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MCCROMETER Mc PROPELLER-TYPE FLOW METER SPECIFICATION

PREPARED BY:

[ENTER COMPANY AND CONTACT INFORMATION HERE]
[ENTER ADDRESS]
[ENTER CITY, STATE & ZIP]

Phone: [ENTER PHONE]
FAX: [ENTER FAX]
e-mail: [ENTER E-MAIL ADDRESS]

PART 1 - GENERAL

1.1 SYSTEM DESCRIPTION

The contractor shall furnish and install a McCrometer Mc brand propeller-type flow meter model [ENTER MODEL] or equal for [ENTER METER APPLICATION].

Note: Refer to the appropriate McCrometer Mc Propeller Meter Product Data Sheet for a detailed description of and configuration options for this meter.

1.2 DESIGN REQUIREMENTS

- A. The nominal size of the meter shall be [ENTER LINE SIZE] inches.
- B. Corrosion-resistant materials shall be used throughout the mechanical enclosure.
- C. Except for the register assembly, no aluminum materials shall be used and all non-stainless steel surfaces shall be treated with a fusion-bonded impervious coating.
- D. All rotating members, except members in the register assembly, shall be mounted on stainless steel radial ball bearings. Sleeve type or ceramic bearings are not acceptable.
- E. Head loss shall not exceed [ENTER HEADLOSS] inches of water at a maximum flow of [ENTER MAXIMUM FLOW] gallons per minute.
- F. Flow meter system accuracy shall be +/-2% of true flow rate within the range specified.

1.3 SUBMITTALS

- A. McCrometer Mc Installation and Operation Manual or equivalent
- B. McCrometer Warranty Statement or equivalent.

PART 2 - PRODUCT CONFIGURATION

2.1 METER BODY

- A. The meter shall comply with the applicable provisions of the American Water Works Association Standard NO. C704-91 for cold water meters applicable to the types of meters described in the bidding schedule as well as the specifications of the invitations for bids. In the event of conflict, the specifications herein shall prevail.
- B. The impeller shall be made of a plastic or other corrosion-resistant material of a rigid but resilient nature that will not flex or otherwise change in dimension under a high flow of water and be capable of withstanding temperatures of up to 160(F without slumping or warping.
- C. Impellers will be factory tested and adjusted to maintain an accuracy of +/-2% over the normal flow range and remain accurate without the use of change gears.
- D. The impeller shall be mounted on a non-corrosive shaft and bearing assembly and shall have a provision for sustaining thrusts at maximum flows. The impeller shall be magnetically coupled to connecting shafts through a sealed housing to eliminate corrosion and friction.
- E. The drive mechanism from the impeller coupling to the register shall be a flexible driveline and shall be lubricated and sealed at the factory.
- F. The meter instrument shall be driven by axial alnico magnets located on the impeller shaft and on the same axis and shall be completely sealed from water pressure.

2.2 REGISTER

- A. The register shall be on a common axis with the impeller support and shall be rigidly supported by the housing support plate or drop pipe.
- B. The register shall consist of an instantaneous indicator and totalizer which shall be mounted perpendicular to the direction of flow and which can be viewed through a transparent cover.
- C. The totalizer shall be six-digit, straight-reading, driven by a positive direct drive mechanism from the impeller coupling, and shall register [ENTER TOTALIZATION UNITS(for example, acre feet, cubic feet, gallons, cubic meters, etc.)].
- D. The flow indicator shall show flows instantaneously and be driven by a magnet drag mechanism from the impeller coupling.
- E. The flow rate indicator shall indicate flow in [ENTER INDICATING UNITS (for example, gallons per minute, cubic feet per second, liters per second, etc.)].
- F. The register assembly shall be factory lubricated and sealed water-tight for infrequent submersion.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's written instructions and approved submittals.
- B. Locate meter as recommended by manufacturer with respect to other piping components to ensure flow meter will meet specified accuracy.