- ALL PIPE SHALL BE RESTRAINED JOINT DUCTILE IRON FROM TAP TO PROPERTY LINE VALVE.
- VAULT SHALL BE RATED FOR NCDOT HS-20 LOADING SUBMIT SHOP DRAWINGS / P.E. SEALED
- ALL CONCRETE SHALL BE MINIMUM 4,000 PSI COMPRESSIVE STRENGTH
- DESIGN SHALL CONFORM TO ASTM C858 SPECIFICATIONS FOR "UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURE"
- STEEL REINFORCING DESIGN SHALL CONFORM TO ASTM C857

- REBARS SHALL BE GRADE 60 PER ASTM A615.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- DIAGONAL REINFORCING SHALL BE ADDED AT ALL OPENINGS
- PIPE PENETRATIONS SHALL BE SEALED WITH FLEXIBLE CONNECTORS (MANHOLE BOOTS) OR WITH 8" OF BRICK & MORTAR (AND 1/2-INCH THICK CONSTRUCTION EXPANSION MATERIAL).
- FRAME TO BE FLUSH WITH GROUND OR CONCRETE SIDEWALK, GROUND SHALL SLOPE AWAY
- ALL JOINTS SHALL BE MADE WATERTIGHT USING 2 RINGS OF BUTYL RUBBER JOINT MASTIC.
- PRECAST VAULT COMPONENTS SHALL HAVE MARKINGS PER ASTM C478 REQUIREMENTS.

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## NO. DESCRIPTION:

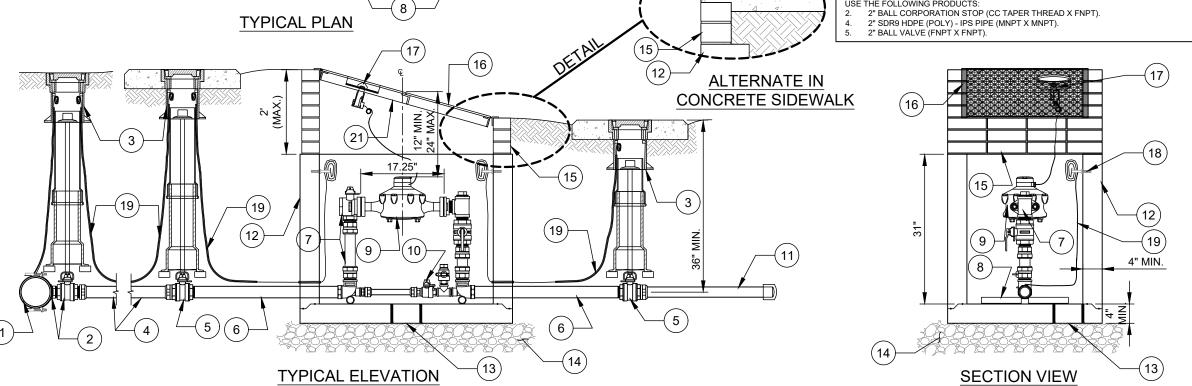
- EXISTING OR PROPOSED WATER MAIN
- TAPPING SADDLE AND 2" BALL CORPORATION STOP WITH T-HEAD OPERATING NUT (CC TAPER THREAD X CTS COMPRESSION).
- STANDARD VALVE BOX ASSEMBLY (TYP) ALL VALVES (OMIT AT CORPORATION STOP ON SHORT SIDE SERVICE OR WHEN IN THE PAVEMENT).
- 2" TYPE K COPPER TUBING.
- 2" BALL VALVE (CTS COMPRESSION X FNPT).
- 2" RED BRASS PIPE NIPPLE (L = 30" OR 36").
- 2" BRASS METER SETTER ASSEMBLY FORD #VB-77-95311-02, MUELLER #106B 242343, CAMBRIDGE #6020-718F7F7-UUBS OR MCDONALD #720B718WTFF, NO SOLDER JOINTS
- 1" SCH 40 RED BRASS NIPPLE (L=18") X 2 EACH.
- 2" WATER METER ASSEMBLY WITH AMR TRANSMITTER (BY CONTRACTOR).
- 1" BYPASS BALL VALVE WITH LOCK WINGS LOCK VALVE IN CLOSED POSITION (PERMANENT STUD LOCK - FURNISHED BY CLTW).
- 2" TYPE K COPPER TUBING TAIL PIECE L = 24" MIN. BASS OR PVC TEMP. CAP.
- PRECAST CONCRETE SERVICE VAULT (36" X 24" X 31").
- 6" DIAMETER SUMP HOLE.
- 6" COMPACTED #57 WASHED STONE
- MINIMUM OF (3) STANDARD SOLID CONCRETE BRICK COURSES UNDER ACCESS DOOR FRAME, MAXIMUM 2'.
- 24" X 36" ACCESS DOOR SEE STANDARD DETAIL
- AMR TRANSMITTER.

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- 3/8" DIAMETER GALV. STEEL EYE BOLT (ADHESIVE ANCHOR) TYPICAL
- AWG #12 GAUGE SOLID COPPER HDPE INSTALLATION TRACER WIRE WITH 30 MILS BLUE INSULATION TERMINATE WITH 24" EXCESS WIRE (COILED) AT EYE BOLT AND VALVE BOX (TYP)
- CAST IN PLACE CONCRETE SIDEWALK BRICK WORK SHALL NOT EXTEND TO SURFACE, ACCESS DOOR SHALL REST ON SIDEWALK.
- ATTACH ENGRAVED LABEL, WITH PREMISE NUMBER, TO UNDERSIDE OF DOOR, NEAR THE LIFTING HANDLE.

## ALTERNATE DESCRIPTION:

WHEN USING SDR9 HDPE (IPS) WITH STAINLESS STEEL, BRASS, OR BRONZE MNPT ENDS USE THE FOLLOWING PRODUCTS:



CHARLOTTE WETER

CHARLOTTE WATER
A CITY OF CHARLOTTE DEPARTMENT
STANDARD DETAILS
WATER METERS

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NO SCALE VERSION 1.0

04/2024

**DETAIL** 15.4.3