



PURCHASING SECTION
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ADDENDUM #2

INVITATION TO TENDER (ITT) NO.: 1220-020-2017-004
TITLE: WATER METER INSTALLATION,
MAINTENANCE, AND TESTING
PROGRAM (MS-1217-002-11)
ADDENDUM ISSUE DATE: July 24, 2017
TENDER CLOSING TIME: 2:00 PM LOCAL TIME
****NEW** TENDER CLOSING DATE:** MONDAY JULY 31, 2017

INFORMATION FOR TENDERERS

This Addendum is issued to provide additional information to the Tenderers for the above named project, to the extent referenced and shall become a part thereof. No consideration will be allowed for extras due to the Tenderer not being familiar with this Addendum. This Addendum No. 2 contains six (6) pages in total.

1. QUESTIONS AND ANSWERS:

- Q1. We are wondering how the “Sudden and Accidental Pollution” insurance coverage requirement applies to the installation of water meters. Is there further documentation that the City can provide so that there is a better understanding of what this insurance is for. Is there another document that has the details on this coverage that is being asked for?
- A1. The “Sudden and Accidental Pollution” insurance coverage is required on all City of Surrey capital projects.
- Q2. Please advise if water meters, fittings, setter, re-setter, etc. need to be NSF 61 compliant.
- A2. Yes, water meters, fittings, setters, and re-setters shall be NSF 61 compliant.
- Q3. We are requesting that the City of Surrey accept the Ford 80 Series Coppersetter – (VBB83W-44-33-NL style) as an approved equivalent (see attached spec document). It meets all of the specification requirements identified in the Tender (NSF-61, angle ball valve inlet, full port valve outlet). The only difference is the compression fitting connections at the base of the setter are oriented vertically rather than horizontal; which facilitates the height of the setter to be adjusted based on the existing service line depth.

A3. Ford 80 Series Coppersetter Model VBB83W-44-33-NL-FP is an acceptable product for 19 mm diameter Voluntary and ICI water meter installations. Note that full port inlet and outlet ball valves are required. The proposed setter model shall be reflected in the Implementation Plan identified in SGCP 4.17.1, specifically part e).

Q4. Sensus Radio Installations. It is our understanding that these units require programming during each installation in order for the unit to function. Is programming of each unit the responsibility of the successful installation Contractor? If so, will a Sensus programming unit(s) be made available from the City to the successful Contractor at no cost?

A4. Yes, the Contractor will be responsible for programming Sensus radios. If required, the City will provide the Contractor with a loaner Sensus device, at no charge, to conduct such programming.

Q5. Register Reprogramming. A reprogramming unit for registers is typically unique to each manufacturer. Can the City provide this equipment (if needed) at no charge to the successful vendor?

A5. See response to Question 4.

Q6. For the past 5 years, can the City provide annual quantity information for New Housing (mandatory) and for the Voluntary meter installations?

A6. The tables below provide monthly Voluntary and Mandatory (New Construction) meter counts since 2015.

Voluntary Meter Installations													
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
2015	78	98	161	140	93	129	153	119	142	101	81	41	1,336
2016	29	80	131	156	119	132	145	125	57	57	35	12	1,078
2017	45	31	127	72	119	111	37						

Mandatory (New Construction) Meter Installations													
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
2015	58	42	80	56	34	65	87	82	91	79	77	116	867
2016	78	72	61	70	112	62	63	87	62	48	80	32	827
2017	60	36	59	58	54	78	37						

Q7. In the Water Meter Supplementary Specifications on Page SS-1, in Item 1.1.1 the table of acceptable meters identifies the Sensus iPERL for 25mm and smaller sizes.

Item 1.1.2 then specifies that all meters 25mm and smaller shall meet appropriate AWWA Standards.

The Sensus iPERL is a solid state Electromagnetic Type Water Meter, that measures water velocity, and there is no AWWA Standard that exists today that covers Electromagnetic Type Water Meters.

If the City requires a solid state (non-mechanical) 25mm or smaller water meter that meets an AWWA Standard, then Honeywell has such a water meter. The Honeywell SM700 is a solid state non mechanical water meter that measures water VOLUMETRICALLY, using a measuring principal called Fluidic Oscillation. Fluidic Oscillator water meters have been used commercially since the 1960's. Within the last 10 to 15 years, advances in electronics and battery technology have made fluidic oscillator meters commercially feasible for residential water use measurement. On June 1, 2005

the AWWA released AWWA Standard C713 – Cold Water Meters – Fluidic Oscillator Type.

Today, AWWA Standard C713 is still the only AWWA Standard that covers any type of Non Mechanical Water Meter designed for Residential Revenue collection application. The Honeywell SM700 is inherently simple, robust and extremely reliable, no power is used to actually measure the water which is measured 100% of the time, unlike an Electromagnetic Water Meter that periodically samples water velocity. The SM700 only uses power to count the fluid oscillations (each oscillation is a known volume of water) and to drive the LCD Register, making the SM700 extremely reliable.

Some additional points to consider:-

The meter lengths and threaded end connections specified in AWWA C713 are the same as those specified in the AWWA C700 mechanical water meter standard, ensuring that the SM700 can directly replace existing AWWA C700 standard water meters 25mm in size and smaller.

The Honeywell SM700 provides a Sensus Protocol Encoder Output as standard and is fully compatible for use with the Sensus 510 and 520 MXU Radio Modules.

- (a) I would like to know if the City would still consider Sensus iPERL meters in sizes 25mm and smaller, knowing that the iPERL does not meet any existing AWWA Standard?
- (b) I would also like to ask if the City would accept the Honeywell SM700 as an alternative 25mm and smaller water meter, that does meet an existing AWWA Standard?

A7. The City will not be approving any additional meter makes / models at this time. However, if a Tenderer wish to submit an *Alternate Tender* that includes supply and installation of a meter make / model that is not listed on the table of acceptable meters contained in Supplementary Specification 33 11 01 Clause 2.10S, the City will review the proposed meter make / model if the *Alternate Tender* is submitted.

Q8. PDF pg 46 & 47 - Are contractors required to install strainers for all Voluntary Strata Meters in existing chambers? Please clarify.

A8. All meters 75 mm diameter or larger shall include a V strainer, which shall be incidental to the supply and installation cost of the meter for all installation scenarios.

Q9. SSP page 12 - Can the City please clarify the specification on spools? What material type should the spools be? SSP Page 12 says that payment on this line item is in fraction of a meter, however, the Schedule of Prices indicate a unit of "each". Please clarify.

A9. Pipe spools shall be ductile iron, Schedule 80 PVC, C900 PVC, polyethylene, or Type K copper. The unit price for Item 4.10 shall apply to all pipe materials for a given size. In the *Schedule of Quantities and Prices*, the unit of "each" represents "1.0 linear metre".

Q10. For SSP page 10 - Please clarify the payment for Extra Depth > 1.2m. Are we to assume that a depth less than an increment of 0.25m are to be rounded down? In other words, is an install on a total service depth of 1.4 m, not billable under this particular line item and included in the base price?

- A10. Quantities for Item 4.2 will be rounded to the nearest 0.25 m increment.
- Q11. For SSP page 10 - For bidding purposes, can the City provide a standard distance from the existing curb stop that the Tenderer should assume for new water service connection? There are varying distances depending on the property that can affect the length of pipe needed and scope of work.
- A11. For Item 4.3, Tenderers shall assume a horizontal distance of 20 m from the property line to the location where the new water service connection will be terminated.
- Q12. For **SSP pg 5 of 18** – The ICI section references that all outside meters shall meet the specification outlined in the City of Surrey Water Meter Design Criteria Manual & Supplementary Specifications June 2016 in Section G. However, the drawing in this section is only for meter sizes up to 25mm. Can the City please provide an engineering specification drawing for sizes 38mm & 50mm?
- A12. 38 mm and 50 mm diameter outside Voluntary and ICI meter installations shall consist of a pre-cast concrete 5686 box c/w base and cast iron lid, and setter c/w high bypass and upstream / downstream full port ball valves. The *Contractor* shall submit a shop drawing for review as part of the Implementation Plan identified in SGCP 4.17.1.
- Q13. SSP pg 9 of 18 – For Outside ICI, in a scenario where additional fittings are required on a 50mm service, can the Schedule of Quantities and Pricing 4.0 Ancillary Water Meter Works be applied?
- A13. For Item 3.1 a), no additional payment for 50 mm fittings will be provided.
- Q14. Is it a mandatory requirement that the City requires touchpads on new or changed out meters, or will the City accept a meter that will connect to their existing radio system or an alternative reading system?
- A14. All new water meters, whether installed as a new installation or a change out, shall be equipped with a touch pad. The only exception is if the City requires a Sensus 520M or 510M radio to be installed.
- Q15. Will the City accept Badger E-Series Ultrasonic water meters as an alternative to the iPERL and OMNI in the 5/8 to 2 inch meter sizes? (See attached data sheets or visit <https://www.badgermeter.com/industries/water-distribution/e-series-ultrasonic-meters.>)
- A15. See response to Question 7.
- Q16. Is the stem on the valve box required to be stainless steel? (As per Supplementary Master Municipal Construction Documents, Sewage Force Mains, Section 2.3 Valves and Valve Boxes, Add 2.3.6.6.)
- A16. Yes, valve stems shall be stainless steel.
- Q17. According to the City's meter size table on Page 18 of 18 of the SSP it mentions 50mm or smaller – does the City accept 5/8 x 3/4 inch meters?
- A17. No, the minimum meter size is 19 mm diameter.

Q18. Form of Tender, Section 6, line item 6.3 Testing c/w Replacement Meter (16mm – 25mm Meter). For this line item, does the Tenderer also charge for the replacement of the water meter for the respective meter size under section 7, Water Meter Replacement? Please note that there is no meter change out line item for 16mm meter size.

A18. The unit price for Item 6.3 shall include the cost of the meter test as well as supply and installation of the replacement meter of equal size. No additional charge under Section 7 is allowed.

Q19. Form of Tender, Section 6, line item 6.2, Field Testing (38mm – 50mm Meters). Can you please provide further details on how this is to be conducted (i.e. does the City provide fire hydrant locations for the Tenderer to use as a water source, is a spool piece to be temporarily installed to maintain a water connection during the test, etc.)?

A19. Water service shall be maintained during the meter test, either via an existing bypass or via temporary installation of a spool piece. The successful *Contractor* will be responsible for providing a water supply suitable for the test flow rates and volumes. Connection to a City fire hydrant will not be permitted.

Q20. Please clarify the decommission existing tattle tale meter. As per Supplementary Specifications 1.8.50S: removal and disposal of the existing meter valves, piping, and supply and installation of new pipe and fittings. With the removal of the meter valves, is the City going to shut off the mains?

A20. The subject tattle tale / cheater meter assemblies are located on existing water service connections, typically on the private side of the property line. The *Contractor* is responsible for isolating the water service connection, utilizing an existing upstream shut off valve or otherwise, to complete the decommissioning. If isolation of the water service connection requires a shutdown of the City watermain by City forces, such *Work* shall be coordinated with the City Project Manager.

Q21. Prime Contractor (GC 21.2.1). Please clarify – could be interpreted as requiring us to agree to be prime contractor on all properties the proponent touches over the course of the contract versus the proponent being prime contractor for any individual work site for the time it is occupying the site (preferred).

A21. SGCP 18.4.7 states that “The *Contractor* is only entitled to request payment of the Builders Lien holdback for *Work* completed in each consecutive one (1) year period.”

This means that *Substantial Performance* would also be issued for *Work* completed in a given one (1) year period. As per GC 21.2.1, the *Contractor's* “prime contractor” obligations shall continue until such time that the *Contractor* has achieved *Substantial Performance*, in this case for *Work* completed in a given one (1) year period.

Q22. Warranty / Maintenance Period (GC / SGC 25). Please clarify – we note the maintenance period is 24 months, and will commence not upon the installation of each meter, but rather upon the time substantial completion occurs. Accordingly, this means that a meter could be installed on the first day of the contract but only considered complete on the last day of the contract, so the “maintenance period” for such meter would actually end up being the contract term + 24 months. In previous tender there was an addendum that addresses substantial completion in six month intervals.

A22. As per SGCP 25.1.1, the *Maintenance Period* shall commence upon the date of the *Certificate of Substantial Performance*, which in this case would apply to *Work* completed in a given one (1) year period.

END OF ADDENDUM #2

All Addenda will become part of the ITT Documents.
