplies, services and other items necessary for the execution, completion and fulfilment of the Requirements;
- r) “Work Site” means the site where the Work is being performed, unless otherwise stated in this RFQ.

**2.0 Personnel****2.1 Qualified Personnel**

The Contractor will provide only professional personnel who have the qualifications, experience and capabilities to perform the Work.

**2.2 Replacement of Personnel or Sub-Contractors**

## PART B – GENERAL CONDITIONS

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If the City reasonably objects to the performance, experience, qualifications or suitability of any of the Contractor's personnel or subcontractors then the Contractor will, on written request from the City, replace such personnel or subcontractors.

### 2.3 City's Own Forces and Other Contractors

The City may have its own work forces and other contractors on the site while the Work is under way. The City will coordinate the work of all contractors on the site and require their coordination with each other. The Contractor will report to the City and apparent deficiencies in other contractors' work which would affect the Work, immediately after the deficiencies come to the Contractor's attention.

## 3.0 Sub-contractors

- 3.1 The Contractor will perform the Work using its own personnel and those subcontractors as may be listed in *Part D - Quotation Form* and approved by the City, and will bind all approved subcontractors to the terms of the Contract Documents, as applicable to the subcontractors work. The Contractor will be as fully responsible to the City for acts and omissions of subcontractors and of persons directly or indirectly employed by them as for acts and omissions of persons directly employed by the Contractor.
- 3.2 All sub-contractors are the responsibility of the Contractor.
- 3.3 The Contractor shall be held as fully responsible to the City for the acts and omissions of its sub-contractors and of persons directly or indirectly employed by the Contractor, as for the acts and omissions of persons directly employed by it.
- 3.4 The Contractor agrees to ensure performance by every sub-contractor with the terms and requirements of the Contract Documents.
- 3.5 No sub-contractors will be permitted except those expressly named by the Contractor in Part D – Quotation form or subsequently permitted in writing by the City pursuant to Section 3.1 of these General Conditions.
- 3.6 The Contractor will list below all subcontractors it intends to use in its performance of the Work, and what parts of the Work each subcontractor will be undertaking (the "Subcontractors").
- 3.7 The Contractor, if awarded the Contract, will engage the listed Subcontractors only, and no others in their stead, without prior written authorization of the City.

## PART B – GENERAL CONDITIONS

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- 3.8 The Contractor, if awarded the Contract, will ensure that every Subcontractor is bounded by a legal agreement with the same terms and conditions of the Contract.

### **4.0 Independent Contractor**

- 4.1 The Contractor, its sub-contractors, the officers, directors, shareholders, partners, personnel, affiliates and agents of the Contractor and its sub-contractors are not, nor are they to be deemed to be, partners, appointees, employees or agents of the City.

### **5.0 Assignment**

- 5.1 The Contractor will not assign, sublet, subcontract, or let out as task work any part of the Work or any of the Contractor's obligations of the Contract Documents to any third party, and will not assign or otherwise transfer any of the rights of payment under the Contract Documents to any third party, without in each case the prior written consent of the City which consent the City may arbitrarily withhold.
- 5.2 Despite Section 5.1, the Contractor may utilize those sub-contractors expressly named in the "List of Subcontractors" of Part D– Quotation Form but only for the Area of Responsibility set out beside their name, provided always that the Contractor may not substitute or replace those sub-contractors, or permit those sub-contractors to further assign, sub-let, sub-contract, or let out as task work their obligations under the Contract documents, except in accordance with Section 4.1 above.
- 5.3 If the City should consent to any such assignment, subletting or letting out as task work of all or any part of the Work, the Contractor shall in no way be relieved from its responsibility for the fulfilment of the Work, but shall continue to be responsible for the same in the same manner as if all the Work had been performed by the Contractor.

### **6.0 Responsibility For Supplies**

- 6.1 The Contractor shall be responsible for the supplies covered by this contract until they are delivered at the designated delivery point, regardless of the point of inspection; and the Contractor shall bear all risks of loss or damage to rejected supplies after notice of rejection.

## PART B – GENERAL CONDITIONS

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### **7.0 Delivery**

7.1 Deliveries shall be made to the site(s) specified by the City. It is the Contractor's responsibility to ensure that all deliveries made to the City occur within the operating hours of the site(s) specified by the City.

### **8.0 Time of the Essence**

6.1 For all requests made by the City pursuant to the Contract, time is of the essence. The acceptance of a late performance, with or without objections or reservations by the City, shall not waive the right to claim damages for such breach nor constitute a waiver of the requirement of timely performance of any obligation remaining to be performed.

### **9.0 Laws, Permits and Regulations**

7.1 The laws of British Columbia shall govern the Contract.

7.2 In carrying out its obligations hereunder, the Contractor shall familiarize itself and comply with all applicable laws, bylaws, regulations, ordinances, codes, specifications and requirements of all regulatory authorities, and shall obtain all necessary licenses, permits and registrations as may be required by law.

### **10.0 Inspection**

10.1 The services are subject to inspection and in case any of the services are not in conformity with the Requirements of the Contract or the Contractors' warranty (expressed or implied), the City shall have the right either to reject them or to require correction.

10.2 The City shall be the final judge of the services and materials in respect of both quality and quantity and its decisions of all questions in dispute with regard thereto will be final.

10.3 The City will not be deemed to have accepted the services by virtue of a partial or full payment for it.

### **11.0 Use of Premises**

11.1 The Contractor shall confine the use of the premises for his work as directed by the City and shall comply with regulations which govern the building or institution where the work is located.

## PART B – GENERAL CONDITIONS

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- 11.2 At the conclusion of the work, the Contractor shall clean up and remove all debris and rubbish to the satisfaction of the City.

### **12.0 Quality of Workmanship and Materials**

- 12.1 The Contractor shall perform the services with the degree of care, skill and diligence normally applied in the performance of services of a similar nature and in accordance with sound current professional practices and conforming to the requirements set out in the RFQ.
- 12.2 The whole of the Work and the manner of performing this Contract shall be done to the entire satisfaction and approval of the City, and it shall be the sole judge of the work and materials in respect of both quality and quantity, and its decision with regard to work or materials, or as to the meaning and intention of this Contract, or any part or parts thereof, shall be binding and final upon the Contractor.
- 12.3 All work shall be done in strict conformity with the Contract Documents and drawings which form a part of the Contract. The intent of the contract documents is to include all labour, materials, equipment, services, supplies and all the things necessary for the proper and complete execution of the work.
- 12.4 Materials, goods and equipment shall be the products of suppliers or manufacturers of established reputation engaged in the supply or manufacture of such materials of equipment.
- 12.5 Materials are to be applied in accordance with the manufacturer's directions and shall use the techniques and applications best suited for the type of material being used.

### **13.0 Warranty**

- 13.1 The Contractor warrants that the goods, materials, equipment and/or services supplied by the Contractor to the City will be in full conformity with the Specifications as well as samples, if any, then this is a sale by sample as well as by description within the meaning of the Sale of Goods Act (BC).
- 13.2 The Contractor further warrants that the goods, materials and/or equipment are of merchantable quality, and fit for the intended use and will perform according to the requirements set out in the RFQ.
- 13.3 Equipment and materials shall be new, free and clear of all liens, charges and encumbrances, the latest model, and shall be complete with all necessary



## PART B – GENERAL CONDITIONS

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accessories for operation. All equipment and materials shall be at the risk of the Contractor until delivered to and accepted by the City.

- 13.4 At a minimum, a one (1) year parts and labour warranty shall be provided on all goods, materials, equipment and/or services provided under the Contract.
- 13.5 The Contractor warrants that its employees have the qualifications, experience, knowledge, skills and abilities necessary for the fulfilment of the Contract.

### **14.0 Indemnification and Insurance**

- 14.1 The Contractor shall indemnify, hold and save harmless the City from and against all claims, losses, damages, costs, actions and other proceedings made, sustained, brought or prosecuted in a manner based upon, occasioned by or attributable to any injury, including death, property damage, infringement or damage arising from any act or omission of the Contractor, its employees, officers, volunteers, servants, sub-contractors, or agents or persons from whom the Contractor has assumed responsibility in the performance or purported performance of the Requirements.
- 14.2 The Contractor shall indemnify the City from and against any and all liability or expenses by way of legal costs or otherwise in respect of any claim which may be made for a lien or charge at law or in equity or to any claim or liability under the Builders Lien Act, or to any attachment for debt, garnishee process or otherwise.
- 14.3 The Contractor shall assume the defence of, and indemnify and hold harmless the City and its officers, employees and agents, from and against all claims relating to materials, goods or equipment furnished and to inventions, copyrights, trademarks, or patents and rights thereto used by the Contractor in the execution of the Contract and in subsequent use and/or operation by the City.
- 14.4 The Contractor will indemnify, hold, and save harmless the City from and against all claims, losses, damages, costs, actions, and other proceedings, made, sustained, brought or prosecuted in manner, based upon, occasioned by, attributable to any injury, including death, property damage, infringement, or damage arising from any act or omission of the Contractor, his employees, officers, volunteers, servants, or agents or persons from whom the Contractor has assumed responsibility in the performance or purported performance of this agreement
- 14.5 The Contractor shall, at its own expense, through the terms of the contract secure, maintain, and pay for the following coverages:

## PART B – GENERAL CONDITIONS

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- a) Comprehensive General Liability Insurance with a limit of not less than \$5,000,000 inclusive per occurrence for bodily injury and property damage and \$5,000,000 for personal injury. The policy or policies shall cover all premises and operations necessary or incidental to the performance of this agreement and include but not necessarily be limited to the following coverages:
1. Contractual liability assumed under this agreement.
  2. Contingent employer's liability with respect to operations of sub-contractors.
  3. Owner's protective liability.
  4. Cross liability.
  5. Automobile liability (non-owned, hired).
  6. Completed operations liability 24 months after completed operations.
  7. Voluntary medical payments.
- b) "Course of Construction" Property Damage Insurance covering all risks of physical loss or damage on an occurrence basis, including loss of use of property, and including losses or damage from flood or earthquake. The coverage provided shall amount to no less than eighty (80%) percent of the total value of the work done and material delivered to the site, or under the control of the Contractor, payable to the City and Contractor as their interests may appear, and protecting each in such terms as will preclude subrogation claims by the insurer against anyone insured there-under.
- 14.6 The City, its officers, officials, and employees shall be added as an additional insured on all such policies. All such insurance provided by these policies shall be primary regardless of any insurance or self insurance that may be enforced at the time of any loss or claim that insures the City, its officers, officials, and employees.
- 14.7 The policy or policies shall be underwritten by an insurance company or companies licensed to do business in the Province of British Columbia and who meet with the reasonable approval of the City. Prior to the commencement of the work defined by this agreement, the Contractor shall furnish the City through the Office of the Manager Purchasing and Risk a certified original copy of all such policies as evidence that such insurance is in force. The Contractor agrees that such insurance policies cannot be cancelled, lapsed, or materially changed without at least thirty (30) days' written notice to the City.

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- 14.8 Maintenance of such insurance and the performance of the Contractor of his obligations under this clause shall not relieve the Contractor of liability under the indemnification provisions here and above set forth. The foregoing insurance provisions shall not limit the insurance required by Municipal, Provincial, or Federal law
- 14.9 It shall be the full responsibility of the Contractor to determine whether any additional insurance coverage is necessary and advisable for its own protection and/or to fulfil its obligations under this Contract. Any such additional insurance shall be provided and maintained by the Contractor its own expense.
- 14.10 It is understood that this agreement is strictly between the Contractor and the City and the Contractor is an independent contractor for the City and no employment relationship, partnership, agency, or joint venture exists between the City, the employees of the Contractor and/or its agents and/or their employees, and/or its Contractors and/or their employees. Any disputes between the Contractor and any of its employees and/or its agents and/or their employees and/or their Contractors and/or their employees shall be resolved by the Contractor with no involvement by the City.

### **15.0 Workers' Compensation Board Coverage/Prime Contractor**

- 15.1 The Contractor agrees that it shall at its own expense procure and carry or cause to be procured and carried and paid for, full Workers' Compensation Board coverage for itself and all workers, employees, servants and others engaged in or upon any work or service which is the subject of this contract. The Contractor agrees that the City has the unfettered right to set off the amount of the unpaid premiums and assessments for such Workers' Compensation Board coverage against any monies owing by the City to the Contractor. The City shall have the right to withhold payment under this contract until the Workers' Compensation Board premiums, assessments or penalties in respect of work done or service performed in fulfilling this contract had been paid in full.
- 15.2 The Contractor agrees that it is the Prime Contractor for the purposes of the Workers' Compensation Board Occupational Health and Safety Regulations for the Province of British Columbia. The Contractor shall have a safety program acceptable to the Workers' Compensation Board and shall ensure that all Workers' Compensation Board safety rules and regulations are observed during performance of this contract, not only by the Contractor but by all subcontractors, workers, material men and others engaged in the performance of this contract. Prior to commencement of construction, the Contractor shall complete and file a "Construction Notice of Project" with the Workers' Compensation Board and shall provide a copy of the same to the City confirming that the Contractor shall be the

## PART B – GENERAL CONDITIONS

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Prime Contractor responsible for coordination of safety and health under Part 3 of the Workers Compensation Act and Part 20 of the WCB Occupational Health and Safety Regulations.

- 15.3 The Contractor shall provide the City with the Contractor's Workers' Compensation Board registration number and a letter from the Workers' Compensation Board confirming that the Contractor is registered in good standing with the Workers' Compensation Board and that all assessments have been paid to the date thereof prior to the City having any obligation to pay monies under this contract. The Contractor shall also provide a signed copy of the Prime Contractor Designation Document.
- 15.4 The Contractor shall indemnify the City and hold harmless the City from all manner of claims, demands, costs, losses, penalties and proceedings arising out of or in any way related to unpaid Workers' Compensation Board assessments owing from any person or corporation engaged in the performance of this contract or arising out of or in any way related to the failure to observe safety rules, regulations and practices of the Workers' Compensation Board, including penalties levied by the Workers' Compensation Board.

### **16.0 Termination**

- 16.1 The City will advise the Contractor by written notice of its intent to terminate the whole or any part of the Contract in any one of the following circumstances:
- s) if the Contractor fails to make delivery of the goods, materials, equipment and/or services within the time specified, or fails to perform any other provisions, terms or conditions of the Contract within the time specified, or within a reasonable time if no time is specified;
  - t) in the event that the Contractor performs any act or does anything by which the City shall incur any liability whatsoever;
  - u) any failure of the Contractor to meet the safety requirements of the Contract;
  - v) in the event that any creditor of the Contractor causes a writ of execution or similar writ or court order to be served upon the City requiring the City to pay any portion due to the Contractor under the Contracts; or
  - w) in the event that the Contractor is adjudged bankrupt or if it makes a general assignment for the benefit of creditors or if it becomes insolvent or if it should take the benefit of any Act that may be in force for bankrupt or insolvent debtors.

## PART B – GENERAL CONDITIONS

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- 16.2 Upon termination of the Contract, the City shall have no obligation to the Contractor except for such services and/or goods as have been supplied up to the date of the termination of the Contract(s).
- 16.3 Upon termination of the Contract(s) in whole or in part, the City may procure similar goods, materials, equipment and/or services and the Contractor shall be liable to the City for any excess costs for such similar goods, materials, equipment and/or services. The Contractor shall not be liable for any excess costs if failure to perform arises by reason of strikes, lockouts, Acts of God or acts of the City. The City will not be liable where Delivery Sites are not available due to strikes, lockouts or Acts of God.

### **17.0 Payments**

- 17.1 The Contractor shall be paid net thirty (30) days from receipt of invoice and acceptance of the goods, materials, equipment and/or services, whichever is the later.
- 17.2 The City shall make progress payments once a month for work completed and materials on the site upon receipt of the Contractor's invoice.
- 17.3 The Contractor shall provide the following submittals with each invoice for payment during the progress of the Contract:
- 17.4 Statutory Declaration accompanying a claim for payment that all wages, accounts for materials, Subcontractors and suppliers have been paid.
- 17.5 Except for the final payment, the City shall holdback ten (10%) percent of the amount of progress claims. The City shall pay the holdback 55 days after completion of the work upon receipt of the contractor's written claim for final payment accompanied by a Statutory Declaration stating that the Contractor has discharged every obligation and paid or satisfied every just claim incurred by him in connection to the Contract, including claims by his Subcontractors, and upon receipt of clearance from the Workers' Compensation Board.

### **18.0 Taxes**

- 18.1 Unless otherwise provided herein, the Contractor shall pay all sales or excise taxes in force during the term of the Contract, provided that any increase or decrease in such taxes shall increase or decrease the amount due under the Contract(s).
- 18.2 Invoices shall show the appropriate amounts for H.S.T.

## PART B – GENERAL CONDITIONS

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### **19.0 Liens**

19.1 The Contractor shall fully indemnify the City from and against any and all liability or expenses by way of legal costs or otherwise in respect of any claim which may be made for a lien or charge at law or inequity or to any claim or liability under the Builders Lien Act, or to any attachment for debt, garnishee process, or otherwise.

### **20.0 Patent Fees**

20.1 The Contractor shall pay all royalties and licence fees and shall save the City harmless from loss on account of suits or claims of infringement of patents in the doing of the work.

### **21.0 Protection of Person and Property**

21.1 The Contractor shall use due care that no persons are injured, no property damaged or lost, and no rights are infringed in the performance of the services, and the Contractor shall be solely responsible for all loss, damages, costs and expenses in respect of any injury to persons, damage of property, or infringement of the rights of others incurred in the performance of the services or caused in any other manner whatsoever by the Contractor, or its employees.

21.2 The Contractor shall effectively warn and protect the public and other personnel from any danger as a result of the services being done.

21.3 The Contractor shall maintain protection of all his work and materials from damage and shall protect the City's and any adjoining property from injury due to the Contractor's work.

### **22.0 Clean Up**

22.1 The Contractor shall at all times perform the services in an orderly and reasonably tidy manner, and shall at suitable intervals remove any accumulation of rubbish or refuse materials. At no time shall any person employed by the Contractor or by any of its sub-contractors discard any litter or garbage on or adjacent to the delivery site, except into a suitable container.

### **23.0 Character of Workers**

23.1 On the written request of the City, the Contractor will remove any employee, Sub-Contractor or agent for any reason including but not limited to the following:

- a) Lack of or failure to obtain any required Security Clearance;

## PART B – GENERAL CONDITIONS

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- b) Intoxication;
- c) Use of foul, profane, vulgar or obscene language or gestures;
- d) Solicitation of gratuities or tips from any person for services performed under this Agreement;
- e) Wilful, negligent or reckless action in disregard of safety or sanitary requirements or regulations; or
- f) Any action which may constitute a public nuisance or disorderly conduct.

23.2 The Contractor will immediately comply with each such request and will then provide the City with all requested documentation verifying that the employee, Sub-Contractor or agent has been removed from further involvement with this Agreement.

### **24.0 Conduct of the Contract**

24.1 The City of Richmond's Manager, Purchasing shall have the conduct of the RFQ and the Contract.

### **25.0 Rectification of Damage and Defects**

25.1 The Contractor shall rectify any loss or damage for which, in the opinion of the City the Contractor is responsible, at no charge to the City and to the satisfaction of the City. Alternatively, the City may repair the loss or damage and the Contractor shall pay to the City the costs of repairing the loss or damage forthwith upon demand from the City. Where, in the opinion of the City, it is not practical or desirable to repair the loss or damage, the City may estimate the cost of the loss or damage and deduct such estimated amount from the amount owing to the Contractor hereunder.

### **26.0 Failure to Perform**

26.1 If, in the opinion of the Manager Purchasing, the work is improperly, defectively, or insufficiently performed, or being performed, the Manager Purchasing may, in writing, order the Contractor to re-execute or correct the work in accordance with such order; and if the Contractor fails to comply with such order within ten (10) working days, the Manager Purchasing may, at any time thereafter, execute or cause to be executed the order so given, and the Contractor shall, on demand, pay to the City of Richmond, all costs, damages, and expenses incurred in respect thereof or occasioned by reason of the non-compliance by the Contractor with any such orders; and if the Contractor fails to pay such costs, damages, and expenses, the City of Richmond may retain and deduct such costs, damages, and expenses from any amount then or thereafter payable to the Contractor under this Contract.

## PART B – GENERAL CONDITIONS

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- 26.2 Should the Contractor neglect to execute the Requirement properly or fail to perform any provision of the Contract, the City may, without prejudice to any other right or remedy it may have, make good such deficiencies and may deduct the cost thereof from the payment due to the Contractor.
- 26.3 If the Contractor fails to perform any provision of the Contract due to reasons of strike, lockout or other work stoppages, the City may upon ten (10) days written notice to the Contractor terminate the Contract without prejudice to any other right or remedy the City may have.

### **27.0 Dispute Resolution**

- 27.1 All claims, disputes or issues in dispute between the City and the Contractor shall be decided by mediation or arbitration, if the parties agree, or failing agreement, in a Court of competent jurisdiction with the Province of British Columbia and be governed by the laws of British Columbia.
- 27.2 In the event that the parties agree to arbitration pursuant to the above, the arbitration shall be governed by the rules of the British Columbia International Commercial Arbitration Centre, except that the arbitrator or arbitrators shall be agreed upon by the parties, and failing agreement by the parties, shall be appointed by a court of competent jurisdiction with the Province of British Columbia.
- 27.3 In the event that the parties agree to arbitration, the arbitration shall take place in the Lower Mainland, British Columbia and be governed by the laws of British Columbia.
- 27.4 The procedure set out in this section is not meant to preclude or discourage informal resolution of disagreements between the City and the Contractor.

### **28.0 Changes in Requirements**

- 28.1 The City, without invalidating the Contract, may make changes to the Contract by altering, adding or deducting from the Requirements. Subject to mutual agreement, the Contractor shall proceed with the amended Requirements and the amended Requirements shall be executed under the provisions of the Contract.
- 28.2 The Contractor must not make any changes to from the terms of the Contract unless it shall first have received the written consent of the City and no claims for additional compensation shall be valid unless the change is so ordered.



PART B – GENERAL CONDITIONS

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**29.0 Notices**

- 29.1 Any notice required to be given in this Contract shall be deemed to be duly given to the City if sent by registered mail addressed to the City's Purchasing Manager at Richmond "City Hall, 6911 No. 3 Road, Richmond, BC V6Y 2C1" and to the Contractor if sent by registered mail addressed to the Contractor at the address set forth in the Quotation.

## PART C – REQUIREMENTS

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### PART C - REQUIREMENTS

#### 1.0 Scope of Work

- 1.1 The work includes fabrication of 6 pump tubes and associated components including galvanizing for the Williams and No.1 Rd drainage pump stations.
- 1.2 The successful proponent shall submit an engineered shop drawing of the proposed pump tubes with the seal of a professional Engineer registered in B.C. The design must be submitted prior to fabrication for the *City's* review and approval. Allow for four (4) working days for review and approval. The cost to supply the shop drawings shall be included in the unit price.
- 1.3 Project funding is provided from the Building Canada Plan – Base Funding Agreement Flood Protection Program and the City of Richmond.

#### 2.0 Schedule

- 2.1 Schedule is a critical factor for this Project. The completed galvanized pump tubes must delivered to the City of Richmond Works Yard no later than September 21, 2012.

#### 3.0 Delivery

- 3.1 Items are to be delivered F.O.B., City of Richmond Works Yard located at 5599 Lynas Lane, Richmond, BC

#### 4.0 Details and Specifications

##### 4.1 Reference Drawing-

- .1 Refer to Attachment: A for drawings (2 sheets):
  - 1) Drainage Pump Station Renovation No.1 Rd North – Pump Tube Elevations and Details DWG. No. LC-1194 SHT No. M3 of 3
  - 2) Drainage Pump Station Renovation Williams Rd West – Pump Tube Details DWG. No. LC-1193 SHT No. C09 of 14

##### 4.2 Hot-Dip Zinc Coatings

###### .1 General

- .1 Description
  - a) This section specifies methods and procedures for hot-dip galvanizing. Use coating where specified, or shown.

## PART C – REQUIREMENTS

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- .2 Reference Standards : Conform to the following reference standards:
  - b) CSA G164, Hot-Dip Galvanizing of irregularly shaped articles.
  - c) CSA HZ Series, Specifications for Zinc and Zinc Alloys.
  - d) ASTM A123, Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
  - e) ASTM A143, Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement
  - f) ASTM A153, Zinc Coating (Hot-Dip) on Iron and Steel Hardware
  - g) ASTM A384, Safeguarding Against Warpage and Distortion During Hot-Dip Galvanizing of Steel Assemblies
  - h) ASTM A385, Providing High-Quality Zinc Coatings (Hot-Dip)
  - i) ASTM A563, Carbon and Alloy Steel Nuts
  - j) ASTM A780, Repair of Damaged Hot-Dip Galvanized Coatings
  - k) MIL-P-21035, Paint, High Zinc Dust Content, Galvanizing Repair
  - l) AGA, American Galvanizers Association
- .3 Submit the following information:
  - a) Zinc dust-zinc oxide coating manufacturer's product data showing conformance to the specified product and indicating coating thicknesses.
  - b) Manufacturer's recommendation for application of zinc dust/zinc oxide coating.
  - c) Coating applicator's Certificate of Compliance that the hot-dip galvanized coating meets or exceeds the specified requirements of CSA G164, ASTM A123 or A153, as applicable.
  - d) Fabricators' certification that all components and/or assemblies correctly fit and align prior to galvanizing.
- .4 Quality Assurance
  - a) Coating applicator to specialize in hot-dip galvanizing after fabrication and follow the procedures of the AGA Quality Assurance Manual. Applicator to be a member of the American Galvanizers Association.
- .5 Shipment, Protection And Storage

## PART C – REQUIREMENTS

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- a) Load and store galvanized articles in accordance with accepted industry standards.
- b) Store in conditions which will prevent the formation of wet storage stain ("white rust").

### **.2 Products**

#### **.1 Materials**

- a) Zinc Coating
  - 1. Zinc used for coating to conform to CSA HZ.2
- b) Zinc Dust/Zinc Oxide Coating
  - 1. Zinc Dust/Zinc oxide coating to conform to military specification MIL-P-21035. Approved manufacturers in alphabetical order: Galvicon Co. and Z.R.C. Chemical Products Co.
- c) Basis Metal
  - 1. Material to be chemically suitable for galvanizing.
  - 2. Do not use steel with silicon content below 0.05%, a carbon content below 0.25% or ultimate tensile strength greater than 1000 MPa.

#### **.2 Fabrication Requirements**

- a) Design products to be hot-dip galvanized and use fabrication practices for products as specified in applicable portions of ASTM A143, A384 and A385 and the AGA publication "Design of Products to be hot-dip galvanized after fabrication".
- b) Fabrication practices for products to be in accordance with the applicable portions of ASTM A143, A384, and A385, except as specified herein. Avoid fabrication techniques which could cause distortion or embrittlement of the steel.
- c) Fabricator to consult with Engineer and hot-dip galvanizer regarding potential problems with distortion or handling during the galvanizing process which may require modification of design before fabrication proceeds.
- d) Remove all welding slag, splatter, anti-splatter compounds and burrs prior to delivery for galvanizing.

## PART C – REQUIREMENTS

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- e) Provide holes and/or lifting lugs to facilitate handling during the galvanizing.
- f) Avoid unsuitable marking paints. Consult with the galvanizer about removal of grease, oil paint and other deleterious material prior to fabrication.
- g) Remove by blast cleaning or other methods surface contaminants and coating which would not be removable by the normal chemical cleaning process in the galvanizing operation.
- h) Prior to galvanizing, trial assemble all components to assure proper fit and alignment.

### .3 Protective Coating

- a) Coating weight: conform to clause 5.1 of ASTM A123.
- b) Surface finish: continuous, adherent, smooth and evenly distributed. Free of any defects detrimental to the stated end use.
- c) Adhesion: to withstand normal handling and use of the article.

### **.3 Execution**

#### .1 Preparation

- a) Pre-clean basis metal in accordance with accepted methods to produce a surface for quality hot-dip galvanizing.
- b) Basis metal to be caustic cleaned and pickled to SSPC-SP8 and fluxed in an aqueous solution of zinc ammonium chloride.
- c) Handle all articles to be galvanized in such a manner as to avoid any damage and to minimize distortion.

#### .2 Application

- a) Galvanize steel members, fabrications and assemblies after fabrication in accordance with CSA G164 and ASTM A123.
- b) Hot-dip zinc coat steel items weighing 50 kg or less, unless otherwise specified. Hot-dip galvanize anchor bolts and nuts 15 mm and larger in accordance with ASTM A153.

#### .3 Repair Of Damaged Galvanized Coating

- a) Where zinc coating has been damaged after installation, basis metal surface to be cleaned and repaired with zinc dust or zinc oxide coating in accordance with ASTM A780. Apply to the recommendations of the coating manufacturer. Apply multiple coats (at least 3) to dry film thickness of 200 microns (8 mils).

## PART C – REQUIREMENTS

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- b) Remove from the project site for repair by the hot-dip zinc coating method any items not physically damaged, but which have insufficient or deteriorating zinc coatings, and items damaged in shipment or prior to installation.

### .4 Threaded Fasteners

- a) Comply with requirements of ASTM 153, CSA G164-M and ASTM 143.
- b) Tap nuts oversize after galvanizing in accordance with ASTM A563.

## 4.3 Steel Pipe Welding

### .1 **General**

#### .1 Scope

- a) This section specifies in this Section covers field and related shop welding requirements for manual, semi-automatic and automatic metal arc-welding process specific to the welding of carbon steel pipe and appurtenances for water or sewerage facilities and pipelines.

#### .2 References

- a) Welding shall comply with the referenced requirements of the following standards, where applicable:
  1. ASME B31.3 Process Piping
  2. AWS A5.20 Specifications for Carbon Steel Electrodes for Flux Core Arc Welding
  3. AWWA C206 Standard for Field Welding of Steel Water Pipe
  4. CSA W48 Filler Metals and Allied Materials for Metal Arc Welding
  5. CSA W59 Welded Steel Construction (Metal Arc Welding)
  6. CSA W117.2 Safety in Welding, Cutting and Allied Processes
  7. CSA W178.2 Certification of Welding Inspectors
  8. CSA Z662 Oil and Gas Pipeline Systems
  9. Occupational Health and Safety Regulation WorkSafeBC

#### .3 Submittals

- a) The contractor shall submit its proposed welding procedures to the Engineer for review not later than ten (10) working days prior to commencing any welding work.

## PART C – REQUIREMENTS

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- b) The welding procedures should outline manufacturing, installation, inspection and testing procedures for the welding. This should include weld mapping and non-destructive inspection criteria.
  - c) Welding documentation for procedures, production and repair welding shall include:
    - 1. Welding procedure specifications (WPS)
    - 2. Procedure qualification records (PQR), including Charpy V-notch testing
    - 3. Welder performance qualifications (WPQ)
    - 4. Welding operator certificates (WOC)
    - 5. Weld Repair Procedure
    - 6. Charpy V-notch reports
  - d) The Engineer will review and comment on the Contractor's submittal within five (5) working days of receipt thereof. The Engineer's review, or otherwise, of the Contractor's proposed welding procedures shall not relieve the Contractor of its duties and responsibilities under the Contract.
  - e) The contract shall submit all as-built documentation in hard copy or pdf file before substantial completion is granted. All inspection, testing or other documents shall reference a traceable weld and pipe identification system. The binder shall include the following information:
    - 1. All welding documentation specified in 1.3.3.
    - 2. Shop and fabrication drawings, fully dimensioned and identified, showing the welder and welding procedures actually used.
    - 3. Final corrective action / inspection reports.
- .4 Definition and Symbols
- a) The welding terms and symbols employed in these Contract Documents, shall be interpreted according to the definitions given in CSA Standard W59.

## .2 Products

### .1 Filler Metal

- a) Welding electrodes shall conform to the classifications of the AWS A5.20 and CSA W48. The weld steel shall be classed to have the following mechanical properties:
  - 1. minimum tensile strength: 480 MPa (70,000 psi);
  - 2. minimum yield point: 410 MPa (60,000 psi).
  - 3. Filler metal shall have a minimum Charpy toughness of 34 joules (25 ft-lb) at -10C (300F).

### .2 Templates

- a) The Contractor shall provide all the necessary pipe mitre templates, jigs, temporary pipe supports, alignment dogs, clamps and consumables required to complete the work.

## PART C – REQUIREMENTS

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### **.3 Execution**

#### **.1 General**

- a) The quality standard shall be CSA Z662 for all pipe greater than 600 mm and ASME B31.3, Category M for all piping less than or equal to 600 mm.
- b) All welding shall be done in accordance with the WorkSafe BC's, Occupational Health and Safety Regulation and in accordance with CSA X117.2 Safety in Welding, Cutting and Allied Processes.

#### **.2 Welder Qualification**

- a) All welders shall be qualified for the particular welding procedures they will perform in accordance with the requirements of Section 7 of CSA Z662. All welders shall be tested and must pass tests for each welding procedure submitted by the Contractor and reviewed by the Engineer.
- b) All welders shall possess a valid Welder's Performance Qualification Record (WPQR) book issued under the authority of the provincial Boiler and Pressure Vessel Safety Program.
- c) All welders who have performed welding for the Owner during the past six (6) months, will be required to prepare weld test specimens as detailed below.

#### **.3 Welder Testing**

- a) All welder testing will be witnessed by an independent certified welding inspector at the Contractor's cost.
- b) All costs associated with the Welder Performance Qualification test shall be paid by the Contractor including preparation of the welded test coupons (time and consumables), and mechanical and Charpy testing of the coupons by an independent certified weld inspection company.
- c) The Welder Performance Qualification test will be performed on 600 mm diameter pipe, supplied by the Owner, of a material equivalent to the production and fabrication piping. Test specimens will be visually inspected by the Engineer and will be bend tested and witnessed by the Engineer. Welder tests are to take place at facilities that are certified to CSA 178.2 and by inspectors that are certified to level 2 or 3.
- d) The Owner requires all butt and fillet welding procedures for pipe to be qualified in accordance with the requirements of Section 7 of CSA Z662. In addition, Charpy V-notch tests are required from all butt weld qualification joints, of the weld metal and heat affected zone samples. Minimum average values of 34 joules (25 ft-lbs) at -10 C (300 F) are required, with a minimum single value of 23 joules (16 ft-lbs).

#### **.4 Preparation of Surfaces Before Welding**



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- a) Prior to welding, or flame cutting, on lined or coated pipes, the Contractor will carefully remove the lining or coating from the interior and exterior of the pipe over a distance of not less than 150 mm (6 inches) on either side of the position of the proposed weld or flame cut.
  - b) Surfaces to be welded shall be free from dirt, loose scale, slag, heavy rust, grease, paint, oil, cement and any other foreign material. Joint surfaces shall be smooth, uniform and free from tears, fins and other defects which could adversely affect proper welding. All cleaning shall be performed by a method acceptable to the Engineer.
  - c) Some pipes may arrive on the Work Site in an out-of-round state. The Contractor shall use blocking, as necessary, to bring the pipes back to true roundness to allow for a proper welding joint.
  - d) The Contractor shall shim the joints prior to welding, so that the annular gap or high-low is equal all around the circumference of the pipe and within the weld procedure tolerance.
- .5 Welding Environment
- a) Welding shall not be performed on wet surfaces, nor when it is raining, snowing or during periods of high wind, unless the operator and the work are properly protected from the elements. Under such conditions it is the Contractor's responsibility to provide suitable hoarding to protect the operator and the work to the satisfaction of the Engineer.
- .6 Preheating Temperatures
- a) The base metal material at the weld position shall be preheated before welding to a temperature of 650 C (1500 F) and be maintained at this level until welding is complete.
- .7 Tack Welds and Defects
- a) Nicks, gouges, notches and depressions in the base metal in the area of the joint shall be repaired before the weld is made. Erection tack welds, used in the assembly of joints, need not be removed, provided that they are sound, and the cover beads are thoroughly fused into the tack welds
  - b) Written approval of weld procedures are required where weld repairs result in removal of the base material to more than 10% of the wall thickness.
- .8 Polarity of Welding Current
- a) The polarity of the welding current shall be in compliance with the reviewed welding procedure.
- .9 Quality of Welds
- a) All welds shall produce complete fusion of the parent metal and shall be free from unsound metal containing porosity, cracks and slag inclusion. The

## PART C – REQUIREMENTS

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surface of each bead and finished weld shall be free from unusual grooves, valleys, depressions, burrs, overlapping, undercutting and other irregularities.

- b) The finished weld surface shall be smooth with gradual changes in profile to accept the specified coating or lining. If, in the Engineer's opinion, the welds will not readily accept the lining or coating, the Contractor shall repair the welds at its own cost.
- c) All weld spatter shall be removed from the internal weld surfaces by the Contractor prior to inspection or costing preparations.

### .10 Application

- a) The welds shall be applied by means of continuous stringer beads. Each bead shall be completed for the full circumference of the seam before successive beads are started. Each pass shall be thoroughly cleaned, especially at the edges of the bead where it connects to the base metal, to remove dirt, slag, and flux before the succeeding bead is applied.
- b) The thickness of the metal build-up behind the advancing arc for each weld pass shall not exceed 5 mm (3/16 inch), and the width shall not exceed three times the SMAW electrode diameter or five times the FCAW wire diameter used to make the weld. Where, in the Engineer's opinion, field connections dictate, the Engineer may revise the application procedure.
- c) Fillet welds shall be made with a minimum cutting back of the joint ring or pipe. The throat of a full-fillet weld shall be not less than 0.707 times the thickness of the pipe wall as shown on the drawings. Excess cutting back of 1.6 mm (1/16") or greater is a defect and shall be repaired.
- d) The fillet weld bead profile shall be 45 degrees unless specified otherwise.
- e) All pipe welds shall have a minimum of a root pass, a hot pass and one fill pass around the entire circumference before the pipe can be left overnight.

### .11 Weld Reinforcement

- a) On butt joints, no part of the finished surface in the area of fusions shall lie below the surface of the adjoining pipe. The weld reinforcement shall not be more than 1.6 mm (1/16 inch) above the surface of the pipe.

### .12 Joint Alignment

- a) Butt joints shall be accurately aligned and retained in position during the welding operation so that at the finished joint position, the one pipe surface shall not project beyond the other adjoining pipe surface by more than 20 percent of the plate thickness, with a maximum of 1.6 mm (1/16 inch).
- b) Where two abutting pipes have different thickness, the difference shall be evenly distributed around the pipe and a 4:1 taper shall be employed by grinding of the thicker pipe to allow a smooth transition between the two thicknesses.

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### .13 Workmanship

- a) All workmen shall wear rubber soled, or other suitable soft soled shoes, which will not damage the pipe coating or lining.
- b) Each welder, working inside a pipe, shall use a container to receive the rod ends, and shall take care not to drop these ends on the pipe coating or lining.
- c) Flame-resistant blankets or other suitable coverings shall be provided by the Contractor and be placed over the pipe costing and lining to prevent damage from hot metal and sparks. The lining and the exterior coating are highly susceptible to damage from sparks and spatter.
- d) If the Contractor damages the lining or coating during the course of the Work, the Contractor shall repair the damage to the satisfaction of the Engineer. Alternatively, the Engineer reserves the right to have the Owner repair the damaged areas and to charge the Contractor for the costs incurred.

### .14 Contractor's Quality Control

- a) The Contractor's quality control plan for welding shall include:
  1. Welder qualification;
  2. Welding procedures;
  3. And all other things necessary to ensure the specifications are met.
- b) Welder and welding operators shall clearly mark each weld they make with their unique, traceable ID using a weather resistant paint marker.

### .15 Owner's Quality Assurance

- a) The Engineer will check the Contractor's work to audit the quality of the final weld product. The Engineer will complete the following tasks:
  1. Visual inspection on 100% of the welds.
  2. Magnetic particle examination will be conducted on 10% of all fillet welds, bell & spigot welds, butt strap welds, and 100% of all fillet welds on pipe hatches, passholes and man ways.
  3. Magnetic particle examination will be conducted on all branch connection joints, on 100% of the welds prior to the installation of the crotch plate assembly and 100% of the welds on the crotch plate assembly.
  4. Air pressure testing will be done on all bell and spigot and butt strap welds and all reinforcing plates (repads). These will be tested to a maximum of 275 kPa (40 psi) in conjunction with the application of soapy water solution on the entire welded area.
  5. Radiographic inspection will be conducted on 100% of length of each weld, of a minimum of 10%, of all groove and miter joints. A minimum of 5% of each welder or welding operator shall be represented. The Engineer will select the welds for radiographic examination.
  6. If welding defects are found through radiographic inspection, then an additional 10% of welds based on the number of welds performed by that

## PART C – REQUIREMENTS

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welder will be radiographed. If no additional defects are found as a result of this additional 10% inspection criteria, the minimum extent of radiographic inspection may be reduced back to 10% as outlined.

- b) The Contractor shall give the Engineer reasonable notice (48 hours minimum) of the production schedule in order to arrange its' quality assurance program. The Engineer shall have unrestricted, safe, access to where the work is being performed. If notice is given and the work is not ready for inspection the contractor will pay the inspectors waiting time.

### .16 Defects and Repairs

- a) The Contractor shall make good and/or repair as directed, at its own expense, all welds which are found to be defective.
- b) All porosity, cracks, trapped welding flux, welds deficient in quality, or made contrary to any provisions of these specifications, shall be removed and repaired by the reviewed repair procedure. The air-carbon-arc method will not be permitted.
- c) All arc strikes, nicks, notches, grooves or depressions in the adjacent base metal during welding, removal of welds and repairs shall be repaired by the contractor in accordance with the reviewed weld procedure.
- d) Mechanical caulking or peening of welds to correct defects will not be permitted. Leaks traced to faulty welded pipe joints shall be repaired by removing the defective material which caused the leak and re-welding.
- e) Repairs shall be made by grinding smooth to base metal and building up with weld metal to produce a surface free of defects. All repairs will be subject to re-inspection by the Engineer.

PART D – QUOTATION FORM

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PART D – QUOTATION FORM

**Quotation Form**

Purchasing  
City of Richmond  
6911 No. 3 Road  
Richmond, BC V6Y 2C1

The undersigned Bidder, having carefully read and examined the Instructions to Bidders, Undertaking of Liability Insurance, Quotation Form, Quotation Annexures, General Conditions of Contract, Specifications and all Addenda issued, and having full knowledge of the Work required, does hereby offer to provide all necessary materials in strict accordance with the Requirements and to do all therein called for on the terms and conditions and under the provisions therein set forth at the:

**LUMP SUM TOTAL QUOTED PRICE OF \$** \_\_\_\_\_

**PAYMENT TERMS** \_\_\_\_\_ **EARLY PAYMENT TERMS** \_\_\_\_\_

The above price includes and covers duties, handling and transportation charges, and all other charges incidental to and forming part of this Quotation, except for H.S.T.

The undersigned Bidder agrees to complete the whole of the works within \_\_\_\_\_ working days of acceptance.

Name of Bidder: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone No: \_\_\_\_\_

Name, Signature, and  
Title of Authorized  
Signing Officer: \_\_\_\_\_

Date: \_\_\_\_\_

E-mail: \_\_\_\_\_

PART D – QUOTATION FORM

**Schedule of Quantities and Prices**

The City shall pay in Lawful money of Canada the amount shown for the following items subject to the conditions of the Contract Documents.

ITEM NO.	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE (\$)	TOTAL AMOUNT (\$)
1	No.1 Rd Pump Tube Including Nipple Piece (per drawing Lc-1194 SHT. N <sup>o</sup> .: M3 of 3)	Each	3		
2	Williams Rd Pump Tube (per drawing Lc-1193 SHT. N <sup>o</sup> .: C09 of 14)	Each	3		
				<b>SubTotal (carried forward to Quotation Form)</b>	\$
				Harmonized Sales Tax	\$

Initials of Authorized Signing Officer

PART D – QUOTATION FORM

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**Undertaking of Liability Insurance**

City of Richmond  
6911 No. 3 Road  
Richmond, BC V6Y 2C1

Dear Sirs:

We, the undersigned (insert insurance company's name) \_\_\_\_\_ do hereby undertake and agree to insure the Contractor in the amount of \$5,000,000.00 as outlined in the attached "General Conditions of the Contract" and agree to:

- a. Name the City of Richmond, its officers, officials, agents, and employees as additional insured in connection with the work being proposed by the Contractor.
- b. State that such policy applies to each insured in the same manner and to the same extent as if separate policy had been issued to each insured named in the policy.
- c. State that the policy cannot be cancelled, lapsed, or materially changed without at least 30 days written notice of cancellation delivered to the City Clerk of the City of Richmond at 6911 No. 3 Road, Richmond, BC V6Y 2C1.
- d. State that coverage provided by such insurance shall protect the Contractor and the City of Richmond during the performance of the works and services specified in the attached Form of Quotation and specifically that the insurance required by such Quotation shall be consistent with the requirements therein.

if the Contract is awarded to (insert bidder's name) \_\_\_\_\_

EXCEPTIONS:

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Dated at \_\_\_\_\_, British Columbia, this \_\_\_\_ day of \_\_\_\_\_, 2012.

BY: \_\_\_\_\_ TITLE: \_\_\_\_\_

This form must be signed by the Insurance Company or an authorized Broker on behalf of the Insurance Company.

A SEPARATE FORM SHOULD BE SIGNED FOR EACH POLICY IF MORE THAN ONE POLICY IS APPLICABLE.





PART D – QUOTATION FORM

**List of Previous Contracts**

The Bidder has recently undertaken and completed the Contracts described following and authorizes the City of Richmond to inquire as to the nature of the Bidders performance on these contracts.

	DESCRIPTION OF CONTRACT	TOTAL PRICE OF CONTRACT	DATE COMMENCED	DATE COMPLETED
Company: Contact Name: Phone: E-mail:				
Company: Contact Name: Phone: E-mail:				
Company: Contact Name: Phone: E-mail:				
Company: Contact Name: Phone: E-mail:				

(If additional space is required, attach additional)

PART E – ATTACHMENT

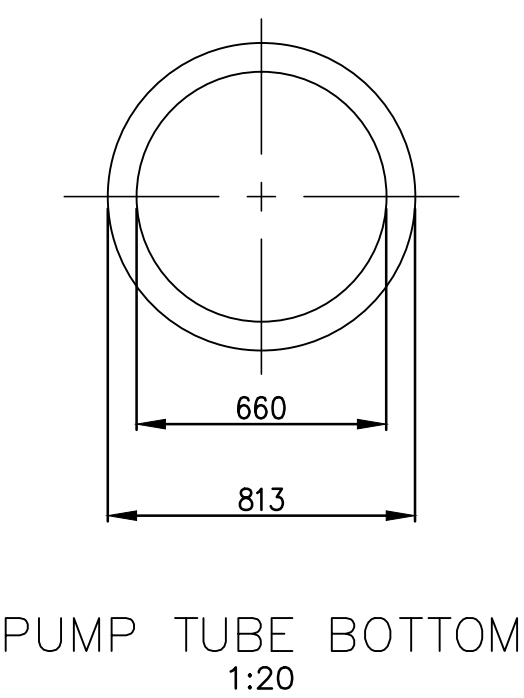
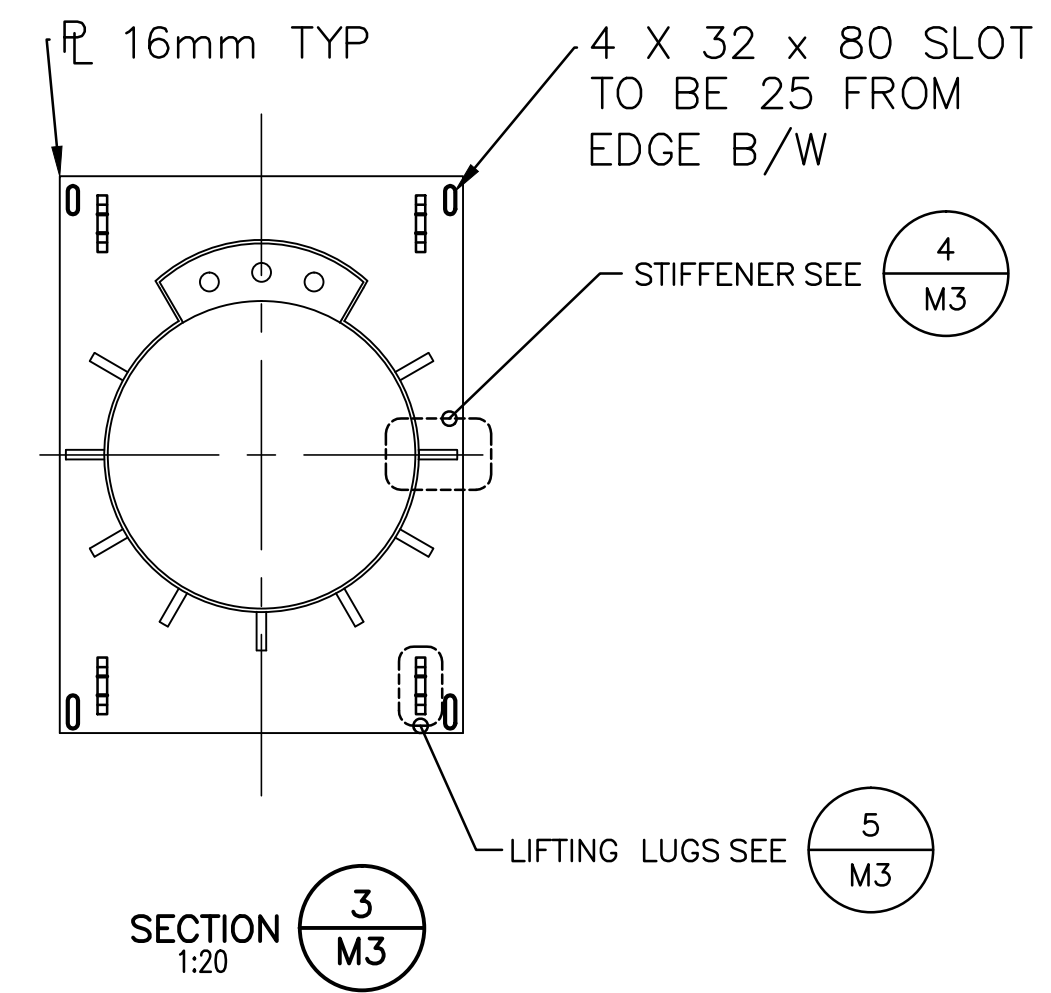
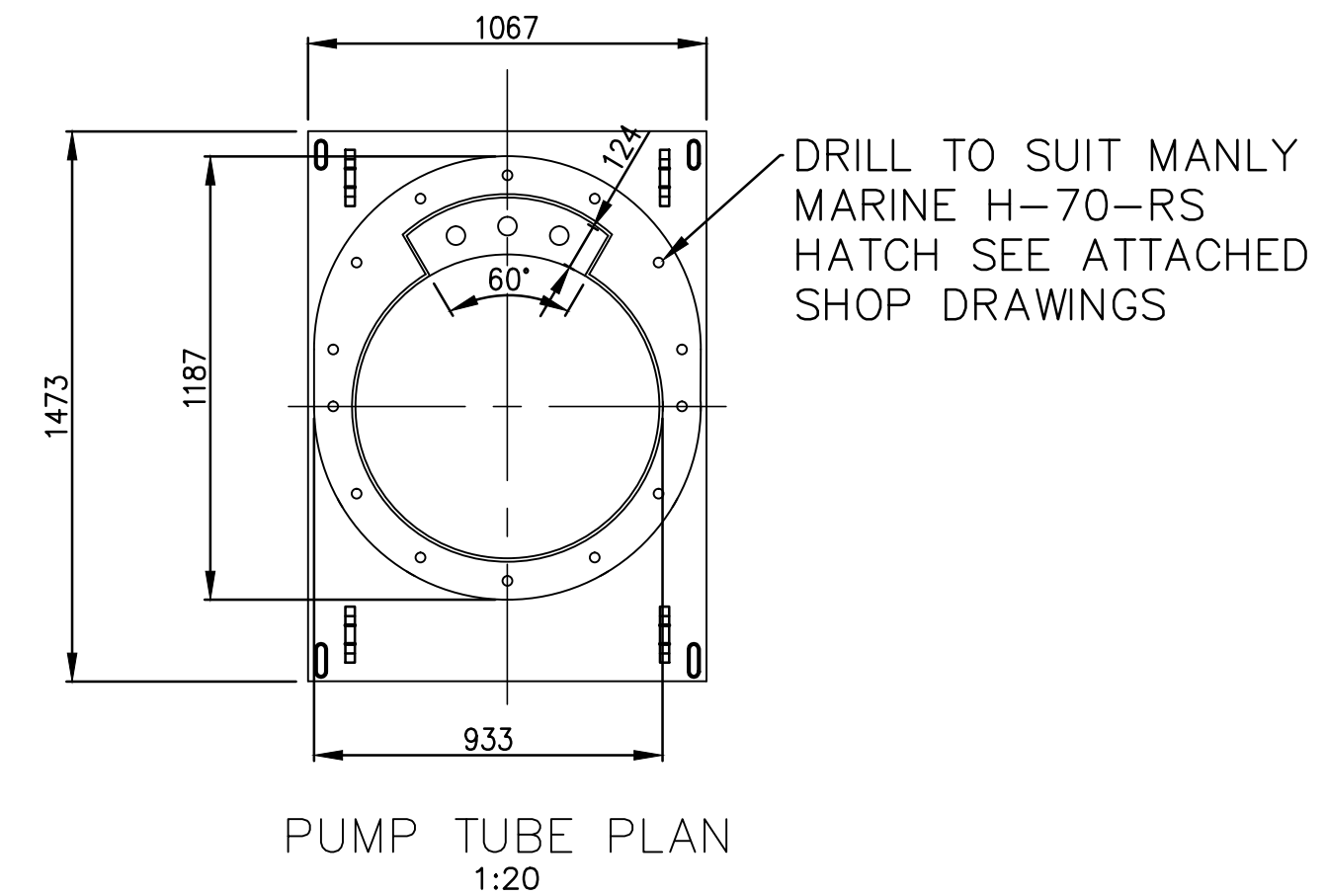
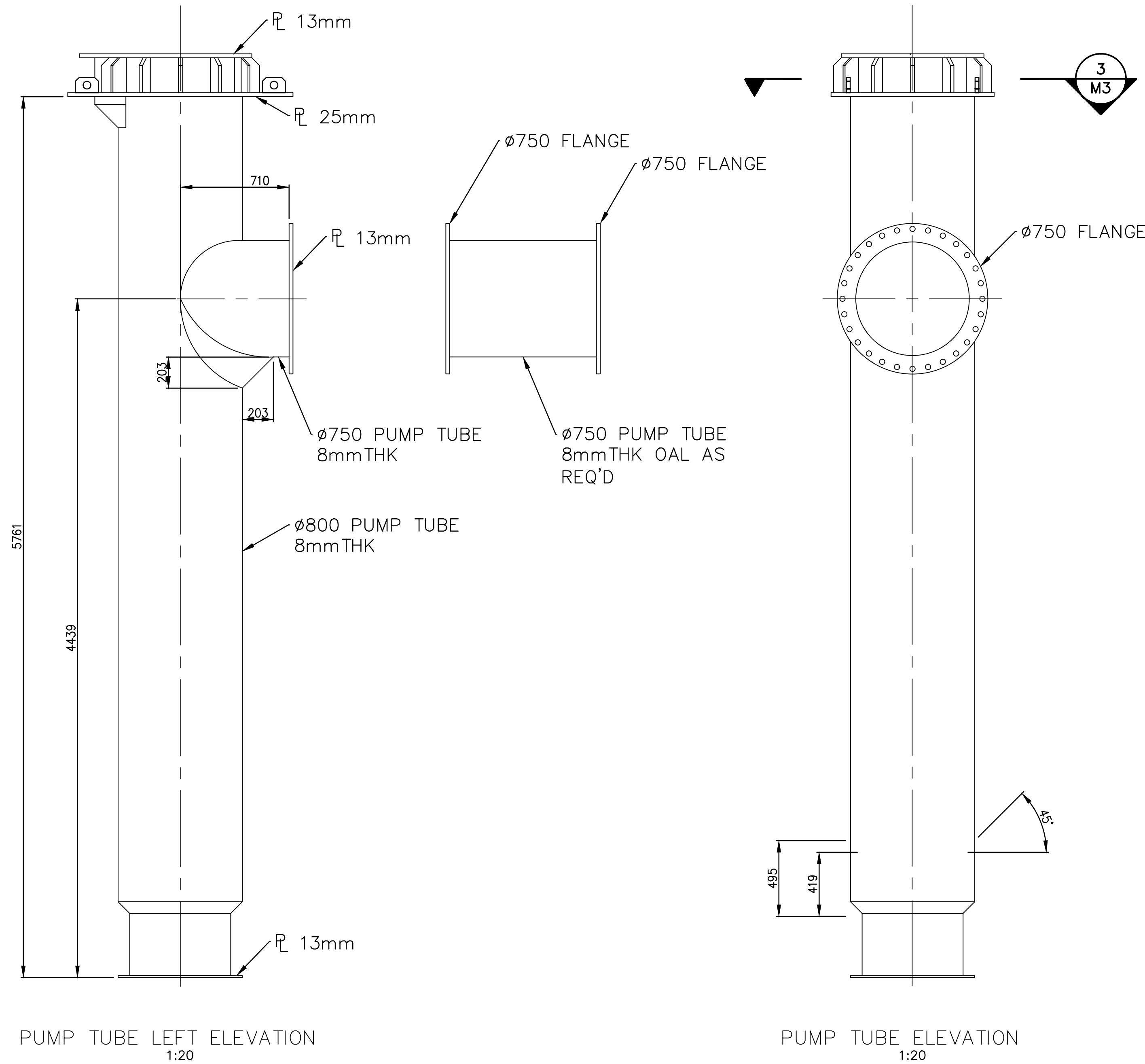
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**PART E – ATTACHMENT A**

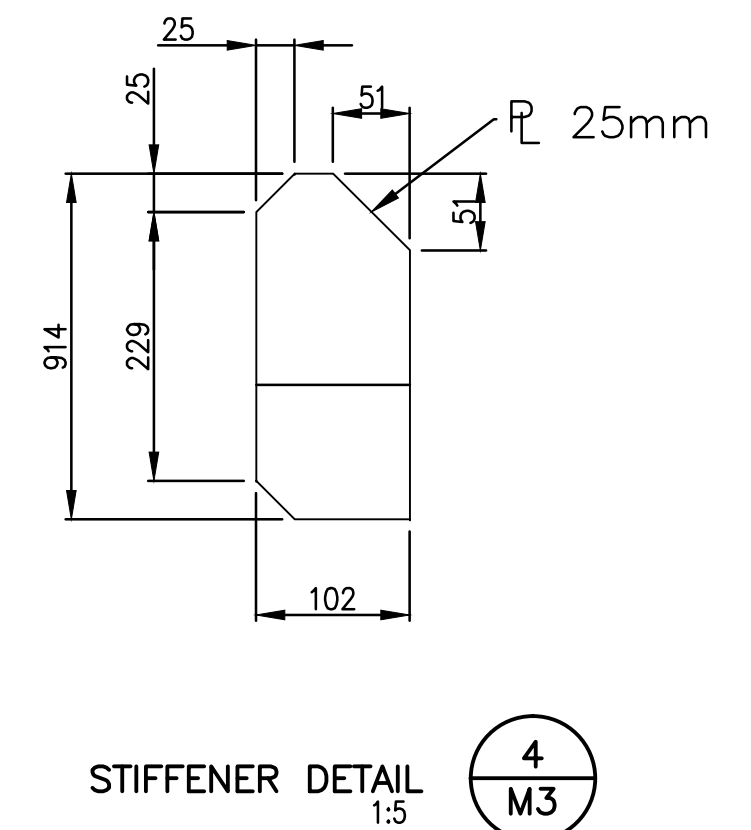
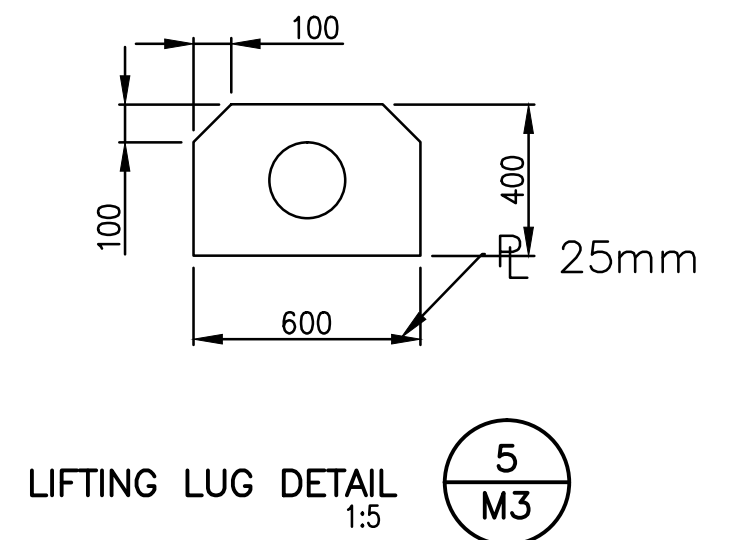
**Reference Drawings**

1. Drainage Pump Station Renovation No.1 Rd North – Pump Tube Elevations and Details DWG. No. LC-1194 SHT No. M3 of 3
2. Drainage Pump Station Renovation Williams Rd West – Pump Tube Details DWG. No. LC-1193 SHT No. C09 of 14

# Attachment A



**NOTES:**  
1) TOLERANCES ARE TO BE MET AS FOLLOWS:  $\pm 2mm$  FOR STEEL  
 $\pm 5mm$  FOR CONCRETE  
2) ALL PIPE TO BE CARBON STEEL



PUMP TUBE IS TO BE SUPPLIED BY CITY OF RICHMOND  
DRAWING IS FOR REFERENCE ONLY

**OPUS DAYTONKNIGHT**  
210 - 889 Harbourside Drive  
North Vancouver, BC North Vancouver Office  
V7P 3S1, CANADA 604-990-4800



**B.C. GAS SERVICES**

THE DEVELOPER OR CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXISTING LOCATION OF GAS SERVICE LINES, AND WHERE NECESSARY ARRANGE FOR THEIR RELOCATION IN ORDER TO FACILITATE INSTALLATION OF THE WORKS SHOWN ON THESE PLANS. A LIST OF SERVICE LINE LOCATIONS MAY BE OBTAINED FROM:

B.C. 1 CALL  
TELEPHONE 1-800-474-6886  
CELLULAR: \*6886

NOTE - B.C. GAS REQUIRES 10 DAYS NOTICE PRIOR TO THE COMMENCEMENT OF ANY WORK.

**BENCHMARK**

ALL ELEVATIONS ARE TO GEODETIC DATUM AND REFER TO RICHMOND BENCHMARK NUMBER: HPN #234 (MONUMENT 77H4891)

ELEVATION 1:125m (DATUM 2005) FIELD BOOK N°

CITY WORK ORDER N° TENDER / PROJECT N°  
CONTRACTOR WORK ORDER N° ACCOUNT N°

**REFERENCE DRAWINGS**

PROPERTY ACQUISITION	Aq	_____
SURVEY PLAN & PROFILE	PP	_____
ROAD CONSTRUCTION	Oc	_____
STORM SEWER INSTALLATION	Lc	_____
WATERMAIN INSTALLATION	Wc	_____
ORNAMENTAL STREET LIGHTING	Tc	_____
TRAFFIC SIGNALS	Ec	_____
SMANITARY SEWER INSTALLATION		_____
OTHER		_____

NOTE - PROVE LOCATION OF ALL UTILITIES / SERVICES BEFORE STARTING CONSTRUCTION.

N°	DATE	BY	CHK.	DESCRIPTION
B	28-JUN-2012	AIS	MM	ISSUED FOR TENDER
A	30-APR-2012	AIS	MM	ISSUED FOR CLIENT REVIEW
REVISIONS				

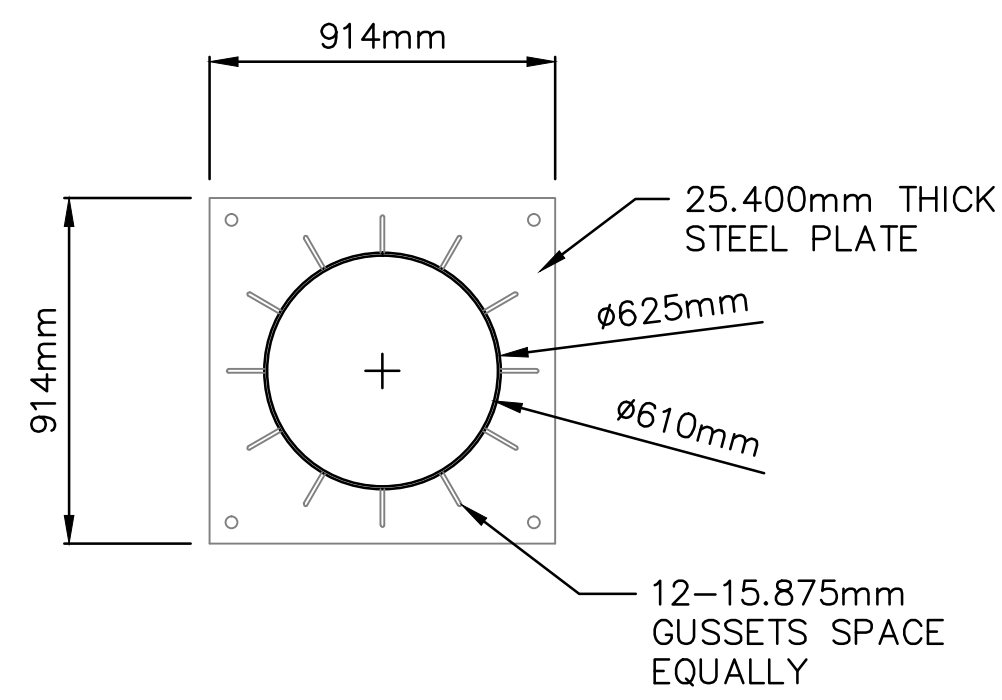
**City of Richmond**  
6911 No. 3 ROAD RICHMOND B.C. V6Y 2C1

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**DRAINAGE PUMP STATION RENOVATION  
NO. 1 ROAD NORTH  
PUMP TUBE ELEVATION AND DETAILS**

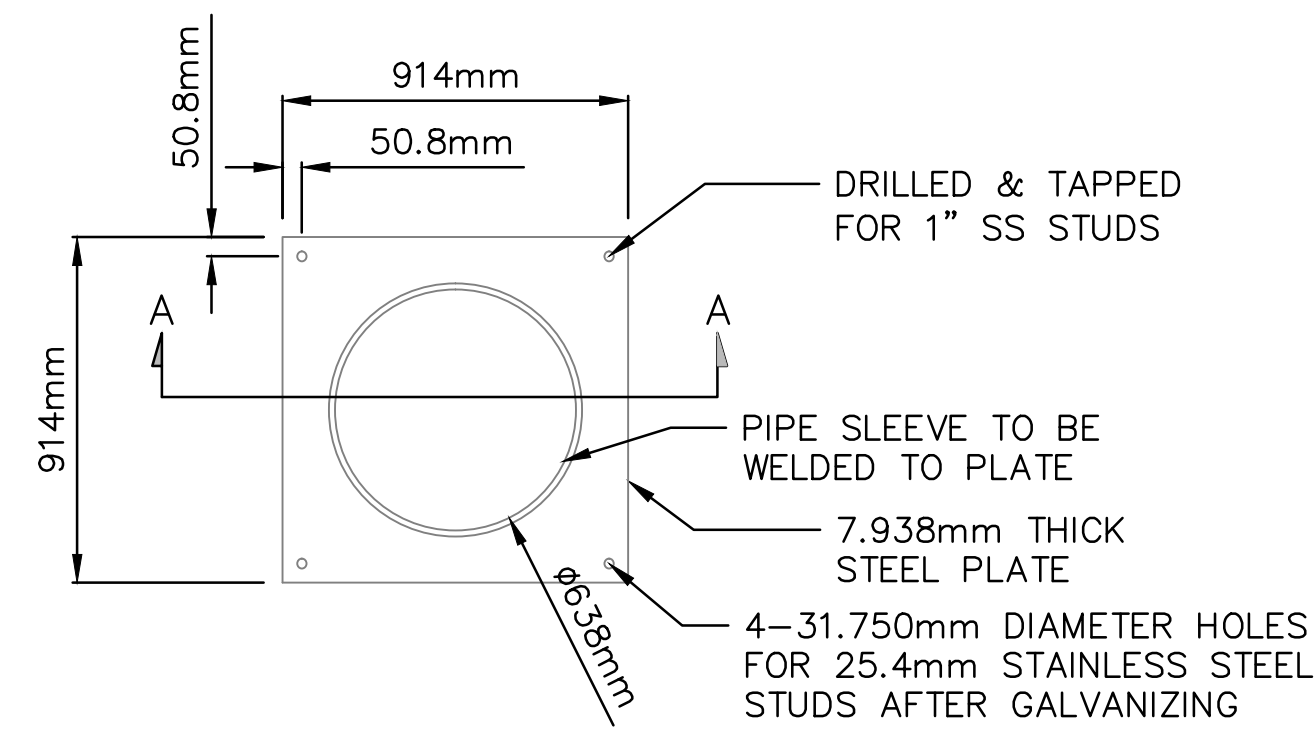
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DRAWN: MMc DWG. N°: **Lc-1194**  
CHECKED: MM SCALE: AS SHOWN DATE: APRIL 2012  
ENGINEER: GS SEC. N°: SEC. NO. SHT. N°: M3 OF 3

**M3**

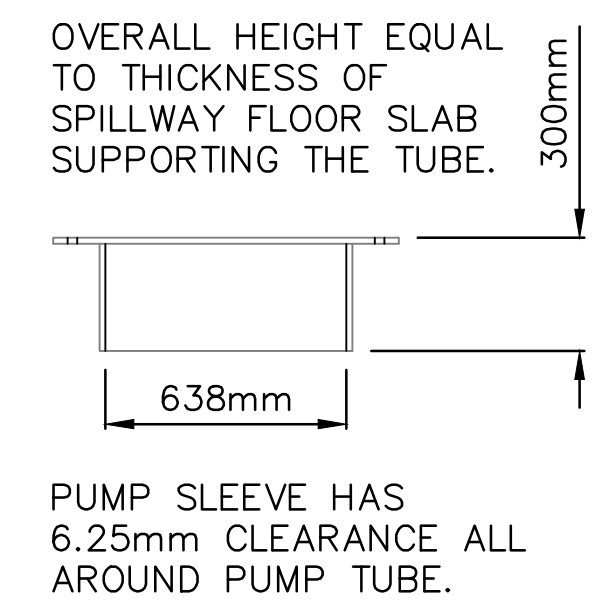
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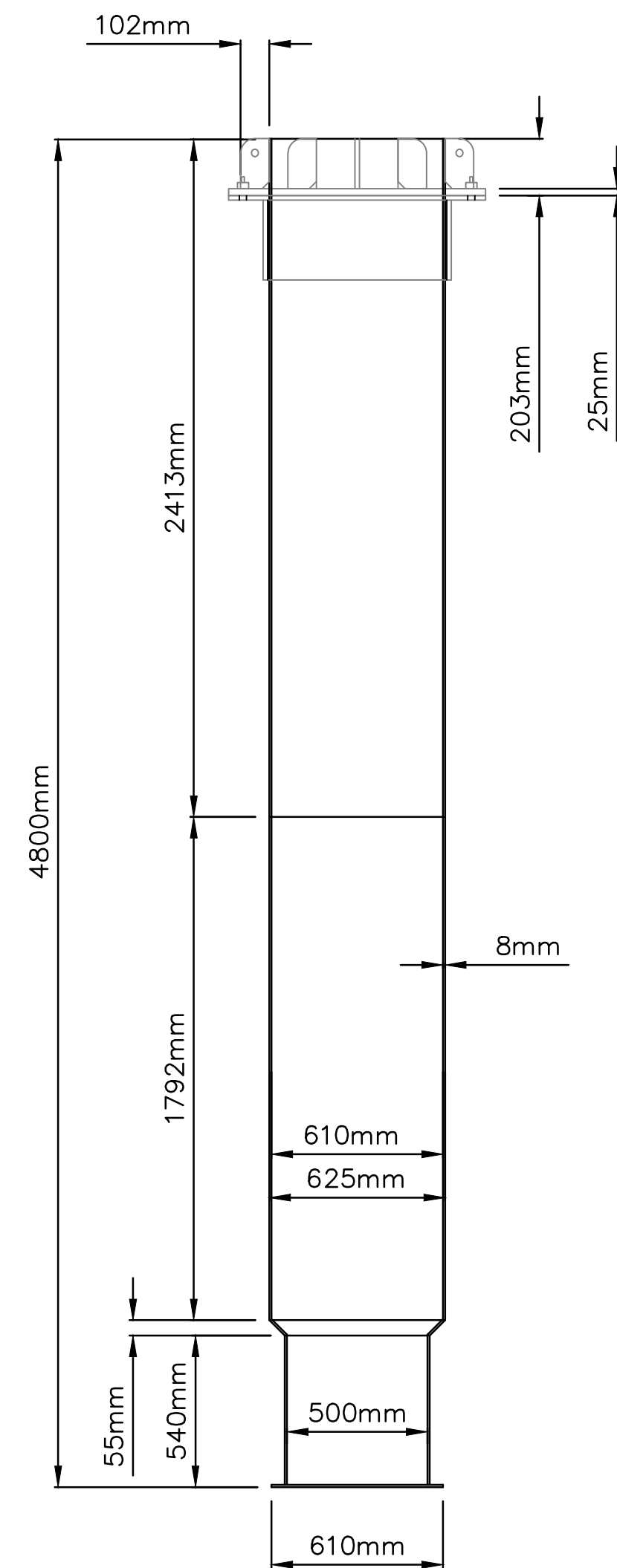
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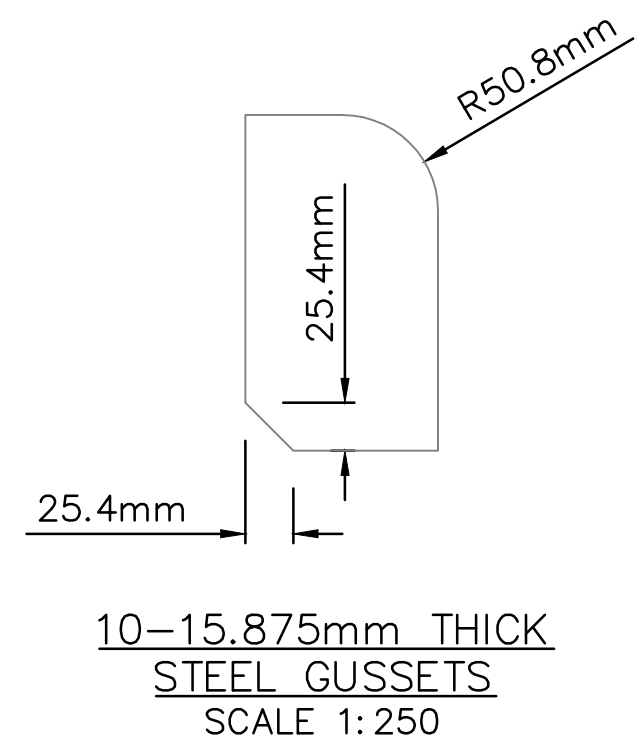
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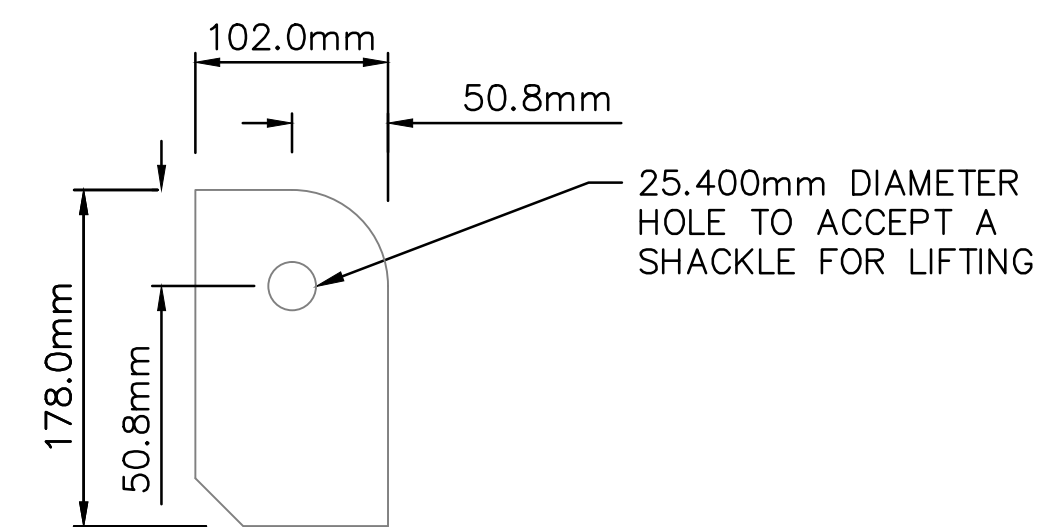
PUMP SLEEVE  
SECTION A-A  
SCALE 1:50



PUMP TUBE  
SCALE 1:50



10-15.875mm THICK  
STEEL GUSSETS  
SCALE 1:250



2-15.875mm THICK  
STEEL GUSSETS  
SCALE 1:250

**APLIN  
MARTIN**  
CONSULTANTS LTD  
201-12448 52 Avenue, Surrey, B.C. Canada V3W 3E9  
Tel: (604) 597-9058, Fax: (604) 597-0001, E-mail: general@aplinmartin.com

**City of Richmond**  
6911 No. 3 ROAD RICHMOND B.C. V6Y 2C1

TITLE:  
**DRAINAGE PUMP STATION RENOVATION  
WILLIAM ROAD WEST  
PUMP TUBE DETAILS**

DESIGN: \_\_\_\_\_  
DRAWN: \_\_\_\_\_ DWG. NO.: **LC-1193**  
CHECKED: \_\_\_\_\_ SCALE: **AS SHOWN** DATE: **FEBRUARY 2012**  
ENGINEER: \_\_\_\_\_ SEC. NO.: \_\_\_\_\_ SHT. NO.: **OF 14**

B.C. GAS SERVICES

THE DEVELOPER OR CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING EXISTING LOCATION OF GAS SERVICE LINES, AND WHERE NECESSARY ARRANGE FOR THEIR RELOCATION IN ORDER TO FACILITATE INSTALLATION OF THE WORKS SHOWN ON THESE PLANS. A LIST OF SERVICE LINE LOCATIONS MAY BE OBTAINED FROM:

B.C. 1 CALL  
TELEPHONE 1-800-474-6886  
CELLULAR: 46886

NOTE- B.C. GAS REQUIRES 10 DAYS NOTICE PRIOR TO THE COMMENCEMENT OF ANY WORK.

BENCHMARK

Elevations are derived from OCM 77H-4534, located at Williams Road about 40 feet from the dike, elevation = 1.471 meters, Geodetic Datum.

ELEVATION 1.471m FIELD BOOK NO. \_\_\_\_\_

CITY WORK ORDER NO. \_\_\_\_\_ TENDER / PROJECT NO. \_\_\_\_\_  
CONTRACTOR WORK ORDER NO. \_\_\_\_\_ ACCOUNT NO. \_\_\_\_\_

REFERENCE DRAWINGS

PROPERTY ACQUISITION	Aq	_____
SURVEY PLAN & PROFILE	Pp	_____
ROAD CONSTRUCTION	Oc	_____
STORM SEWER INSTALLATION	Lc	_____
WATERMAIN INSTALLATION	Wc	_____
ORNAMENTAL STREET LIGHTING	Tc	_____
TRAFFIC SIGNALS	Ec	_____
SANITARY SEWER INSTALLATION	_____	_____
OTHER	_____	_____

NOTE- PROVIDE LOCATION OF ALL UTILITIES / SERVICES BEFORE STARTING CONSTRUCTION.

NO	DATE	BY	CHK	DESCRIPTION
2	23 APR 2012	YTC	RJW	ISSUE FOR TENDER
1	31 JAN 2012	YTC	RJW	70% DESIGN SUBMISSION

REVISIONS