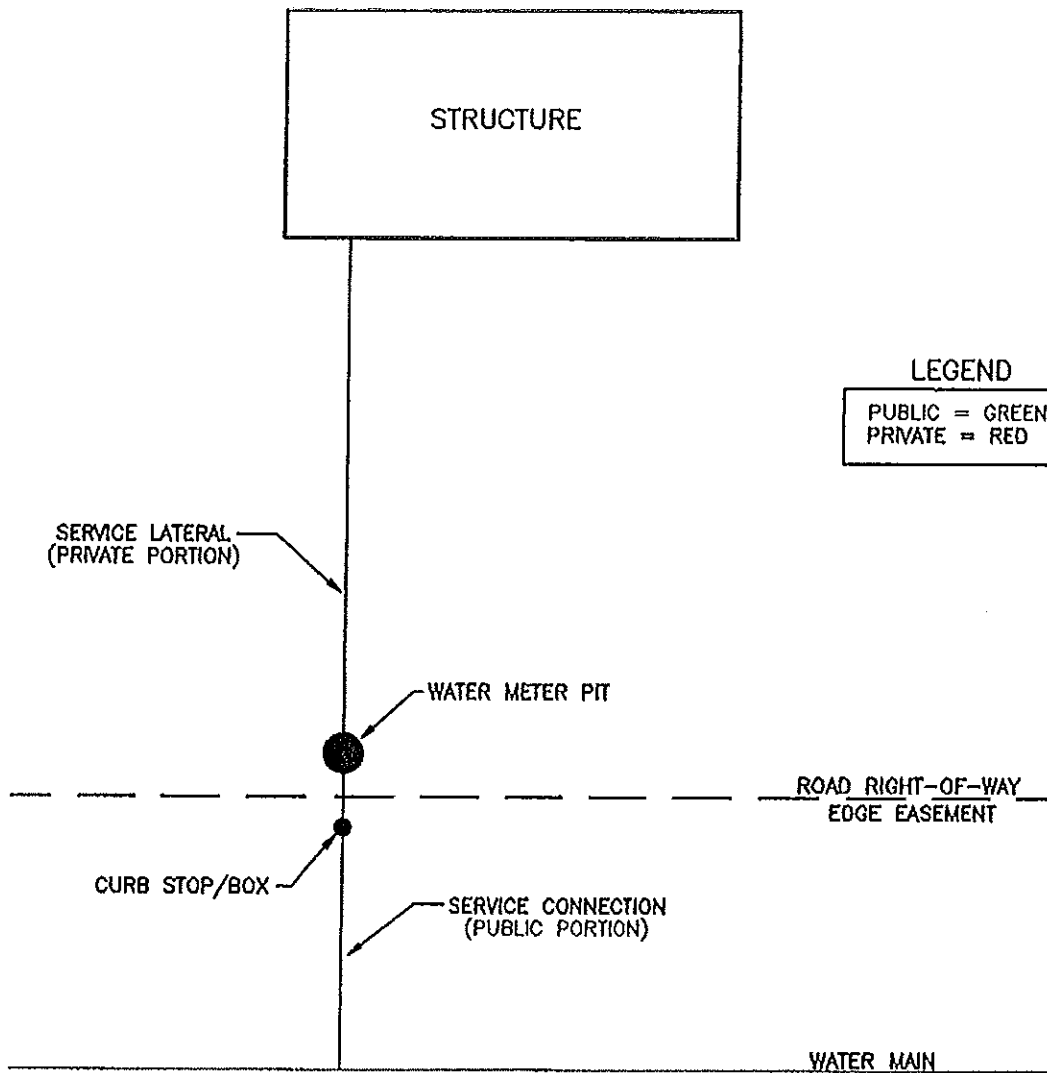


FIGURE #1

# TYPICAL WATER SERVICE LINE



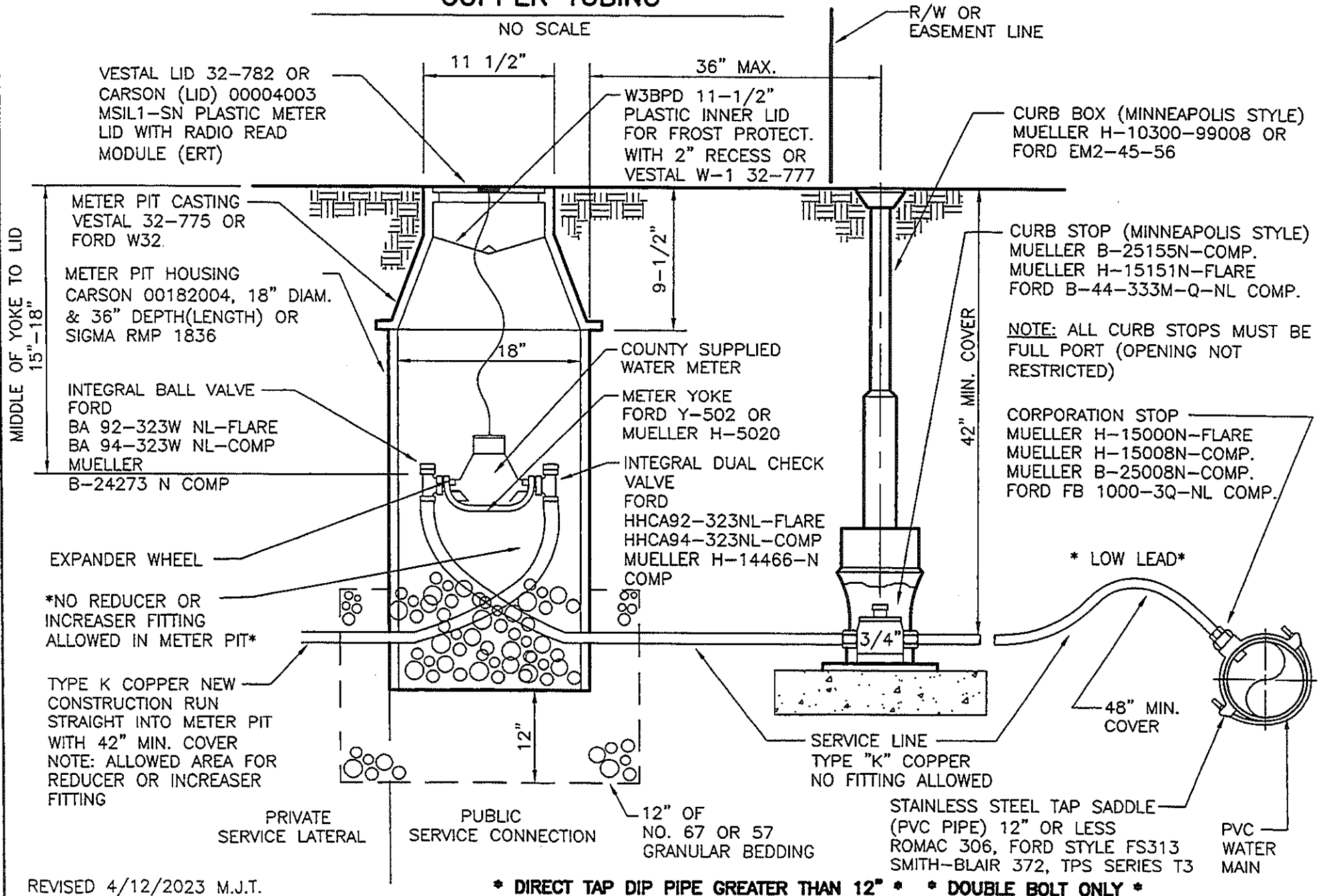
### LEGEND

PUBLIC = GREEN  
PRIVATE = RED

### NOTE

THE SERVICE LINE = THE COMBINATION OF THE SERVICE CONNECTION (PUBLIC) AND THE SERVICE LATERAL (PRIVATE).

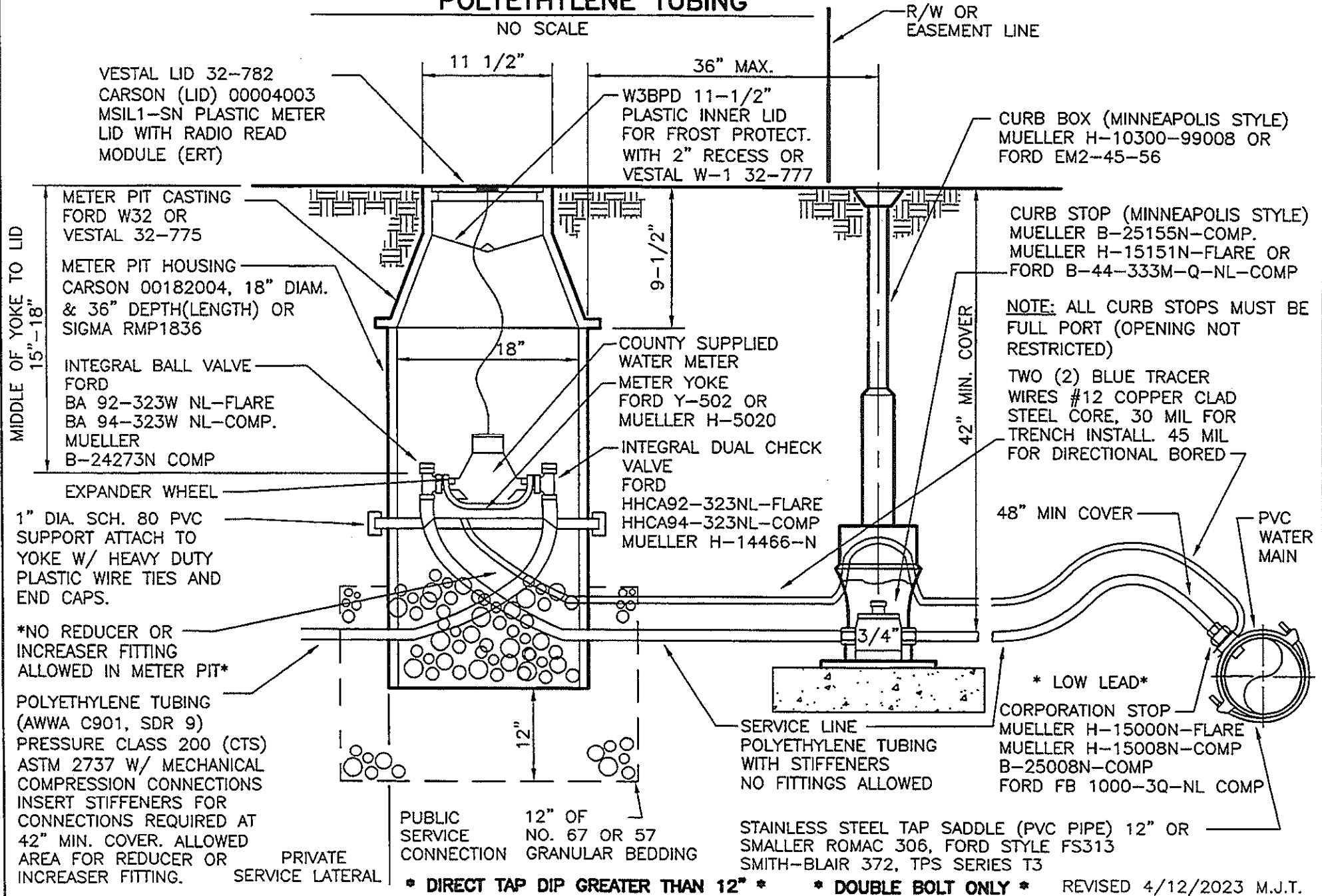
# FIGURE 2 – COP 5/8" X 3/4" METER PIT SETTING COPPER TUBING



REVISED 4/12/2023 M.J.T.

\* DIRECT TAP DIP PIPE GREATER THAN 12" \* \* DOUBLE BOLT ONLY \*

# FIGURE 2- PE 5/8" X 3/4" METER PIT SETTING POLYETHYLENE TUBING



VESTAL LID 32-782  
CARSON (LID) 00004003  
MSIL1-SN PLASTIC METER  
LID WITH RADIO READ  
MODULE (ERT)

W3BPD 11-1/2"  
PLASTIC INNER LID  
FOR FROST PROTECT.  
WITH 2" RECESS OR  
VESTAL W-1 32-777

CURB BOX (MINNEAPOLIS STYLE)  
MUELLER H-10300-99008 OR  
FORD EM2-45-56

METER PIT CASTING  
FORD W32 OR  
VESTAL 32-775

CURB STOP (MINNEAPOLIS STYLE)  
MUELLER B-25155N-COMP.  
MUELLER H-15151N-FLARE OR  
FORD B-44-333M-Q-NL-COMP

METER PIT HOUSING  
CARSON 00182004, 18" DIAM.  
& 36" DEPTH(LENGTH) OR  
SIGMA RMP1836

NOTE: ALL CURB STOPS MUST BE  
FULL PORT (OPENING NOT  
RESTRICTED)

INTEGRAL BALL VALVE  
FORD  
BA 92-323W NL-FLARE  
BA 94-323W NL-COMP.  
MUELLER  
B-24273N COMP

COUNTY SUPPLIED  
WATER METER  
METER YOKE  
FORD Y-502 OR  
MUELLER H-5020

TWO (2) BLUE TRACER  
WIRES #12 COPPER CLAD  
STEEL CORE, 30 MIL FOR  
TRENCH INSTALL. 45 MIL  
FOR DIRECTIONAL BORED

EXPANDER WHEEL  
1" DIA. SCH. 80 PVC  
SUPPORT ATTACH TO  
YOKE W/ HEAVY DUTY  
PLASTIC WIRE TIES AND  
END CAPS.

INTEGRAL DUAL CHECK  
VALVE  
FORD  
HHCA92-323NL-FLARE  
HHCA94-323NL-COMP  
MUELLER H-14466-N

\*NO REDUCER OR  
INCREASER FITTING  
ALLOWED IN METER PIT\*

PVC WATER MAIN

POLYETHYLENE TUBING  
(AWWA C901, SDR 9)  
PRESSURE CLASS 200 (CTS)  
ASTM 2737 W/ MECHANICAL  
COMPRESSION CONNECTIONS  
INSERT STIFFENERS FOR  
CONNECTIONS REQUIRED AT  
42" MIN. COVER. ALLOWED  
AREA FOR REDUCER OR  
INCREASER FITTING.

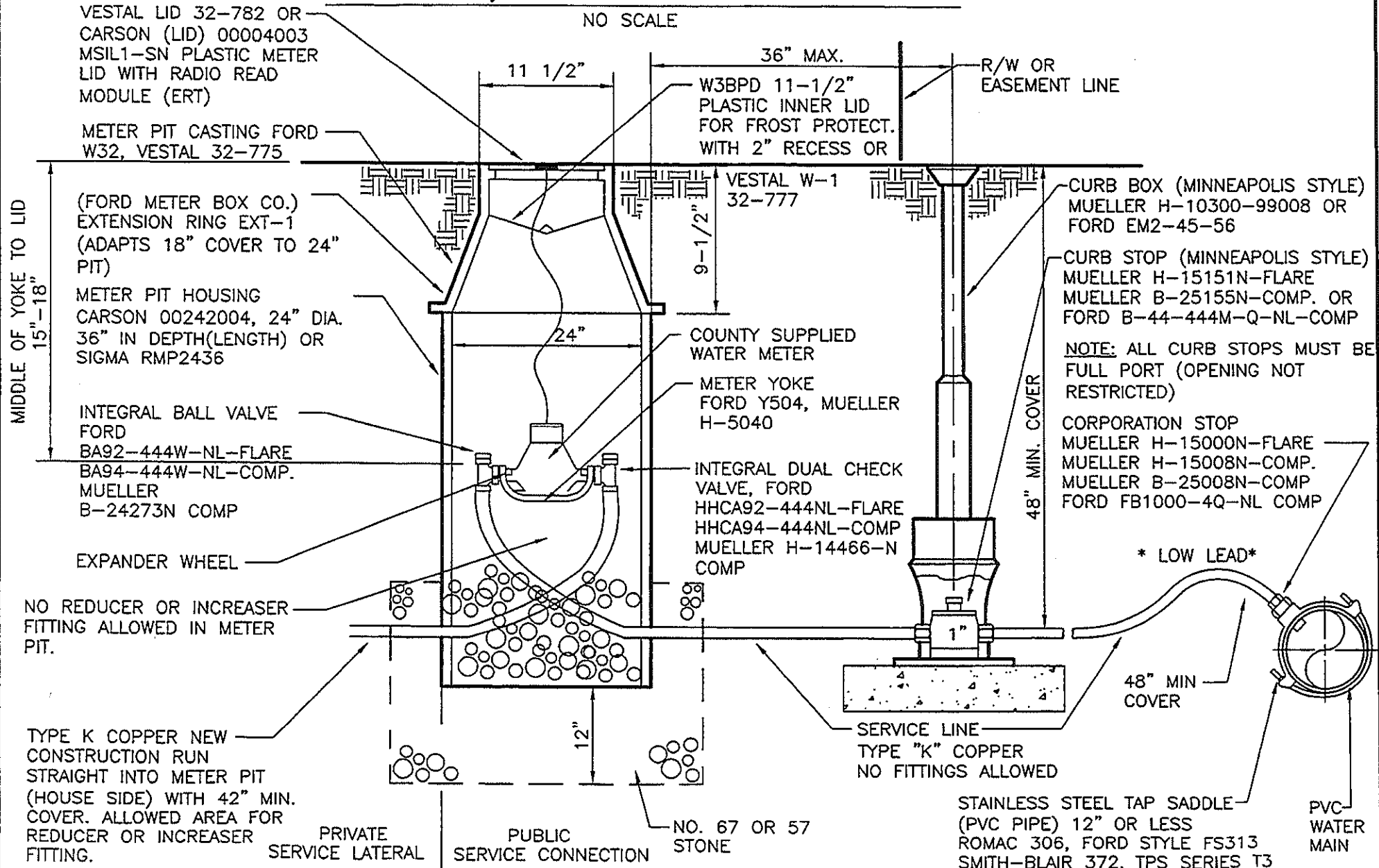
SERVICE LINE  
POLYETHYLENE TUBING  
WITH STIFFENERS  
NO FITTINGS ALLOWED

\* LOW LEAD \*  
CORPORATION STOP  
MUELLER H-15000N-FLARE  
MUELLER H-15008N-COMP  
B-25008N-COMP  
FORD FB 1000-3Q-NL COMP

STAINLESS STEEL TAP SADDLE (PVC PIPE) 12" OR  
SMALLER ROMAC 306, FORD STYLE FS313  
SMITH-BLAIR 372, TPS SERIES T3

## FIGURE 2A - COPPER TYPICAL 3/4" OR 1" METER PIT SETTING

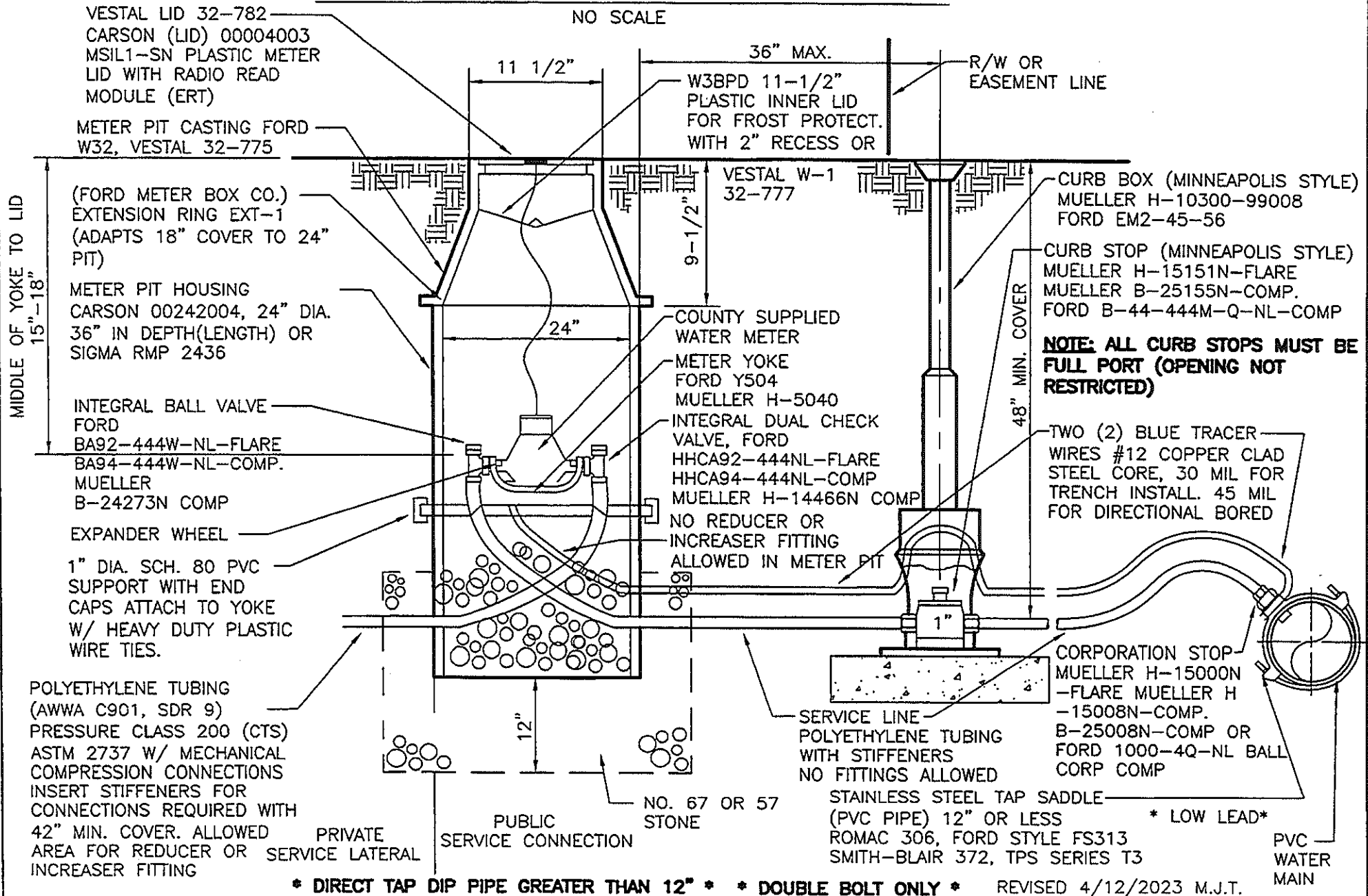
NO SCALE



REVISED 4/12/2023 M.J.T.

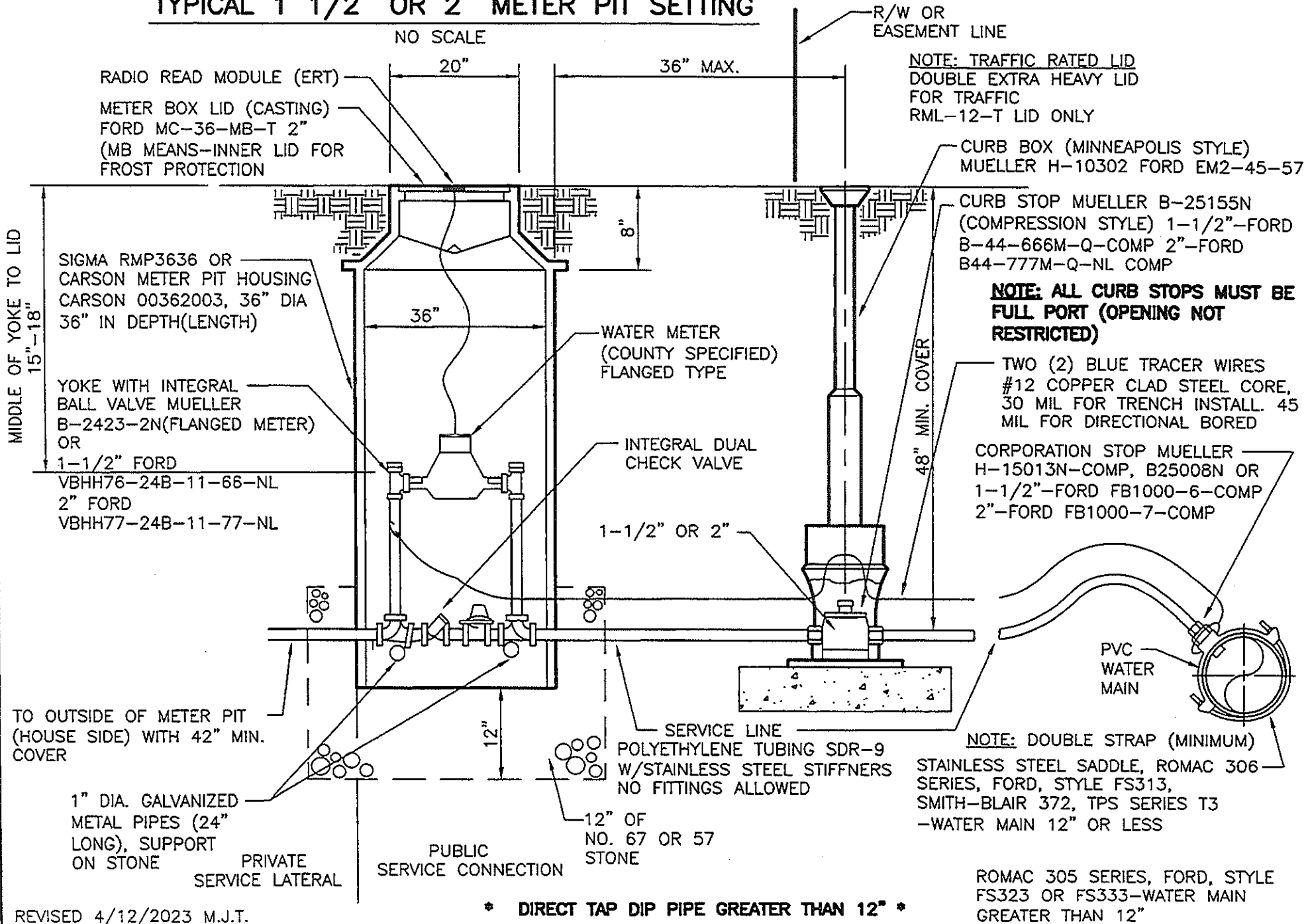
\* DIRECT TAP DIP PIPE GREATER THAT 12" \* \* DOUBLE BOLT ONLY \*

**FIGURE 2A - PE  
TYPICAL 3/4" OR 1" METER PIT SETTING  
POLYETHYLENE TUBING**

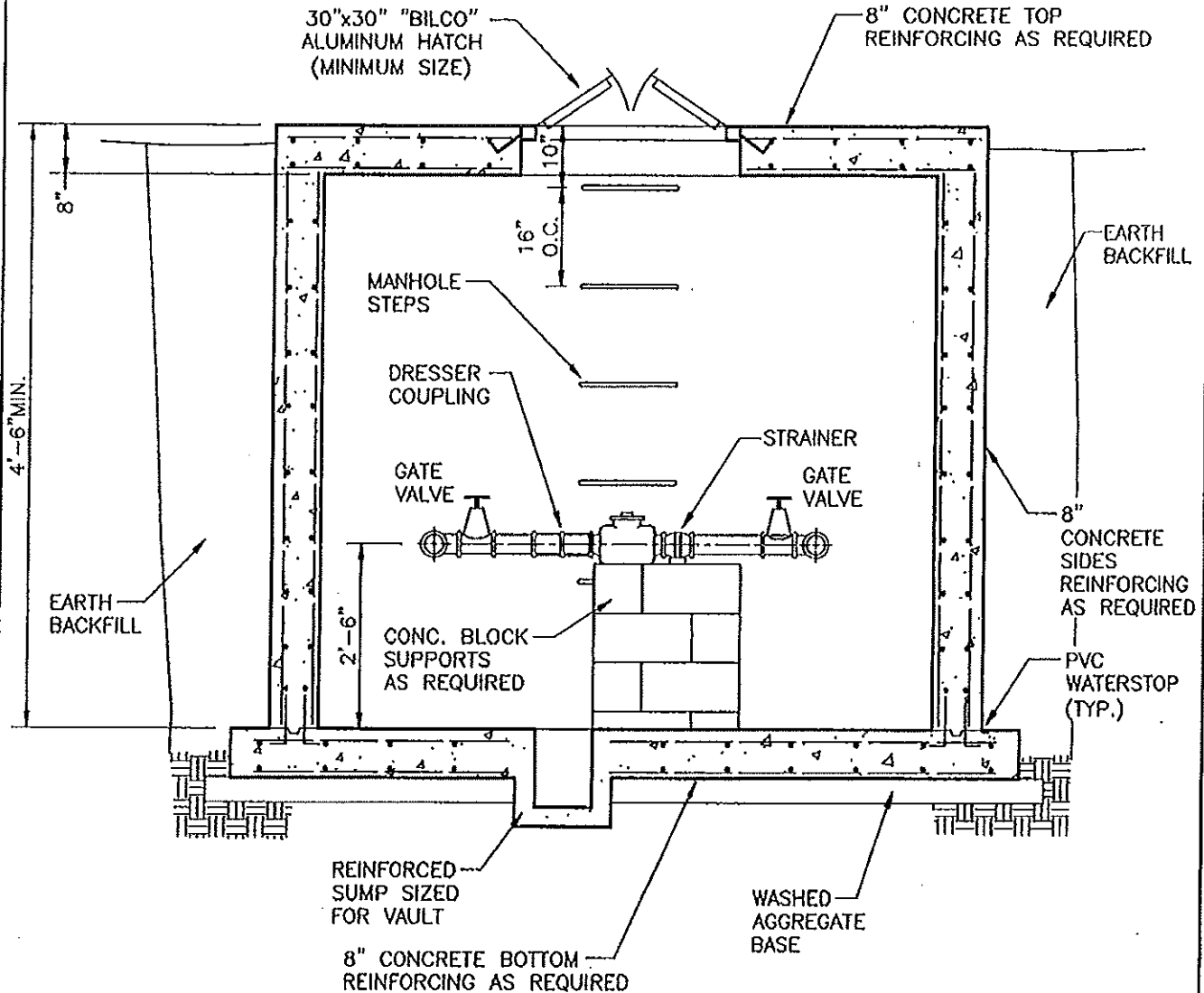


\* DIRECT TAP DIP PIPE GREATER THAN 12" \* \* DOUBLE BOLT ONLY \* REVISED 4/12/2023 M.J.T.

# FIGURE 3 TYPICAL 1 1/2" OR 2" METER PIT SETTING



# FIGURE 4 TYPICAL 3" AND LARGER METER VAULT



## SECTION A-A NOT TO SCALE

### GENERAL NOTES

1. ALL PIPING, VALVES, AND APPURTENANCES WITHIN VAULT ARE THE SAME DIAMETER/SIZE OF SERVICE LINE.
2. VAULTS FOR 8" DIAMETER SERVICE LINES AND LARGER SHALL REQUIRE A LARGER VAULT THAN THE ONE SHOWN, TO BE DETERMINED BASED ON LAYING LENGTH OF APPURTENANCE TO BE INSTALLED.
3. SHOP DRAWINGS FOR THE VAULT AND ALL APPURTENANCES MUST BE SUBMITTED FOR APPROVAL PRIOR TO THE ISSUANCE OF A PERMIT.
4. ALL VAULTS SHALL HAVE A CONCRETE FLOOR UNLESS OTHERWISE APPROVED BY THE OTTAWA COUNTY SANITARY ENGINEER.
5. ALL FLANGE SHALL BE PRE FAB OR MEGA FLANGE.

# FIGURE 5A

## HYDRANT ASSEMBLY—TYPE A

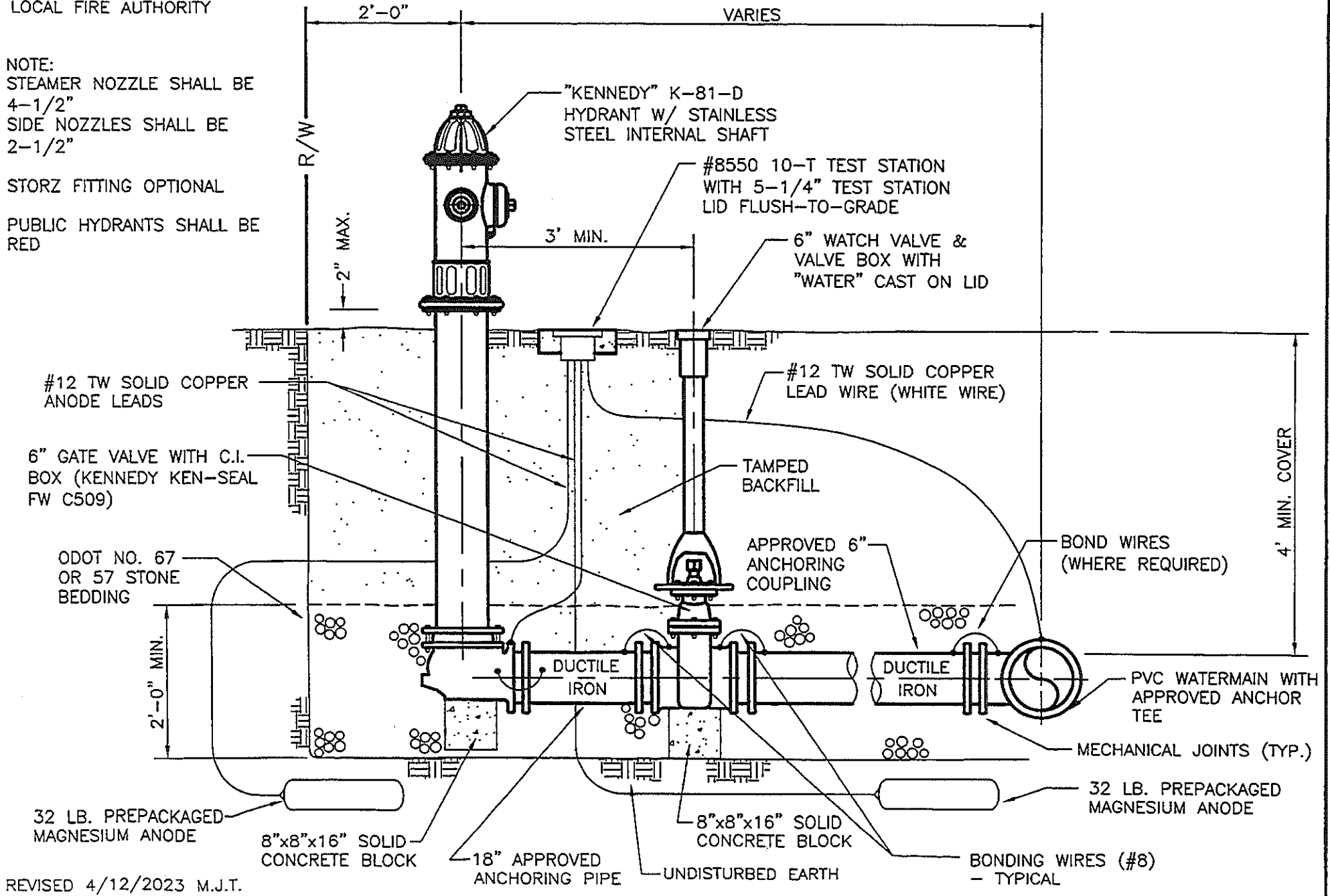
NO SCALE

NOTE:  
 QUANTITY &  
 LOCATION SHALL  
 CONFIRMED W/  
 LOCAL FIRE AUTHORITY

NOTE:  
 STEAMER NOZZLE SHALL BE  
 4-1/2"  
 SIDE NOZZLES SHALL BE  
 2-1/2"

STORZ FITTING OPTIONAL

PUBLIC HYDRANTS SHALL BE  
 RED



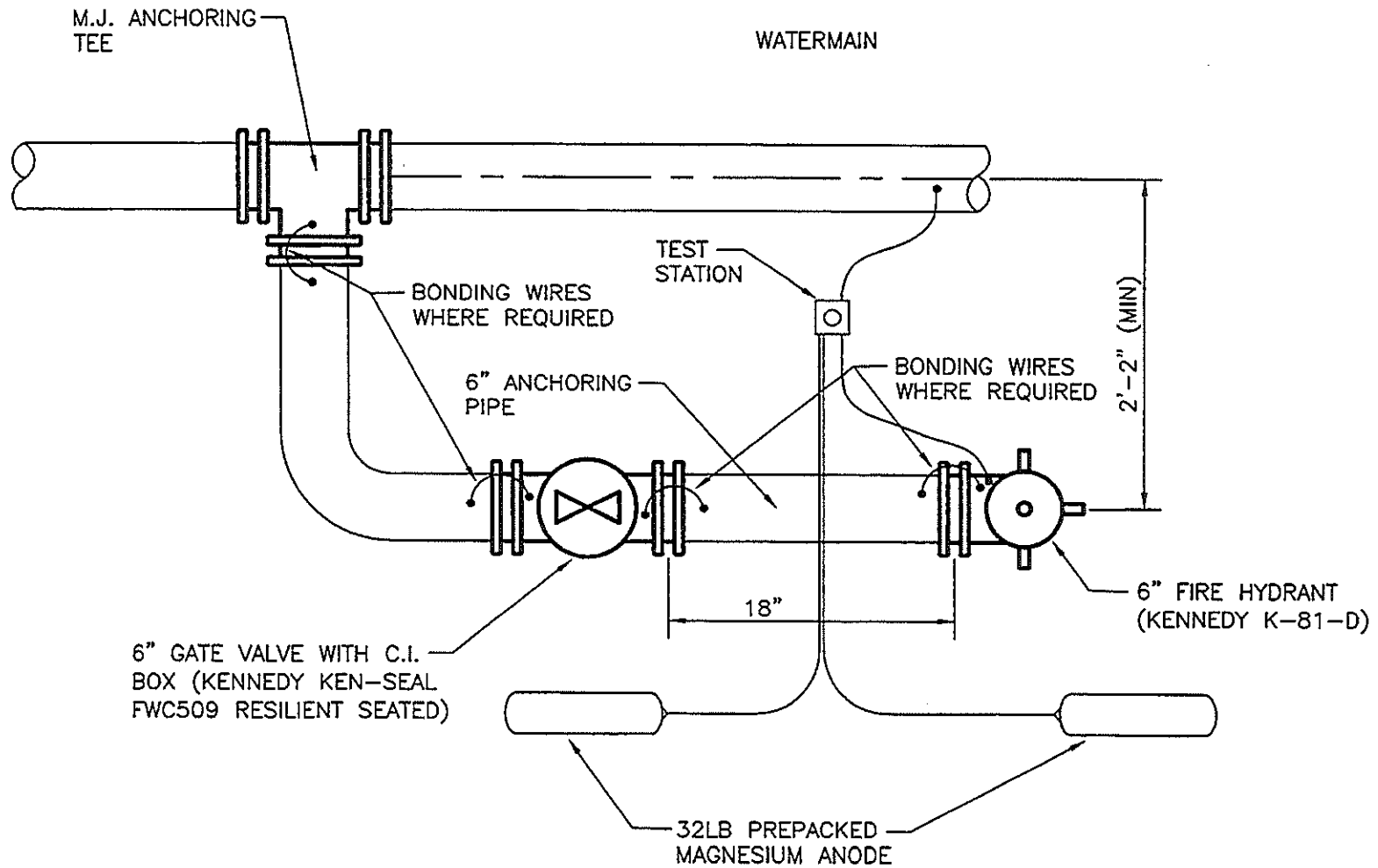
REVISED 4/12/2023 M.J.T.



**FIGURE 5B**  
**HYDRANT ASSEMBLY—TYPE B**

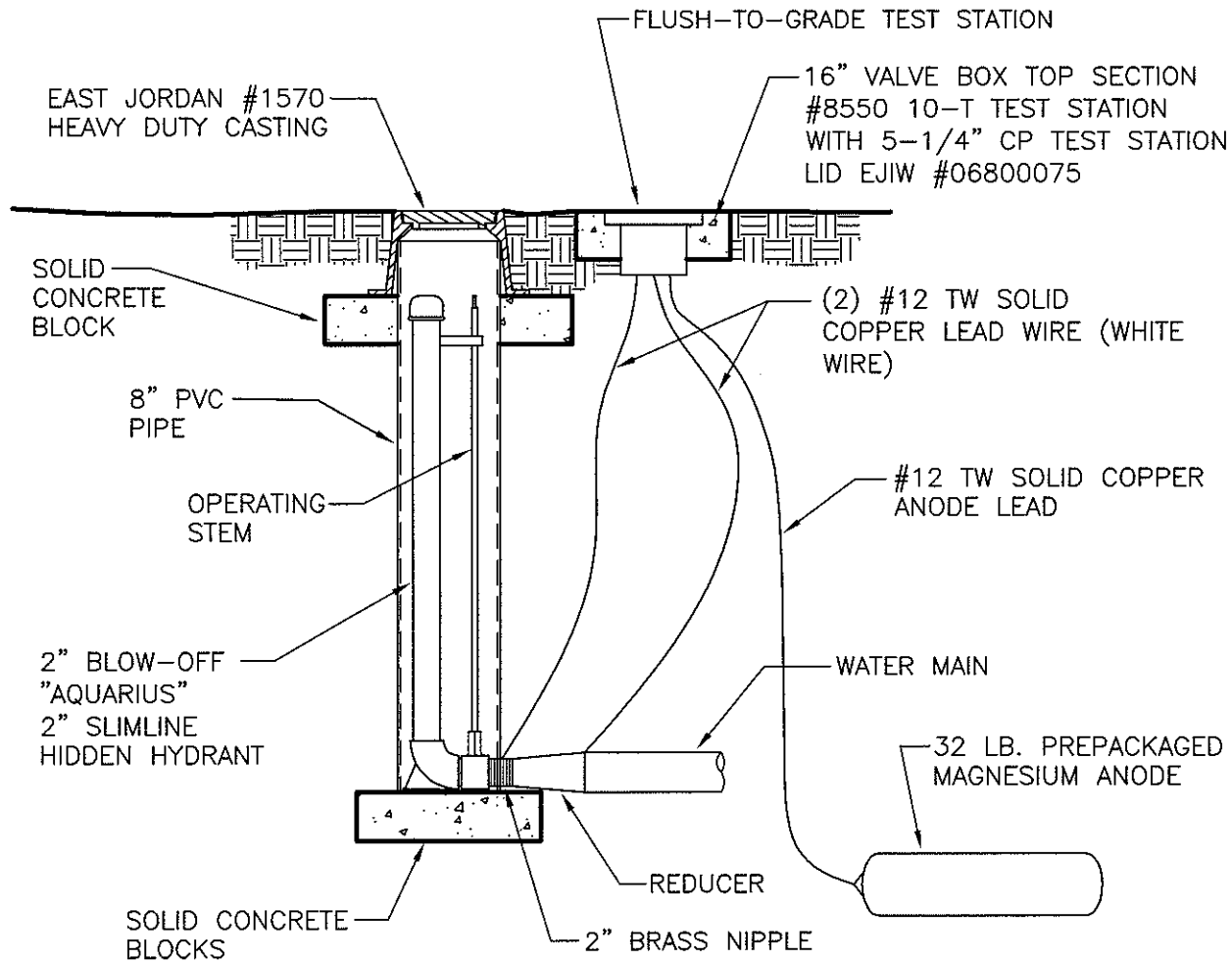
NO SCALE

NOTE: BLOCKING UNDER PIPE AND  
HYDRANT (STONE DRAIN) SHALL BE  
8"X8"X16" SOLID CONCRETE BLOCKS.  
(SEE FIGURE 5A FOR LOCATIONS)



# FIGURE 6 WATER MAIN BLOW-OFF DETAIL

NO SCALE

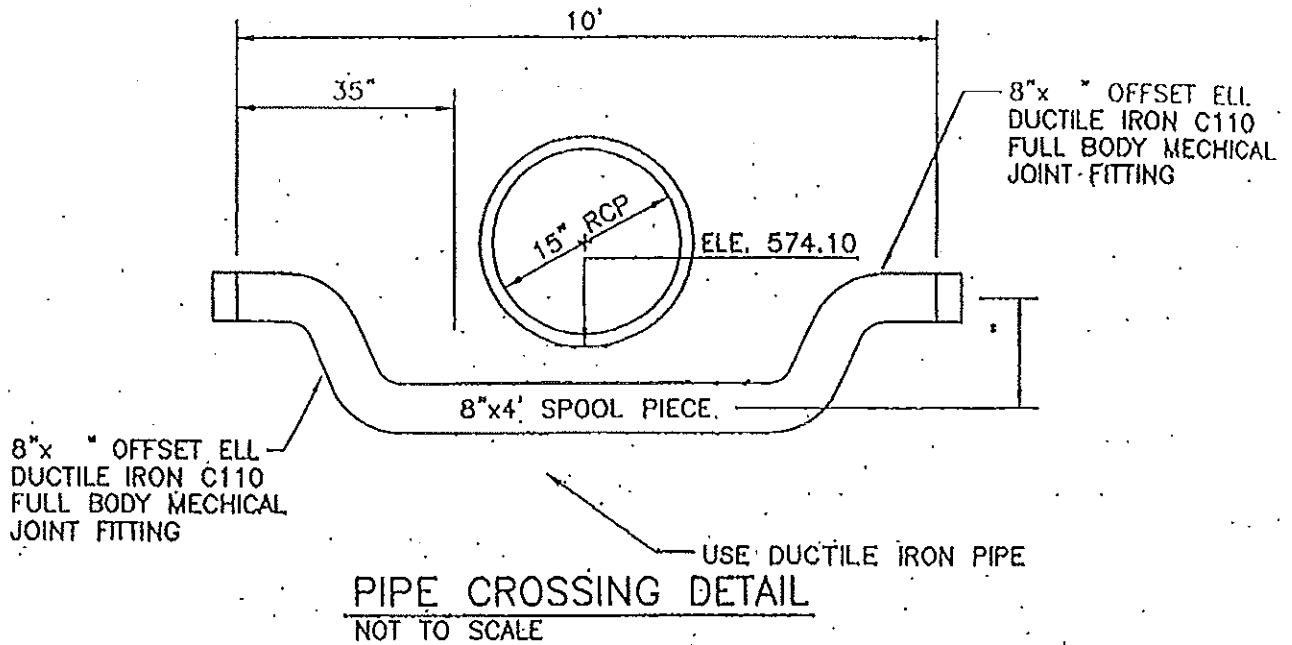


2ND OPTION: (THIS ELIMINATES THE 3"x2" FIPT DUCTILE IRON FITTING)

USE HARCO TEE #151-308, 3"G X 3"G X 2" FIPT.

HARCO PLUG #144-030 INSTALLED IN THE END OF THE TEE AND BLOCKED.

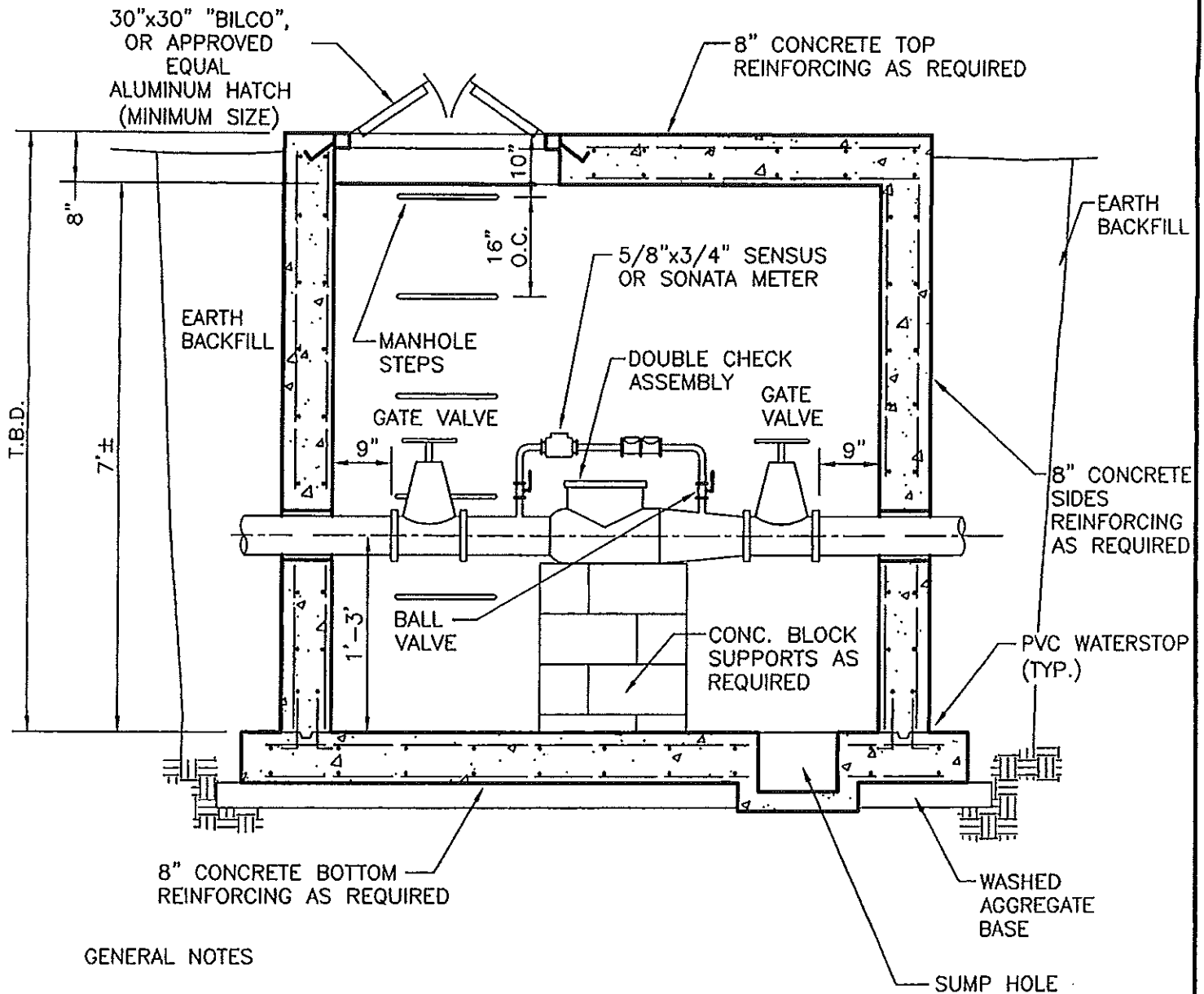
BLOCK THE THREE SIDES OF THE HARCO TEE. NOTCH 8" PVC PIPE AROUND  
BLOCKING AND 2" BRASS NIPPLE, ENSURING THAT THE BOTTOM OF THE PVC PIPE  
SITS ON THE SOLID CONCRETE BLOCK.



## DETAILS:

- Spool piece shall be made of ductile iron pipe only.
- All "T" bolts for MJ joints shall be "Core-Blue" brand "T" bolts.
- All fittings and ductile iron pipe shall be wrapped in polyethylene wrap.
- Spool piece shall NOT be encased in concrete.
- Shall be 18" separation (clearance) between top of spool piece and invert of crossing pipe.
- Contractor/developer shall coordinate installation with this department's field operations staff.

**FIGURE 7**  
**FIRE LINE DETECTOR CHECK PIPING PLAN VIEW**  
 NOT TO SCALE



**GENERAL NOTES**

1. HATCH: 30"x30" "BILCO" ALUMINUM (MINIMUM SIZE)
2. VAULT: SIZED TO ALLOW FOR SPECIFIED CLEARANCES AND 3" OR GREATER DOMESTIC METER.
3. SUMP: 12" DIAMETER x 9" DEEP SUMP HOLE.
4. GATE VALVES: KENNEDY WITH NON RISING STEMS AND WITH WHEEL HANDLE.
5. DOUBLE CHECK DETECTOR CHECK ASSEMBLY: AMES 1048, e.g. 3000ss OR APPROVED EQUAL. BACK FLOW DEVICE TO BE APPROVED BY OTTAWA COUNTY SANITARY ENGINEER.
6. A 2" FIP THREADED TEST PORT SHALL BE INSTALLED AFTER THE DOUBLE DETECTOR ASSEMBLY
7. ALL FLANGE SHALL BE PRE FAB OR MEGA FLANGE.
8. APPROVED COUNTY METER WITH ITRON ERT CONNECTOR. (NO BADGER METER ALLOWED)

**FIGURE 8**  
**FIRE LINE DETECTOR CHECK PIPING TOP VIEW**

NO SCALE

