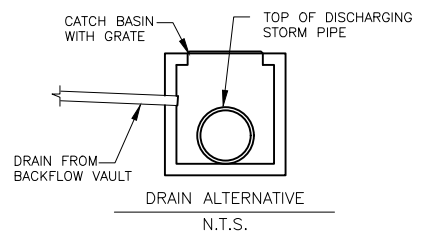
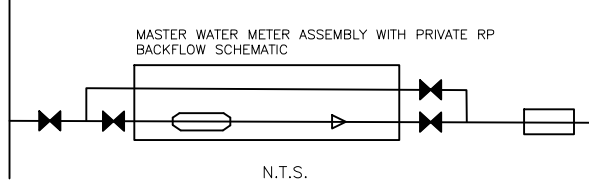


- GENERAL NOTES:** The water service and all the components will be supplied and installed by Developer's NC Licensed Utility Contractor and subject to City review and approval.
- Meter: 4-inch Octave Ultrasonic by Master Meter, Inc. with either Grade 316 stainless steel or lead-free epoxy coated ductile iron meter body compliant with ANSI/NSF 372 (AB1953 or NSF61G) and a maximum working pressure of 175 PSI and standard ANSI Class 125 standard end flanges; or a City approved equal. The meter shall have a 9-digit LCD display programmed to read 6-digits with 100 cubic feet register and GPM for rate of flow. The Meter must be compatible with the AMI module and Nexgrid.
 - Pipe Material: 4-inch restrained ductile iron pipe and fittings within the vault and at least 10-ft external to the vault. All external pipe joints and/or fittings shall be at least 3-ft from external vault wall.
 - External Separation: 4-inch piping and fittings shall be a maximum of 3.5 feet below finished grade.
 - Vault: Pre-cast reinforced concrete underground vault with H-20 Loading and anti-floatation. All vault openings shall be watertight and sealed utilizing mastic gaskets, non-shrinking grout and resilient pipe connectors, as required.
 - Test Port: 2-inch ductile iron tapping saddle manufactured by ROMAC Industries, Inc., Model 202S or equal; Brass 2-inch straight ball valve with Secura-Lok manufactured by Ford, Inc B81-777-NL or equal and brass plug.
 - Test Port Location: 8-inches from meter flange to the test port connection.
 - Dismantling Joints: Dismantling joint manufactured by ROMAC Industries, Inc., Model DJ405, or equal, installed at least 12-inches from the vault wall. The dismantling joint flanges is to extend at least 12-inches to the meter flange.
 - By-Pass Spool Piping: Flanged spool piece 16-inch in length. Spool piece to be flanged to the by-pass piping dismantling joint within the vault.
 - Vault Access Hatch: The aluminum doors/hatch shall be flush mount, water-tight and lockable with H-20 load rating as manufactured by BILCO or equal. The doors/hatch shall be sized to ensure the valves, meter and test port are located within the door opening and accessible to City of Concord staff.
 - Internal Horizontal Separations: 12-inches of horizontal clearance must be provided between the interior vault wall and all fittings and piping/fittings/controls; and 18-inches of horizontal clearance between all internal by-pass assembly piping/fittings and the meter assembly piping/fittings.
 - Internal Vertical Separations: Maintain 14-inches of minimum vertical clearance from the vault lid/hatch to the top of the meter assembly.
 - Private Backflow Assembly: Appropriate backflow assembly, in accordance with the City of Concord Code of Ordinance. Backflow assembly must be located outside of the public utility easement/right of way and/or within 5-ft of the meter assembly unless otherwise approved by the City of Concord Backflow Administrator.
 - Civil Design: The civil utility design drawings shall include all pipe material, lengths, diameter, tees, bends, and valving with applicable attributes external to the interior meter vault assembly.
 - Material Submittals and Shop Drawings: The contractor must submit a scaled detailed shop drawing of the vault with the authorized master meter assembly and piping to the consultant engineer. The consultant engineer is to review and certify the Contractor's material submittals associated with the public utilities and detail shop drawings meet City technical standards defined in this details, structural loading, and anti-floatation requirements. After the consultant engineer has certified the submittals and shop drawings, the information is to be emailed to Gary Stansbury, City of Concord Construction Manager, at stansburyg@concordnc.gov for review prior to any construction activity.



TIE INTO CATCH BASIN OR STORMWATER MANHOLE PER DETAIL SHOWN ABOVE. NO TIE IN TO STORMWATER PIPE WILL BE ACCEPTED.



4-INCH WATER METER ASSEMBLY WITH H-20 LOADED VAULT AND HATCH STANDARD DETAIL

MASTER WATER METER ASSEMBLY FOR WATER DISTRIBUTION SYSTEMS

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