

**RM OF OAKVIEW**

**TENDER**

**COMMUNITY OF OAK RIVER  
WATER METER AND AUTOMATED METER READ  
SYSTEM INSTALLATION**

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### **Drawing**

**SPECIFICATIONS**

**The Manitoba Water Services Board**

**STANDARD CONSTRUCTION SPECIFICATIONS\***

March 2022

**\*Note: Refer to MWSB Website:**

**<http://www.gov.mb.ca/ia/mwsb/pubs/standard-construction-specifications.pdf>**

**for updates to these Specifications.**

**It is the responsibility of the holder of these Specifications to maintain the most recent update.**

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## INSTRUCTIONS TO BIDDERS

### 1. Project Information

- (a) The RM of Oakview is issuing this Request for Tenders for the following project:

**PROJECT NAME: Community of Oak River, Water Meter and Automated Meter Read System Installation**

- (b) The following is a brief description of the Work required for the project:

**The installation of approximately 90 residential and commercial water meters c/w integrated register and RF transmitter, and all related appurtenances located in the Community of Oak River, Manitoba.**

Details of the scope of Work required for the project are set out in the Project Specifications.

### 2. Project Specifications

- (a) All work shall conform to The MWSB Standard Construction Specifications, March 2022. Refer to M.W.S.B. website:

<http://www.gov.mb.ca/ia/mwsb/pubs/standard-construction-specifications.pdf>

### 3. Submission Deadline and Address

- (a) All bidders shall submit the completed tender form in an envelope marked on the outside with "Community of Oak River Water Meter Installation and Automated Meter Read System" to the RM of Oakview, Box 179, 10 Cochrane St, Oak River, MB, R0K 1T0, not later than October 20<sup>th</sup>, 2022 at **12:00** noon.

### 4. Inquiries

All inquiries with respect to the proposed work shall be directed to the Owner:

RM of Oakview  
Attention to: Marci Quane, Chief Administrative Officer  
Box 179  
10 Cochrane Street  
Oak River, MB R0K 1T0  
Phone: (204) 566-2146

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**5. Tender Form**

- (a) The Bidder must complete the Tender Form (using Form No. 3A), making all required entries.
- (b) No change shall be made in the wording of the Tender Form.
- (c) The Tender Form must be signed and dated by the Bidder. The name and official capacity of the person(s) signing the Tender Form must be printed below the signature(s).

**6. Schedule of Prices**

- (a) Bidders must complete the Schedule of Prices (using Form No. 3B) by showing:
  - (i) a unit price for each item for which a quantity is given;
  - (ii) a lump sum price for each lump sum item given; and
  - (iii) the total Tender price.
- (b) Prices shall be quoted in Canadian funds.
- (c) The unit or lump sum prices quoted shall be all inclusive, and shall include: (i) the cost of the various items of Work as set forth in the Contract; (ii) the cost to furnish all Material (except as otherwise provided in the Contract); (iii) the cost to furnish all Plant, labour, transportation and incidentals necessary for the proper completion of the Work which the Contractor is required to do in accordance with the terms and conditions of the Contract; and (iv) all insurance, Worker's Compensation, vacation pay, custom duties, excise taxes (except the Federal Goods and Services Tax (G.S.T.) and Provincial Sales Tax (P.S.T) and all other charges, costs and assessments. G.S.T. and P.S.T. shall be identified separately in the space provided in the Schedule of Prices.

**7. Acceptance of Tender**

- (a) The Owner reserves the right to reject any or all tenders, to waive defects, to accept any tender or to accept any offer which they may consider to be in the best interest of the Owner.

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**INSURANCE, PERFORMANCE SECURITY AND SAFETY REQUIREMENTS**

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The Bidder must provide the Owner with the documents as described herein, within five (5) calendar days after receiving the acceptance letter from the Owner:

**1. Insurance**

Insurance Requirements: Except as otherwise expressly provided in the Tender Documents, the Contractor shall, at the Contractor's expense, maintain the following insurance:

**(a) Wrap-Up Liability Insurance**

This policy shall provide for coverage against claims for personal injury, bodily injury or death, or damage to third party property as a result of the construction of the project, with minimum limits of coverage of \$2,000,000. (Two Million Dollars) per occurrence.

This policy shall be project specific (i.e. provide single project coverage), and provide coverage for the Contractor and all Subcontractors involved in the Work, as well as the RM of Oakview, the Engineer and its sub-consultants (if the Engineer is a third party consultant) and their officers, employees and agents.

This policy shall be endorsed as necessary to cover products; completed operations; contingent employer's liability, and including shoring, blasting, excavating, underpinning, demolition, pile driving and caisson work, work below ground surface, tunneling and grading, as applicable. The coverage shall also include cross liability, premises and operations, blanket contractual, extended bodily injury, broad form property damage and non-owned automobile liability.

**(b) Builders' Risk Insurance OR Installation Floater**

This policy shall provide for all risks coverage at full replacement cost for all property relating to the project for an amount not less than the total estimated construction cost of the project.

This policy shall remain in effect until ten (10) calendar days after Substantial Performance of the Work.

This policy shall be in the joint names of the Owner, the Contractor and all Subcontractors involved in the Work, and shall provide that, in the case of a loss or damage, payment shall be made to the Owner and the Contractor, as their respective interests may appear.

**(c) Automobile Liability Insurance**

This insurance shall provide coverage for automobile public liability and property damage on all licensed vehicles owned or operated by the Contractor, its Subcontractors, or any of their officers, employees or agents under the Contract and used in the performance of the Work, with minimum limits of coverage of \$2,000,000 (Two Million Dollars) per vehicle.

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(d) Contractor's Equipment Insurance

The Contractor is responsible for insuring construction machinery and equipment used by the Contractor in the performance of the Work.

Insurers: The policies required shall be underwritten by insurers acceptable to the Owner.

Period of Insurance: Unless otherwise stipulated, the policies shall be effective from the date of commencement of Work and shall be maintained until the day of issue of the Municipality's certification of Final Completion, and in the case of completed operations coverage and claims-made based policies for a period of at least twenty-four (24) months following completion of all Work under the Contract.

Notification: The insurance policies must include a provision that thirty (30) days prior written notice shall be given by the insurer to the Owner in the event of any material change in, cancellation of, expiration of coverage or amendment restricting coverage specific to the Contract.

Indemnification: The insurance coverage required shall in no way limit the Contractor's obligations under the Contract. Any additional coverage the Contractor may deem necessary to fulfill the Contractor's obligations under the Contract shall be at the Contractor's own discretion and expense.

Evidence of Insurance: The Bidder shall provide the Contracts Manager with Certificates of Insurance or certified copies of the Wrap-Up Liability, the Builders' Risk and the Automobile Liability policies as evidence of the required insurance.

2. Workers Compensation

Workers Compensation Board of Manitoba: The Contractor shall be registered with the Workers Compensation Board of Manitoba (even when such registration is not required by *The Worker's Compensation Act* (Manitoba)). The Contractor shall maintain such coverage in good standing throughout the term of the Contract.

Evidence of Workers Compensation Board Coverage: The Bidder shall provide a clearance letter from the Worker's Compensation Board of Manitoba as written evidence that the Bidder is registered and in good standing with the Workers Compensation Board of Manitoba. A clearance letter may be obtained online at the Worker's Compensation Board of Manitoba website at: <http://www.wcb.mb.ca/clearances>. The clearance letter must be dated no earlier than the issue date of the Tender.

3. Site Safety Plan

The Bidder shall prepare and submit a site safety plan that meets the requirements of *The Workplace Safety and Health Act*. This plan shall include but is not limited to all items listed below:

- (a) Hazard/Risk Assessment Practices and Procedures, including planned site safety inspections and accident/incident investigation procedures; and
- (b) Emergency Response Plan and Procedures.

**RM of OAK RIVER**

**TENDER FORM**

**Project Name**

**Community of Oak River Water Meter and Automated Meter Read System Installation**

**Submission Deadline**

Date: **October 20<sup>th</sup>, 2022**  
Time: Before 12:00 p.m. prevailing RM of Oakview time

**Bidder**

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

\_\_\_\_\_  
Street

\_\_\_\_\_  
City Province Postal Code

*(mailing address if different)*

\_\_\_\_\_  
Street or P.O. Box

\_\_\_\_\_  
City Province Postal Code

**Contact Person**

The Bidder hereby authorizes the following contact person to represent the Bidder for purposes of the Tender.

\_\_\_\_\_  
Contact Person Title

\_\_\_\_\_  
Telephone Number Facsimile Number

**Offer**

The Bidder hereby offers to perform the Work in accordance with the Contract for the price quoted by the Bidder, as set out in the Schedule of Prices.



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**Tender Documents** The Bidder agrees that the Tender Documents in their entirety shall be deemed to be incorporated in and shall form a part of this Tender notwithstanding that not all parts are necessarily attached to or accompany these Tender Documents.

**Time to Complete Work** In accordance with GC:10 of the General Conditions, the Bidder agrees to achieve Substantial Performance:

On or before: December 31<sup>st</sup>, 2022

**Liquidated Damages** The Bidder acknowledges and agrees that if it fails to achieve Substantial Performance in accordance with the dates specified in the Contract, the Bidder will be required to pay the RM of Oakview the following amounts per Working Day as liquidated damages for each and every Working Day which the failure continues:

Liquidated Damages: **\$500.00** per working day.

**Signatures**

In witness whereof the Bidder or the Bidder’s authorized official or officials have signed this \_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

\_\_\_\_\_(seal)  
Signature of Bidder or Bidder’s Authorized Official or Officials

\_\_\_\_\_  
(Print name and official capacity of individual whose signature appears above)

**ACCEPTANCE**

The RM of OAKVIEW hereby accepts the above Tender submitted by the Bidder,

\_\_\_\_\_ (hereinafter, called the “Contractor”) for  
(insert legal name of Bidder)

Project Name: **Community of Oak River Water Meter and Automated Meter Read System Installation**

Project Description: **The installation of approximately 90 residential and commercial water meters c/w integrated register and RF transmitter, and all related appurtenances located in the Community of Oak River, Manitoba.**

and agrees that such acceptance shall constitute the binding Contract between the RM of Oakview and the Contractor for the Work.

The RM of OAKVIEW hereby confirms that the Contract Price for the Work is:  
\$\_\_\_\_\_.

The RM of OAKVIEW authorizes the Contractor to commence the Work on: \_\_\_\_\_,  
20\_\_\_\_.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_.

**FOR THE RM of OAKVIEW:**

\_\_\_\_\_(seal)  
Signature

\_\_\_\_\_  
Print Name and Title



**PART 1**

**GENERAL**

**1.01  
DOCUMENTS**

In the event of conflict between these Special Provisions and the Drawings or the other sections of the Specifications, the Special Provisions shall govern.

The Contractor shall take note that The Manitoba Water Services Board **Standard Construction Specifications, March 2022** with reference made to specific Divisions and Sections outlined in the Table of Contents shall apply to and be part of this Section and part of the Contract Documents.

**1.02  
DESCRIPTION OF  
WORK**

The Contractor shall supply all labour, equipment and materials for the complete installation of residential and commercial water meters. The work shall include:

- Total co-ordination of the project including homeowner contacts and installation schedules
- Before and after photographs
- There are approximately 90 residential connections required in the Community of Oak River. The Contractor shall install the new owner supplied water meter c/w RF transmitter, encoder register, and new meter washers and new tail pieces, reducers and all required materials to complete the installation successfully.
- New ball valves shall only be installed in locations where the existing valves fail to operate properly.
- New gaskets shall be installed as required.

**1.03  
LOCATION OF  
WORK**

The successful Contractor will be given a map, list of addresses, and contact numbers in the Communities of Oak River that require water meter installations.

**1.04  
WORK SCHEDULE**

The Contractor is responsible to schedule and co-ordinate homeowner appointments in a systematic manner. The Contractor will be required to provide a project schedule and completion date that is within the allotted time given for the contract.

**1.05  
PUBLIC RELATIONS**

The Municipal water meter program must include good public relations from beginning to completion. The Contractor is responsible to keep the public well informed and provide ample advance notice of impending work. Public relations shall be conducted through written notices, publicity in the newspaper, and thoroughly trained installation crews.

**1.06  
QUANTITY  
REVISIONS**

The Owner reserves the right to increase or decrease the number of water meters. In the event that these rights are exercised, the Contract Unit Prices quoted on the Tender form shall remain unchanged. The total number of installed meters can

vary up to ± 15 installations.

**1.07  
EXISTING CODES**

The Contractor shall observe all Federal, Provincial and Municipal Regulations and By-Laws and Manitoba Plumbing Codes.

**PART 2**

**PRODUCTS**

**2.01  
GENERAL**

The Contractor shall supply all the materials required for the execution of this Contract except the water meters c/w tail pieces and RF transmitter which are to be supplied by the Owner. All materials supplied by the Contractor shall be new and free from defects. All products supplied for this contract shall conform to the MWSB Standard Construction Specifications and Listing of approved Products.

**2.02  
WATER METERS**

Residential and commercial water meters supplied by the Owner will be Neptune T-10 water meters with R900i encoder registers c/w tail pieces and RF Transmitter. The meters supplied will be positive displacement type residential meters conforming to the latest edition of A.W.W.A. Standard C700 for positive displacement type meters.

The Owner will also supply the water meter seal to the Contractor for installation.

**2.03  
COPPER TUBE  
AND FITTINGS**

Copper tube shall be Type M rigid in accordance with CSA HC7-6 and ASTM B88 and fittings (i.e., soldered connections, compression unions, threaded unions, transition fittings, etc.) shall be in compliance with the latest edition of the Manitoba Plumbing Code. Other non-ferrous, ferrous and non-metallic pipes and fittings shall only be acceptable for transition adapters in cases where the existing piping is not copper tubing and all shall comply with the requirements of the Manitoba Plumbing Code.

**2.04  
BUILDING  
SUPPLY VALVE**

The tender price for this item shall include the complete installation including all associated work required. Building supply valve shall be 19 mm valve as required (ball valve with brass body). End connections or adaptors to complete the installation of the Building Supply Valves are to be supplied by the Contractor to suit the existing service pipe.

**2.05  
RF TRANSMITTER  
OPERATION**

The Owner supplied RF transmitter shall be mounted according to the manufacturer's installation instructions. Read transmissions must be verified using the Municipality's handheld or Mobile/Drive-By receiver before installation is accepted. Labour to replace meter and RF Transmitter to become operational is Contractor's responsibility.

**PART3**

**EXECUTION**

**3.01  
GENERAL**

The Contractor shall execute the work under this Contract in accordance with the Specifications and to the satisfaction of the Owner and as required by all respective codes and regulations currently in effect.

**3.02  
PROJECT  
MANAGER** The Contractor shall appoint a project manager/supervisor who has experience with this type of work and who has authority to speak on project related issues. The project manager shall work in conjunction and in close cooperation with the **Municipal representative** appointed to supervise the meter installation work.

**3.03  
OPERATIONS** The Contractor will provide a local base of operation in order to maintain proper control of the project requirements and to maintain emergency maintenance measures throughout the operational period of this contract.

**3.04  
PROJECT  
PERSONNEL** The Contractor must conform to all applicable laws and regulations of the province. Noncompliance may result in termination of the contract. All technicians must be trained in the technical and procedural requirements of the work, as well as in public relations. Training must include safety training to meet applicable Manitoba Workplace Health and Safety requirements awareness.

The Contractor shall hire only persons who are technically competent and who are of acceptable character for the work that entails unsupervised entry into individual residences as technicians. The Owner reserves the right to conduct background checks on all the Contractor's personnel.

All Contractor personnel must wear a uniform with the company's logo on it. The Contractor shall provide each installer with means of identification consisting of a photo identification card with the Contractor's company logo.

No installer shall enter a residence without the permission of an adult (18 years or older). The installer shall not perform any work in the residence other than that necessary to complete the meter installation. Solicitation for any other work, even if plumbing related, will result in immediate termination of the Contractor.

**3.05  
CUSTOMER LISTS** In conjunction with the start work order, the Owner will provide the Contractor (in an electronic format - excel) the following:

- Service address with postal code separated by column (i.e. unit #, street number, street name, town, province, postal code).
- Note: this is the physical address where the meter is to be installed.
- Account number
- Tenant (occupant) name
- Tenant (occupant) phone number
- Owner address with postal code separated by column (i.e. unit #, street number, street name, town, province, postal code).
- Owner name
- Owner phone number

**3.06  
OWNER LETTER  
TO CUSTOMER** In order to expedite the installation of meters and to generate and maintain goodwill among residents, the Owner will send out a letter to all customers impacted, introducing the program and the Contractor to the Customers. This letter must be sent out by the Municipality prior to the start of the meter installations.

After this introductory letter, the Contractor shall assume full responsibility of

customer notification and arrangement of appointments. The Owner must review and approve all letters and notifications to the public prior to distribution by the Contractor.

**3.07  
CONTRACTOR  
CUSTOMER  
NOTIFICATION**

In order to notify the customer and to secure appointments with homeowners, the Contractor is required to make three documented contacts with each customer (if necessary) using any combination of the following approaches:

- Deliver letters to the premise owners introducing the company and explaining what is involved in meter installation including a clear indication that the water will be shut off to accomplish the installation. The letter shall invite the homeowner to call the company and make an installation appointment. Also included shall be an emergency repair and maintenance number.
- Send installation crews out to the areas to conduct installations. At the same time, the crews attempt to call on premises that did not call in to make appointments. A door knocker is to be left at each residence where face to face contact is not made.

In lieu of installation crews, canvassers can also be used to fulfill the above contact.

- Call premise owners and make appointments.
- Reminder notices and/or Final Notice letter(s) can also be sent directly to homeowners and/or tenants whom are unresponsive. The letter should clearly state that the Contractor has been unsuccessful in their attempts to contact them and should instruct the premise owners to phone and book an appointment within a two week time span.

Using any combination of the contact methods detailed above (excluding the Municipalities initial contact letter), the Contractor is contractually required to make a total of three documented attempts per account to attempt to book an appointment. The Contractor is responsible for all costs associated with the above contact requirements with the exception of the initial letter from the Owner.

**3.08  
ALL CONTACTS  
COMPLETED/  
RETURNED TO  
OWNER**

In the event that the homeowner fails to respond to the three contacts (unresponsive customer), the Contractor will advise to the Owner that the installation could not be completed. The Contractor shall provide a report at each progress meeting to identify these accounts to the Owner. At this point, the Contractor will have fulfilled its contractual obligation with that account (refer to the Completion Rate definition noted below). If the Owner manages to secure an appointment during the operational / installation phase of the contract, the Contractor will be required to fulfill the appointment (In accordance with the unit prices in the Form of Tender). The Owner will provide the Contractor with any Owner booked appointments on an on-going and timely basis (i.e. not held out until the end of the project). If the Owner manages to arrange an appointment

during the operational phase of the contract, the Contractor will perform the installation (in accordance with the unit prices in the Form of Tender).

At no time and under no circumstances, is the Contractor or any of his/her employees authorized to threaten a customer in any manner whatsoever including threats of legal action, fines, penalties or water supply termination for refusing to co-operate with the Installation Program.

**3.09  
WORKING HOURS**

The work shall take place during the hours of 8:00 AM to 8:00 PM, Monday through Friday and 8:00 AM to 5:00 PM on Saturdays to facilitate completion of the project, and to provide maximum flexibility to the Municipality's customers. Appointments outside these hours may be scheduled if necessary to facilitate completion of the project, after consultation and approval by the Owner.

Appointments should be offered to homeowners in four hour windows / blocks – 8:00am to noon (morning), noon to 4pm (afternoon) or 4pm to 8pm (evening). Customers, in many cases, will be making special concessions to be present at the appointed time. It is the installer's duty to be punctual and considerate of the customer's time schedule. In the event the appointment time cannot be met, the Contractor shall notify the customer and/or reschedule another appointment.

**3.10  
PLUMBING**

All installations and material shall conform to the current edition of the Manitoba Plumbing Code and be in accordance with the manufacturer's published installation instructions. In the event of conflicts, the Plumbing Code shall prevail. The Contractor is advised that he/she may encounter various existing plumbing pipe materials in the residences. All plumbing materials removed as a result of the meter installation are the property of the RM of Oakview and shall be disposed of by the Contractor at an approved disposal site.

**3.11  
CORRODED  
PLUMBING**

If the service is too corroded, is not accessible to permit a meter installation, requires complete replacement, or is deteriorated to such an extent that major replacement is necessary, and thereby prohibits a meter installation, the Contractor shall notify the premise owner that the necessary improvements should be carried out and that they should arrange to have the required work done. The Contractor shall ensure that the premise owner understands that the repairs are to be done at the premise owner's expense.

With respect to any existing building supply valve, should a leak develop when used in the normal course of operation, the Contractor will not be held responsible for the cost to replace this valve. In these situations, costs will be covered be in accordance with the unit prices in the Schedule of prices.

At regular progress meetings, the Contractor shall provide the Owner with a report outlining these accounts. At this time these accounts will be returned to the Owner. No attempts shall be made by the Contractor to install a meter at any such address until he receives notification from the Owner that the required work has been completed.

**3.12  
DIFFICULT**

If, in the Contractors opinion, the condition of the customer's service plumbing, or the extent of the interior finishing at the service inlet, is such that significant



**INSTALLATIONS**

damage or difficulty would result from attempting to install the new meter, the Contractor shall inform the Municipal representative so that the situation may be assessed and shall not commence installation unless directed to do so by the Municipal representative. If the Municipal representative advises the Contractor to proceed, the work required to complete the installation will be paid for in accordance with the unit prices in the Schedule of Prices.

**3.13  
PLUMBING  
MODIFICATIONS**

The work shall include plumbing and modifications where required to install the meter beyond the typical meter installation:

- a) 1 – 4 additional fittings – The price in the schedule of prices shall include the supply and installation of an additional 1-4 fitting to complete the typical meter installation.
- b) 5 – 8 additional fittings – The price in the schedule of prices shall include the supply and installation of an additional 5-8 fitting to complete the typical meter installation.

The work shall include major plumbing modifications where required to install the meter beyond the typical meter installation:

- a) Major Plumbing – The price for the work shall be charged at an hourly rate with 15-minute intervals and include the supply and installation of an additional 9 or more fittings to complete the typical meter installation.

**3.14  
CARPENTRY  
MODIFICATION**

The work shall include carpentry modifications where required to install the meter and/or replacing the building supply valve. The price shall include neatly cutting open walls/gyproc/studs to complete the installation of the meter and/or replacing the building supply valve. The Contractor is not responsible to refurbish the neatly cut out area of the work.

**3.15  
LINE FREEZING**

The Contractor shall perform water service line freezing on service connections that have each of the following, inoperable curb stop and a faulty building supply valve. The work shall include all equipment, supplies and labour required to complete the line freezing for each associated service line.

**3.16  
INCOMPLETE  
SITUATIONS**

Other reasons, which may prohibit a meter installation, may include but not limited to:

- i) Premise owner refusal or unresponsive
- ii) Vacant premise
- iii) Plumbing is inaccessible
- iv) Curb stop is inoperable (freezing of service is not possible)
- v) Meter location subject to freezing

If any of the preceding situations are encountered, which prohibit the Contractor from proceeding with the meter installation, the Contractor will provide the Owner with a report detailing these accounts (provided at progress meetings). This notice will outline why a meter was not put in and what corrective action needs to occur to facilitate a meter installation. At this time these accounts will be returned to the Owner. No attempts shall be made by the Contractor to install a meter at any such address until he receives notification from the Owner that the required work has been completed.

**3.17  
INSTALLATION  
RECORDS**

The Contractor will be responsible for documenting proper records of all meter installations. The Contractor is responsible for costs associated with producing this installation form. The installation data must be provided to the Owner at regular intervals in an electronic format (Excel). The Contractor shall complete an installation form for each meter installation including the following:

- a. Installation date
- b. Item/service description
- c. Area/Ward (if applicable)
- d. Account number
- e. Work Order Number (if applicable)
- f. Address (number, street name)
- g. Customer Name (if available)
- h. New Meter Information including meter serial number, meter location, meter size, meter type, unit of measure, remote type, remote location, remote identification number
- i. Recording existing water meter information as above, and readings, (if any) and submitting information to the Owner.

**3.18  
PHOTOGRAPHS**

The Contractor is required to take one “before” and one “after” photograph for all meter installations. Photographs will be provided to the RM at the end of the project on a flash drive labeled by address.

**3.19  
INSTALLATION  
WARRANTY**

The Contractor shall warrant their work for a period of 1 year as per Special Provisions 3.30. The warranty shall only apply to work performed by the Contractor. Installation warranty includes leaks from fittings installed by the Contractor. The Contractor will be responsible for "damage" caused by their negligence. In the event "damage" is caused by age of plumbing (e.g. thin/aged copper service, faulty existing infrastructure, inoperable fitting, etc) or a latent defect, the Contractor will not be held responsible and corrections will not be billable to the Contractor.

**3.20  
EMERGENCY AND  
MAINTENANCE  
RESPONSE**

The Contractor shall provide an emergency repair service for those properties in which he has installed meters. A contact number for emergencies shall be included in the Contractors’ informational material.

The Contractor shall repair any leaks or other defects caused by the installation work within 5 days for non-emergencies. Emergency cases will be treated on a case-by-case basis but the Contractor will undertake to have technician and equipment on site within two hours of notification of a problem.

**3.21  
DISCONNECTION  
AND  
RECONNECTION OF  
GROUND WIRE**

The Contractor shall not tamper with any electrical ground wires found connected to the service pipes before the meter. In cases where the ground wires interfere with the Contractor's proposed work or the ground wire is on the household side of the meter, the Contractor shall have the wire disconnected and reconnected by qualified personnel in accordance with all electrical regulations in force. The Contractor shall make use of a jumper wire when cutting copper pipe to install meter, to ensure that grounding continuity is not compromised.

**3.22  
METER  
INSTALLATION**

The work will include the installation of the meter and the mounting and connection of the external sensing device. Meter couplings, tail pieces, reducers, remote wire, wire and seal wire are included in a standard installation.

Prior to the installation, the Contractor shall inspect the existing plumbing and valve. If the existing valve is found to be inoperable or faulty, the Contractor is required to replace the valve (paid for under the appropriate item in the Form of Tender). Building Supply Valve shall be installed upstream of the meter, where required.

A normal meter installation is one where there is an adequate length of pipe available to install the meter according to AWWA standards. All couplings, reducing couplings and transition couplings will be considered incidental to all meter installation. Additional work outside a normal installation will be performed at the unit price in the Pricing Schedule. Where additional work is required, the Owner may request to view the before and after photographs to validate/audit the Contractor's work.

The Contractor shall record the reading on existing water meter prior to removal. The final reading and old water meter shall be returned to the Owner.

The meter shall be located as near as possible to the building shut-off valve, with no other connection between the incoming shut-off valve and the meter. No by-pass connection shall be installed across the meter, with the exception of commercial water meter installations.

Lead free solder shall be used for soldered joints. Threaded joints may be sealed with a suitable plumbing compound or with Teflon Tape. If Teflon tape is used, it shall not extend beyond the inserted end of the male fitting. The Contractor must install a bonding jumping wire around the meter assembly using number 2 copper wire.

**3.23  
METER  
INSTALLATION  
TESTING**

After the installation is complete, the installer shall open all valves. Water shall be run through the meter to make sure that the meter register functions properly and to test the meter installation for leakage. The installer shall also ensure that the meter has not been installed backwards. The installation shall be checked according to the manufacturer's instructions. Any leaks related to the installation shall be corrected immediately.

Once the plumbing system is fully charged and there are no apparent leaks associated with the meter installation, the installer shall observe the low flow indicator on the meter. In the event of flow indications, the installer shall in

consultation with the premise occupier, determine whether open or known leaking fixtures located elsewhere in the premise may be causing the flow through the meter.

If source of flow is not readily apparent after consultation with the premise occupier, the installer shall inform the occupier that the plumbing system will need further investigation by the occupier if he/she wishes to eliminate any wasteful flow that may be occurring. The installer is to note on the installation sheet and to notify the Owner that the meter is registering unaccountable flow.

**3.24  
RF TRANSMITTER  
TESTING**

The RF transmitter shall also be tested for continuity in accordance with the manufacturer's instructions and rendered fully operational at the time of installation.

An installation is deemed successfully complete when the technician who performed the installation has captured a meter read (a valid meter reading and ID is obtained through the radio meter interface assembly) from at the meter site as well as from outside of the residence at street level (i.e. check read). The new meter reading will be documented on the work order as proof of operation. Each installation is to be tested immediately after installation. The installer must immediately correct any defects observed during the testing procedures to minimize the need of returning to the site at a later date to correct equipment and installation deficiencies.

**3.25  
SEALING THE  
METER**

Water meters shall be sealed by the Contractor as follows: The standard bare seal wire shall be threaded through the double hole in the connection nut run up through this meter head and back through the connection nut. The two wire ends shall then be joined by the seal, provided by the municipality, rendering the meter installation tamper-proof.

**3.26  
INOPERABLE  
BUILDING SUPPLY  
VALVE – CURB  
STOP OPERATIONS**

If the building supply valve is deemed to be inoperable, the Contractor may contact the municipality to shut off the water at the curb stop prior to commencing work on that customer's meter.

The Contractor shall confirm the shut-off by operating an internal plumbing fixture prior to proceeding with the meter installation. Upon completion of the meter installation the Contractor shall turn on the service at the interior shutoff valve and confirm full valve opening by once again operating an internal plumbing fixture. Prior to the Contractor commencing work, the Municipal staff will attempt to locate all known existing service curb stops and ensure that they are in proper working operation. Repairs to curb stops will be the responsibility of the Municipality.

If the Owner cannot locate the curb stop, or if the curb stop does not operate properly, an Owner representative shall take appropriate remedial action. If an address is encountered where both the building supply valve is inoperable and the curb-stop is inoperable and/or inaccessible, partial payment **will not be** applied to delays caused by curb stops being located, repaired, or installed by the municipality. Contractor shall reschedule installation for a later date as when the repairs have been made.

**3.27  
PROGRESS  
MEETING**

On a day determined by both the Contractor and the Owner, a job progress meeting will be held (usually bi-weekly). At this time, the Contractor and the Owner will discuss production, project schedule, and review any special installations or outstanding items that require approvals, etc. The Owner will commit to timely responses to issues that have an impact on overall project timeline.

At predetermined intervals (bi-weekly or monthly), the Contractor shall provide the Owner with the following reports (electronic, excel):

- A list of completed installations (inclusive of the Installation Record data noted above);
- A list of accounts where all required contact attempts have been completed (these accounts will be handed back to the Municipality); and
- A list of accounts returned to the Owner for reasons such as customer refusals, curb stop issues, etc.

Note: the data provided in the above reports should be based on work/activity that has taken place since the previous reports were provided.

**3.28  
INSPECTION –  
QUALITY  
ASSURANCE**

It is expected that the Contractor will have the Project Manager/Supervisor conduct inspections throughout the duration of the contract. The Owner also reserves the right to carry out inspections on a random basis.

**3.29  
FINAL SYSTEM  
INTEGRITY CHECK  
FOR RF PROJECTS**

At the end of the installation phase, the Contractor is responsible for reading the entire system using a mobile data collector, supplied by the Municipality for use by the Contractor.

Deficiencies are the responsibility of the Contractor to correct. The Owner expects a read success rate of 99.5% prior to the Owner assuming the new system. This rate must be achieved over “one pass” (i.e. without the needs to re-read streets to collected missed accounts).

**3.30  
WARRANTY**

The Contractor shall replace or repair at his expense any faulty material or workmanship which occurs within a one-year period from the date the Certificate of Substantial Completion is issued.

**PART 1**

**GENERAL**

**1.01  
OTHER CONTRACT  
DOCUMENTS**

The General Conditions of the Contract and the other General requirements of Division 1 attached hereto shall apply to, and be part of, this Section.

**1.02  
ITEMS COVERED BY  
CONTRACT PRICES**

In addition to covering the cost of the various of items of work for which the Contract Unit Prices and Contract Lump Sum Prices are set forth in the Contract, the Contract Prices so set forth shall be held to cover and shall cover the cost of furnishing all materials, plant, tools, equipment, labour, services, transportation and incidentals necessary for executing the work required of the Contractor under the terms of the Contract, Plans and Specifications, and the observing, performing and keeping of all the terms, covenants and conditions of the Contract all of which shall be observed, performed and kept by the Contractor. Any item of work not specifically listed under Contract Unit or Lump Sum Prices shall be considered incidental to such other items as are listed.

**1.03  
WATER METER  
PACKAGE C/W TAIL  
PIECES**

1) METHOD OF MEASUREMENT - Measurement of each size of “Water Meter Package c/w Tail Pieces” as described in Section 01001, Special Provisions shall be based on the actual number of water meters of each size acceptably installed. The installation of the Owner supplied water meter, tail pieces, encoder register, RF transmitter, #2 jumping strap and meter seal, and the supply and installation of all required coupling nuts, copper pipe, couplings, reducing couplings, transition couplings, lead free solder, sealing the meter, water meter and RF Testing, before and after pictures, installation records and recording the final meter reading from the old water meter shall be considered incidental to the work.

2) BASIS OF PAYMENT - Payment for each size of “Water Meter Package c/w Tail Pieces” shall be at the Contract Unit Price for each size as specified herein, which shall be payment in full for those operations incidental to the work for which no price or provisions for payment are included in this Contract.

**1.04  
REPLACE BUILDING  
SUPPLY VALVE**

1) METHOD OF MEASUREMENT – Measurement of each size of “Building Supply Valve” as described in Section 01001, Special Provisions shall be based on the actual number of building supply valves of each size supplied and acceptably installed. The installation of the building supply valve includes the necessary copper pipe, fittings, couplings, reducer transition couplings, and lead free solder, curb stop operation (by owner) all of which shall be considered incidental to the work.

2) BASIS OF PAYMENT – Payment for each size of “Building Supply Valve” shall be at the Contract Unit Price for each size as specified herein for which payment shall be in full including those operations considered incidental to the work for which no price or provisions for payment are included in this Contract.

**1.05  
CARPENTRY  
MODIFICATIONS**

1) METHOD OF MEASUREMENT – Measurement for each “Carpentry Modifications” described in Section 01001, Special Provisions, and shown on the Plans shall be on a unit basis.

2) BASIS OF PAYMENT – Payment for each “Carpentry Modification” shall be at the unit price for each “Carpentry Modification” completed as specified herein, which shall be payment in full neatly cutting open walls/gypoc/studs to complete the installation of the meter and/or replacing the building supply valve required beyond the typical meter installation and for those materials and operations described in these specifications and for those operations incidental to the work for which no price or prices or provisions for payment are included in the Contract.

**1.06  
PLUMBING  
MODIFICATIONS**

1) METHOD OF MEASUREMENT – Measurement for each “Plumbing Modification” described in Section 01001, Special Provisions, and shown on the Plans shall be on a unit basis.

2) BASIS OF PAYMENT – Payment for each “Plumbing Modification” shall be at the unit price for each “Plumbing Modification” supplied and installed as specified herein, which shall be payment in full for the number of fittings required beyond the typical meter installation and for those materials and operations described in these specifications and for those operations incidental to the work for which no price or prices or provisions for payment are included in the Contract.

**1.07  
LINE FREEZING**

1) METHOD OF MEASUREMENT – Measurement for each “Line Freezing” described in Section 01001, Special Provisions, and shown on the Plans shall be on a unit basis.

2) BASIS OF PAYMENT – Payment for each “Line Freezing” shall be at the unit price for each “Line Freezing” supplied and installed as specified herein, which shall be payment in full for those materials and operations described in these specifications and for those operations incidental to the work for which no price or prices or provisions for payment are included in the Contract.