# NO. DESCRIPTION:

- 2" SCH. 40 RED BRASS PIPE MNPT (LENGTH = L3).
- 2. 2" X 1" BRASS SERVICE SADDLE - FNPT OUTLET.
- 3. 1" X 3/4" X 3/4" BRASS U-BRANCH - MNPT
- 5/8" X 3/4" ANGLE BALL VALVE WITH LOCK WINGS FNPT X YOKE STAR NUT.
- 5/8" DUCTILE IRON METER YOKE BAR.
- 5/8" STRAIGHT BALL VALVE (YOKE STAR NUT X FNPT)
- 3/4" RED BRASS NIPPLE WITH THREADED END (L = 18").
  - 2" SCH. 40 RED BRASS PIPE MNPT (L = 24")
- 2" 90° BRASS BEND FNPT X CTS COMPRESSION.
- 2" BALL VALVE CURB STOP W/ TEE HEAD OPERATING NUT FNPT X FNPT
- 2" X 1" BRASS REDUCER FNPT X FNPT.
- 1" BRASS 90° STREET ELBOW MNPT X FNPT
- 1" BALL VALVE CURB STOP MNPT X MNPT WITH LOCK WINGS (LOCK CLOSED WITH PERMANENT BLUE PAD LOCK FURNISHED BY CLTW).
- 1" RED BRASS THREADED COUPLING FNPT X FNPT
- PRECAST CONCRETE METER VAULT SEE CHART FOR SIZE. 15.
- MANIFOLD HOT DIP GALV. STEEL ACCESS DOOR SEE DETAIL
- 17. 2" FLEXIBLE PIPE CONNECTOR BOOT (DO NOT FILL WITH MORTAR).
- 18. 1 1/2"Ø - SCH 40 PVC SLEEVE (WITH RUBBER ISOLATION BUSHING AT EACH FACE OF VAULT WALL) OR FOAM RUBBER PIPE INSULATION THROUGH
- GALV. STEEL OR S.S. ADJUSTABLE SADDLE PIPE SUPPORT (NUMBER REQ'D = N1) WITH 1/4"± THICK NEOPRENE LINER (WITH STAINLESS STEEL EPOXY ANCHORS).
- 3/8" DIAMETER STAINLESS STEEL EYE BOLT (EPOXY ANCHOR).
- AWG #12 GAUGE COPPER TRACER WIRE WITH BLUE INSULATION (30 MILS HDPE) - TERMINATE WITH 24" EXCESS WIRE (COILED) @ EYE BOLT AND VALVE BOX (TYPICAL).
- 5/8" WATER MÉTER WITH AMR TRANSMITTER (FURNISHED BY CLTW).
- 23. 12" DIAMETER SUMP HOLE.
- 24. 6" #57 WASHED STONE.
- 25. 2" TYPE K COPPER (NO JOINTS PERMITTED).
- FOR EXISTING MAINS 2" BALL CORPORATION STOP WITH T-HEAD OPERATING NUT - CC (TAPER TREAD) X CTS COMPRESSION (WITH STANDARD VALVE BOX ASSEMBLY), OR; FOR NEW MAINS - MJ TEE, MJ PLUG - TAP - 2", 2" X 6" SCH 40 RED BRASS NIPPLE, 2" GATE VALVE W/ TEE HEAD OPERATING NUT (FNPT) (WITH STANDARD VALVE BOX ASSEMBLY), BRASS STRAIGHT CONNECTOR (MNPT X CTS COMPRESSION) MUELLER #H-15428, FORD #C84-77GJ, McDONALD #24753T.
- SERVICE SADDLE CC (TAPER THREAD OUTLET).
- 28. 6" OR LARGER WATER MAIN.
- 29. PRECAST CONC. RISER OR BRICKWORK MAY BE REQUIRED FOR GRADE ADJUSTMENTS. MAX HEIGHT SHALL BE 12".
- CAST IN PLACE CONCRETE SIDEWALK BRICK WORK SHALL NOT EXTEND TO SURFACE, ACCESS DOOR SHALL REST ON SIDEWALK.
- UNUSED SERVICES SHALL BE LOCKED (LOCK (BLUE SERIAL NO.) FURNISHED BY CLTW) IN CLOSED POSITION.
- FOR EACH WATER METER, ATTACH AN ENGRAVED LABEL DIRECTLY ABOVE THE METER/ALIGNED WITH THE TRANSMITTER, INCLUDING THE PREMISE NUMBER, STREET NUMBER/UNIT NUMBER AND STREET NAME. TO UNDERSIDE OF DOOR.

#### **DESIGN REQUIREMENTS:**

- VAULT SHALL BE RATED FOR NCDOT HS-20 LOADING SUBMIT SHOP DRAWING / CALCULATIONS / 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. e.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185.
- PIPE PENETRATIONS SHALL BE ISOLATED FROM PIPE WITH FLEXIBLE CONNECTERS (MANHOLE BOOTS) OR WITH RUBBER ISOLATION BUSHINGS.
- PRECAST VAULT COMPONENTS SHALL HAVE MARKINGS PER ASTM C478 REQUIREMENTS.

# DIMENSIONS (INCHES)

5' MIN

**TRACER** 

WIRE

6 1/2" | 6 1/2"

TYP. (TYP.)

(27)-

### **ELEVATION VIEW**

6.5" (TYP.

**PLAN VIEW** 

-(18)(TYP.)

L5

ALTERNATE IN

CONCRETE SIDEWALK

(14)-

## SIDE ELEVATION VIEW

**SECTION A-A** 

(16)

NO. ALTERNATE DESCRIPTION:

NOTES:

VAULT.

REQUIREMENTS.

WHEN USING SDR9 HDPE (IPS) WITH STAINLESS STEEL, BRASS,

2" - 90° SCH. 40 BRASS OR S.S. BEND - FNPT X FNPT

2" SDR9 HDPE (POLY) IPS PIPE (MNPT X MNPT) - LENGTH

FOR EXISTING MAINS - 2" BALL CORPORATION STOP W/

(W/STD. VALVE BOX ASSEMBLY) OR; FOR NEW MAINS -

MJ TEE, MJ PLUG - TAP - 2", 2" X 6" SCH 40 RED BRASS

NIPPLE, 2" GATE VALVE W/ TEE HEAD OPERATING NUT

(FNPT) (WITH STANDARD VALVE BOX ASSEMBLY).

ACCESS DOOR SHALL BE ANCHORED TO VAULT OR

ACCESS DOOR SHALL BE FLUSH WITH GROUND OR

SIDEWALK, AND GROUND SHALL SLOPE AWAY FROM

SEE MULTIPLE WATER SERVICES - SCHEMATIC STANDARD

(22)

19 3/4"

DETAIL FOR ADDITIONAL LAYOUT REQUIREMENTS AND

ASSEMBLY MAY BE FLIPPED 180° TO MEET SITE

SIDEWALK PER ACCESS DOOR STANDARD DETAIL.

TEE HEAD OPERATING NUT - CC (TAPER THREAD) X FNPT

OR BRONZE MNPT ENDS. USE THE FOLLOWING PRODUCTS:

AS REQUIRED (NO JOINTS PERMITTED).

VAULT (INSIDE)			VAULT (OVERALL-MIN.)			WALL THICKNESS (MIN.)	FLOOR THICKNESS (MIN.)	NUMBER OF METERS	L3 2" RED BRASS PIPE	N1 REQ'D NO. OF PIPE		
L	W	Н	L1	W1	H1	W2 / L2	H2	(MAX.)	LENGTH NO. 1	SUPPORTS NO. 19	L4	L5
72	36	36	84	48	42	6	6	10	60	2	6.5	7
60	36	36	72	48	42	6	6	8	48	2	7	7.5
48	36	36	60	48	42	6	6	6	36	2	7.5	8
36	36	36	44	44	40	4	4	4	24	1	8	8.5

CONCRETE CAS. PRE( AND

NO SCALE

VERSION

1.0

DATE

04/2024 **DETAIL** 15.4.1