- ALL FLANGE HARDWARE (BOLT/WASHER/NUT) SHALL BE STAINLESS STEEL TYPE 304 WITH ANTI-SEIZE COMPOUND.
- 3. ALL PIPE SHALL BE RESTRAINED FROM TAP TO PROPERTY LINE VALVE.
- C. VAULT SHALL BE RATED FOR NCDOT HS-20 LOADING SUBMIT SHOP DRAWINGS / P.E. SEALED FOR REVIEW
- D. ALL CONCRETE SHALL BE MINIMUM 4000 PSI COMPRESSIVE STRENGTH.
- E. DESIGN SHALL CONFORM TO ASTM C858 SPECIFICATIONS FOR "UNDERGROUND PRECAST CONCRETE UTILITY STRUCTURE".
- F. STEEL REINFORCING DESIGN SHALL CONFORM TO ASTM C857.

- G. REBARS SHALL BE GRADE 60 PER ASTM A615.
- H. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- I. DIAGONAL REINFORCING SHALL BE ADDED AT ALL OPENINGS
- J. PIPE PENETRATIONS SHALL BE SEALED WITH FLEXIBLE CONNECTERS (MANHOLE BOOTS) OR WITH 4-INCHES OF BRICK & MORTAR (AND 1/2 INCH THICK CONSTRUCTION EXPANSION MATERIAL).
- K. FRAME TO BE FLUSH WITH GROUND OR CONCRETE SIDEWALK, GROUND SHALL SLOPE AWAY FROM VAULT.
- L. ALL JOINTS SHALL BE MADE WATERTIGHT USING 2 RINGS OF BUTYL RUBBER JOINT MASTIC.
- M. PRECAST VAULT COMPONENTS SHALL HAVE MARKINGS PER ASTM C478 REQUIREMENTS.

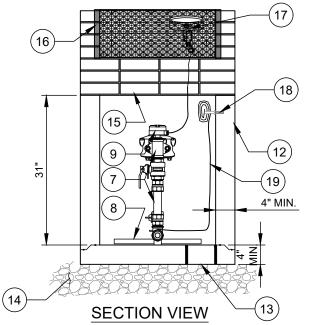
NO. DESCRIPTION:

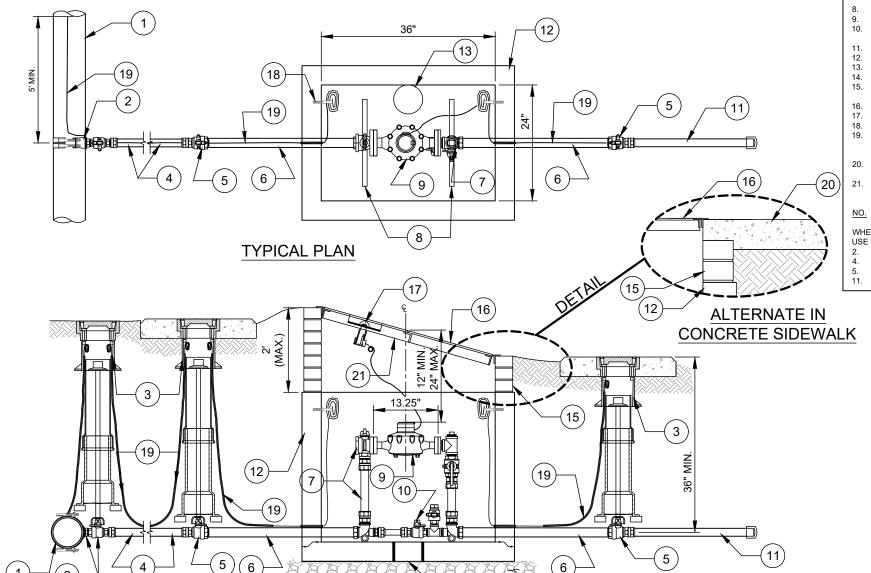
- EXISTING OR PROPOSED WATER MAIN.
- TAPPING SADDLE AND 1 1/2" BALL CORPORATION STOP WITH T-HEAD OPERATING NUT (CC TAPER THREAD X CTS COMPRESSION).
- STANDARD VALVE BOX ASSEMBLY (TYP) ALL VALVES (OMIT AT CORPORATION STOP ON SHORT SIDE SERVICE OR WHEN IN THE PAVEMENT).
- . 1 1/2" TYPE K COPPER TUBING.
- 5. 1 1/2" BALL VALVE (CTS COMPRESSION X FNPT).
- 1 1/2" RED BRASS PIPE NIPPLE (L = 30" OR 36")
- . 1 1/2" BRASS METER SETTER ASSEMBLY FORD #VB-76-95311-05, MUELLER #098B 242343, CAMBRIDGE #6020-718F6F6-UUBS OR MCDONALD #720B618WTFF, NO SOLDER JOINTS PERMITTED.
- 1" SCH 40 RED BRASS NIPPLE (L = 18") X 2 EACH.
- 1 1/2" WATER METER ASSEMBLY WITH AMR TRANSMITTER (BY CONTRACTOR).
- BYPASS BALL VALVE WITH LOCK WINGS LOCK VALVE IN CLOSED POSITION (SERIAL NUMBERED STUD LOCK FURNISHED BY CLTW).
- 11. 1 1/2" TYPE K COPPER TUBING TAIL PIECE L = 24" MIN. BASS OR PVC TEMP. CAP.
- 2. PRECAST CONCRETE SERVICE VAULT (36" X 24" X 31").
- 6" DIAMETER SUMP HOLE.
- . 6" COMPACTED #57 WASHED STONE.
- 5. MINIMUM OF (3) STANDARD SOLID CONCRETE BRICK COURSES UNDER ACCESS DOOR
- 16. 24" X 36" ACCESS DOOR SEE STANDARD DETAIL.
- 17. AMR TRANSMITTER.
- 18. 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.

NO. ALTERNATE DESCRIPTION:

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

- 1 1/2" BALL CORPORATION STOP (CC TAPER THREAD X FNPT).
- . 1 1/2" SDR9 HDPE (POLY) IPS PIPE (MNPT X MNPT).
- . 1 1/2" BALL VALVE (FNPT X FNPT).
- 11. 1 1/2" SDR9 HDPE (POLY) IPS PIPE (MNPT X MNPT) BASS OR PVC TEMP. CAP.





TYPICAL ELEVATION

1 1/2-INCH WATER METER SERVICE CONNECTION AND VAULT

CHARLOTTE WETER

CHARLOTTE WATER
A CITY OF CHARLOTTE DEPARTMENT
STANDARD DETAILS
WATER METERS

NO SCALE VERSION 1.0

> DATE 04/2024

DETAIL 15.4.2