

**NOTES:**

- A. ALL FLANGE HARDWARE (BOLT/WASHER/NUT) SHALL BE STAINLESS STEEL - TYPE 304 WITH ANTI-SEIZE COMPOUND.
- B. 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 3,600 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" OF BRICK & MORTAR (AND 1/2-INCH THICK CONSTRUCTION EXPANSION MATERIAL AROUND THE PIPE).
- 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.

**NO. DESCRIPTION:**

- 1. HDPE WATER MAIN.
- 2. HDPE SERVICE TAPPING SADDLE WITH T-HEAD OPERATING NUT, AND CAP AND CUTTER.
- 3. HDPE BUTT FUSION JOINT.
- 4. BUTT FUSION X THREADED (MNPT) ADAPTER.
- 5. STANDARD VALVE BOX ASSEMBLY (TYP.) - ALL VALVES (OMIT AT CORPORATION STOP ON SHORT SIDE SERVICE).
- 6. 1 1/2" SDR-9 IPS HDPE PIPE.
- 7. 1 1/2" BRASS BALL VALVE (FNPT X FNPT).
- 8. 1 1/2" RED BRASS PIPE NIPPLE (L = 30").
- 9. 1 1/2" BRASS METER SETTER ASSEMBLY - NO SOLDER JOINTS PERMITTED. SEE TECHNICAL SPECIFICATIONS.
- 10. 1" SCH 40 RED BRASS NIPPLE (L = 18") X 2 EACH.
- 11. 1 1/2" WATER METER ASSEMBLY WITH AMR TRANSMITTER (BY CONTRACTOR).
- 12. BY PASS BALL VALVE WITH LOCK WINGS - LOCK VALVE IN CLOSED POSITION (SERIAL NUMBERED STUD LOCK - FURNISHED BY CLTW).
- 13. PRECAST CONCRETE SERVICE VAULT (36" X 24" X 31").
- 14. 6" DIAMETER SUMP HOLE.
- 15. 6" COMPACTED #57 WASHED STONE. MINIMUM OF (3) STANDARD SOLID CONCRETE BRICK COURSES UNDER ACCESS DOOR FRAME, MAXIMUM 2'.
- 16. 24" X 36" ACCESS DOOR - SEE STANDARD DETAIL.
- 17. AMR TRANSMITTER.
- 18. 3/8" DIAMETER GALV. STEEL EYE BOLT (ADHESIVE ANCHOR) - TYPICAL.
- 19. AWG #12 GAUGE SOLID COPPER TRACER WIRE 30 MILS BLUE HDPE INSTALLATION - TERMINATE WITH 24" EXCESS WIRE (COILED) AT EYE BOLT AND VALVE BOX (TYP.).
- 20. CAST IN PLACE CONCRETE SIDEWALK - BRICK WORK SHALL NOT EXTEND TO SURFACE, ACCESS DOOR SHALL REST ON SIDEWALK.
- 21. 1 1/2" TYPE K COPPER TUBING TAIL PIECE - L = 24" MIN. - BRASS OR PVC CAP END.
- 22. ATTACH ENGRAVED LABEL, WITH PREMISE NUMBER, TO UNDERSIDE OF DOOR, NEAR THE LIFTING HANDLE.

