NO SCALI

VERSION

1.0

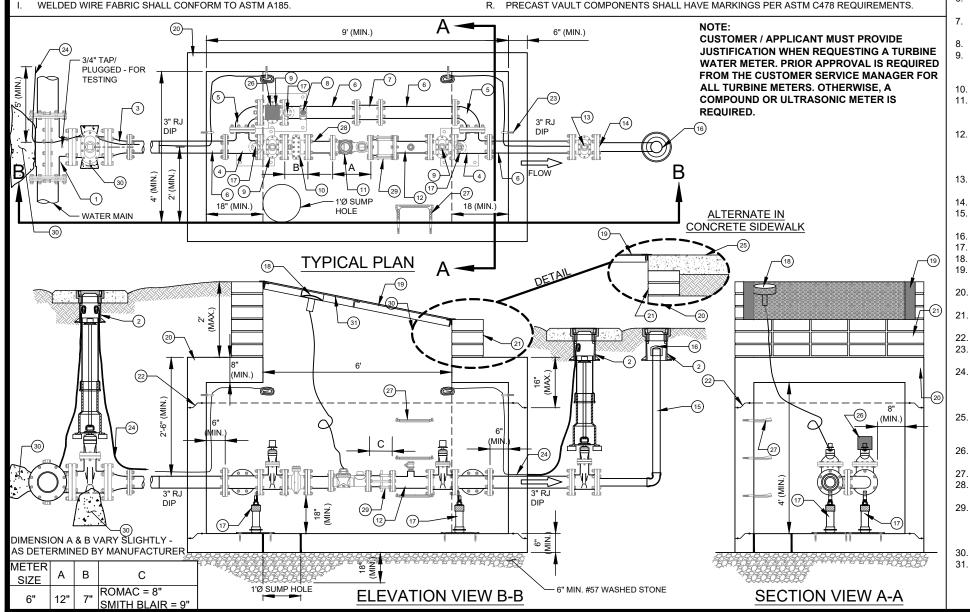
04/2024

DETAIL

15.4.4

- ALL FLANGE HARDWARE (BOLT/WASHER/NUT) SHALL BE STAINLESS STEEL TYPE 304 WITH
- ALL PIPE SHALL BE RESTRAINED JOINT DUCTILE IRON FROM TAP TO PROPERTY LINE VALVE.
- METER CONFIGURATION AND LENGTH MAY VARY DUE TO BRAND VERIFY LENGTH TO DETERMINE MINIMUM VAULT LENGTH.
- VAULT SHALL BE SIZED AS NEEDED FOR PIPE (8' X 4' MINIMUM) AND RATED FOR NCDOT HS-20 LOADING - SUBMIT SHOP DRAWINGS / P.E. SEALED FOR REVIEW
- 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.

- DIAGONAL REINFORCING SHALL BE ADDED AT ALL OPENINGS.
- PIPE PENETRATIONS SHALL BE SEALED WITH FLEXIBLE CONNECTORS (MANHOLE BOOTS) OR WITH 8" OF BRICK AND MORTAR (AND 1/2-INCH THICK CONSTRUCTION EXPANSION MATERIAL AROUND THE PIPE)
- FRAME TO BE FLUSH WITH GROUND OR CONCRETE SIDEWALK. GROUND SHALL SLOPE AWAY FROM VAULT
- ALL JOINTS SHALL BE MADE WATERTIGHT USING 2 RINGS OF BUTYL RUBBER JOINT MASTIC.
- ALL VALVES SHALL BE OPEN RIGHT CLOCKWISE, EXCEPT NO. 13.
- O. SERVICE AND VAULT MAY BE ROTATED 90° WHEN NEEDED, DUE TO LIMITED SITE / SPACE RESTRICTIONS.
- WRAP TAPPING SLEEVE WITH 2 LAYERS HDPE PLASTIC FILM (HDCLPE PER AWWA C-105) 4 MILS EACH LAYER - EXTEND HDPE 2' EACH WAY FROM SLEEVE - DUCT TAPE OR ZIP LOCK TIE ENDS.
- CONCRETE THRUST BLOCKING REQUIRED AT TAPPING SLEEVE.
- PRECAST VAULT COMPONENTS SHALL HAVE MARKINGS PER ASTM C478 REQUIREMENTS.



- 4" TAPPING SLEEVE AND 4" FLANGE X MJ TAPPING
- VALVE ON EXISTING MAIN. 3" MJ TEE. 3" FOSTER ADAPTOR AND 3" MJ GATE VALVE ON NEW MAIN.
- STANDARD VALVE BOX ASSEMBLY (TYP.) ALL VALVES.
- 3. 4" X 3" REDUCER (RJ) REQUIRED ON EXISTING MAIN INSTALLATIONS. (REDUCER NOT REQUIRED ON NEW MAIN INSTALLATIONS)
- FLANGE DUCTILE IRON TEE WITH ADJUSTABLE FLANGE SUPPORT.
- 5. FLANGE DUCTILE IRON 90°-BEND.
- 6. FLANGE X PLAIN END DUCTILE IRON PIPE - LL = 63" (MIN. SPECIAL CLASS 53).
- 7. MJ LONG PATTERN SOLID SLEEVE WITH RESTRAINED
- 3/4" BALL CORPORATION STOP WITH TAPPING SADDLE.
- FLANGE GATE VALVE; WITH 2" OPERATING NUT OPEN RIGHT AND WITH ADJUSTABLE FLANGE SUPPORT ON BYPASS VALVE.
- PLATE STRAINER FL X FL.
- 11. FLANGE TURBINE METER ASSEMBLY W/AMR TRANSMITTERS. METER CONFIGURATION MAY VARY DUE TO BRAND SUPPLIED.
- 3" EPOXY COATED/LINED STEEL FL X FL SPOOL WITH 2" FNPT TEST OUTLET - LL = 12" (MARS CO.) AND 2" BALL CORPORATION STOP WITH T-HEAD OPERATING NUT -MNPT X FNPT.
- MECHANICAL JOINT (RJ) GATE VALVE 2" OPERATING NUT - OPEN LEFT @ PROPERTY LINE.
- MECHANICAL JOINT PLUG WITH 2" TAP.
- TEMP 2" PIPE GALVANIZED STEEL (SCH 80) WITH STANDARD VALVE BOX/CONCRETE PAD
- TEMP 2" THREADED COUPLING (SCH 80 G.S.F.)
- ADJUSTABLE FLANGE PIPE SUPPORTS (3 REQUIRED).
- AMR TRANSMITTERS.
- 19. 4' X 5' DOUBLE-LEAF ACCESS DOOR, SEE STANDARD **DETAIL**
- 20. PRECAST REINFORCED CONCRETE VAULT - 8' X 4' X 4'
- 21. MINIMUM OF (3) STANDARD SOLID CONCRETE BRICK COURSES UNDER ACCESS DOOR FRAME, MAXIMUM 2'.
- JOINT REQUIRED AT FLAT TOP SECTION
- 3/8" DIA. GALVANIZED STEEL EYE BOLT (ADHESIVE ANCHOR) - TYPICAL
- AWG #12 GAUGE SOLID COPPER TRACER WIRE WITH BLUE INSULATION (30 MILS HDPE) - TERMINATE WITH 24" EXCESS WIRE (COILED) @ EYE BOLT AND VALVE BOX (TYPICAL).
- CAST IN PLACE CONCRETE SIDEWALK BRICKWORK SHALL NOT EXTEND TO SURFACE. ACCESS DOOR FRAME SHALL REST ON SIDEWALK.
- VALVE LOCK (FURNISHED BY CLTW) LOCK VALVE CLOSED.
- 27. PLASTIC STEP - 12" VERTICAL SPACING.
- 28. DUCTILE IRON PIPE SPOOL (FL X FL) - L = 15" (SPECIAL CLASS 53).
- 29. DISMANTLING JOINT - FL X FL - (L = 10" OR 9" -EXTENDED) SMITH BLAIR #975 (SET TO 9") OR ROMAC #DJ400 (SET TO 8") WITH STAINLESS STEEL TIE RODS/HARDWARE.
- CONCRETE THRUST BLOCKING 3,600 PSI
- ATTACH ENGRAVED LABEL, WITH PREMISE NUMBER. TO UNDERSIDE OF DOOR, NEAR THE LIFTING HANDLE.