



TECHNICAL SPECIFICATION

TITLE: PURCHASE OF ASSORTED SIZES OF ELECTROMAGNETIC FLOWMETER

1.0 SCOPE OF CONTRACT

The scope shall be supply, testing, delivery and commissioning of Three (3) sets assorted brand new Electromagnetic Flowmeter to General Santos City Water District (GSCWD).

| Particulars | Requirements | |
|--------------------------------|--------------------------------------|--------------------------------------|
| | Set 1 | Set 2 |
| SIZE mm (inches) | 250 (10) | 200 (8) |
| Number of Units | 1 | 2 |
| TYPE | Electromagnetic Flow meter | Electromagnetic Flow meter |
| BORE | Full Bore | Full Bore |
| POWER SUPPLY | 115 - 230 VAC | 115 - 230 VAC |
| MEASUREMENTS | Direct / Inverse Flow | Direct / Inverse Flow |
| Q_{max} m^3/hr | 600 | 400 |
| $Q_{nominal}$ m^3/hr | 450 | 280 |
| $Q_{Transitional}$ m^3/hr | 13 | 8 |
| Q_{min} m^3/hr | 8 | 5 |
| CABLE | 20 meters w/ complete accessories | 20 meters w/ complete accessories |
| CONNECTION | Flanged Type, PN16 | Flanged Type, PN 16 |



| | | |
|---------------|--------------------------------------|--------------------------------------|
| LINING | Hard Rubber for Potable Water | Hard Rubber for Potable Water |
| RATING | IP 67/NEMA 6 | IP 67/NEMA 6 |

TERMS AND CONDITIONS

1. The scope of work shall be supply, testing, delivery and commissioning of Three (3) sets assorted brand new electromagnetic flowmeter to General Santos City Water District (GSCWD).
2. The **electromagnetic flowmeter** shall be tested in a *laboratory determined by GSCWD before delivery to ensure conformance with the design parameters.* The cost of the laboratory testing shall be borne entirely by the winning bidder.
3. The winning bidder is required to submit actual documents (**manuals, data sheets, manufacturer's test results, name plate specifications, Manufacturers Authorization Certificate and etc.**) of the unit that is to be tested prior to the scheduling of laboratory testing.
4. The flowmeter shall be tested for accuracy in a laboratory for **maximum, minimum, nominal, and transitional flow rates.** The result shall be the basis for the flowmeter to **PASS or FAIL** in the accuracy test.
Max permitted error:
From Q_{min} to $Q_t = \pm 5\%$
From Q_t to $Q_{max} = \pm 2\%$
5. Laboratory testing shall be witnessed by four (4) GSCWD representatives together with the winning bidder's representatives for three (3) days. All relevant and incidental cost (Testing fee, transportation, accommodation, allowances and etc.) in the testing of the equipment shall be shouldered by the winning bidder.
6. In case the unit to be tested is different from the submitted documents and/or do not comply with the specifications set by GSCWD, laboratory testing shall not be conducted.




7. In case the unit failed to pass the testing requirements during laboratory testing, the winning bidder shall replace the unit subject to another laboratory testing without cost to GSCWD.
8. That during the installation and commissioning of the unit, the winning bidder shall be required to send a technician responsible of commissioning. All relevant and incidental cost (transportation, accommodation, allowances and etc.) in the commissioning of the equipment shall be shouldered by the winning bidder.
9. Field testing shall be made once the unit is ready for operation and when both the GSCWD and winning bidder have finished their scopes of work on the installed unit. GSCWD engineers shall conduct field testing with the presence of winning bidder's representative. Flowmeter must meet the testing requirements in terms of efficiency. In case the unit failed to pass the field testing, the winning bidder shall make necessary corrections / changes to replace the unit without cost to GSCWD.
10. The winning bidder shall deliver the three (3) sets **brand new electromagnetic flowmeter**, within **Ninety (90)** calendar days upon receipt of Purchase Order (PO). Laboratory testing is included in the 90- calendar day's delivery period.
11. The winning bidder shall be subjected to Liquidated Damages (LD) for each day of delay as provided by the IRR of RA 9184.
12. That the winning bidder shall issue a warranty certificate of not less than one (1) year and the warranty shall commence from the date of commissioning of the pumping equipment. That the bidder must have an available qualified and trained technicians 24/7 in case of equipment failure.


Prepared by:



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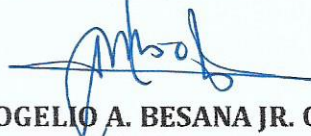
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