

Instructions for Water Taps and Meters by Licensed Plumbers and Water Tap Contractors

These instructions are for establishing new water service for water taps for ¾" and 1" meters on water mains 12" in diameter or smaller. The work must be completed by a Plumber licensed by the City of Broken Arrow, or a Water Tap Contractor licensed by the Oklahoma Department of Environmental Quality and in good standing with the City of Broken Arrow. The work must be inspected by City of Broken Arrow Neighborhood Engagement and the Utilities Department before water service is turned on. Materials and installation shall meet the [City of Broken Arrow Standard Construction Specifications](#). Please refer to this document for additional information. These instructions are for information purposes only and do not substitute for the Standard Construction Specifications.

Water Tap Materials Procurement and Inspection Process

1. Once the permit application is approved and paid, please call the City of Broken Arrow's Purchasing Division 918-259-6530 to schedule a pickup date.
2. On the pickup date, items may be picked up at the Purchasing Division located at 1700 W. Detroit St within the City of Broken Arrow Maintenance Facility.



3. Show the permit to Purchasing personnel using the Self Service Portal app or a hard copy.
4. The materials provided are listed below.
5. When the materials are picked up, a Utility Billing account will be opened in the name of the person or business listed on the Permit Application. All City of Broken Arrow Utility Billing accounts are charged a \$30 base fee no matter the water usage.
6. **If materials are not picked up within two weeks of the scheduled pickup date, the materials will be restocked, and the account will be charged a 30% Restocking Fee.**
7. The materials shall be installed per the instructions below. **PLEASE ENSURE THAT CORRECT METER IS INSTALLED AT THE CORRECT ADDRESS.** The meters are not interchangeable and will cause the inspection to fail.
8. When the tap and meter are ready for inspection, request an inspection through the Self Service Portal.
9. The tap shall not be buried prior to inspection.

10. A Certificate of Occupancy will not be issued until all inspections are passed.



Materials Needed

Materials Provided by the City of Broken Arrow

The following items are provided by the City of Broken Arrow and may be picked up at the Purchasing Division located at 1700 W. Detroit St. These items shall not be substituted. Should materials provided by the City of Broken Arrow become damaged during installation, additional materials may be purchased from the City of Broken Arrow Purchasing Division.

- ¾" or 1" Water Meter (including register and antenna)
- Meter Box and Lid

Materials Provided by the Plumber or Water Tap Contractor

The following items will be provided by the Plumber or Water Tap Contractor. Materials shall meet [City Standards](#). Substitutions are not allowed and will cause the installation to be rejected.

- Tapping Saddle: Service line taps shall have a solid brass body, brass straps, brass bolts, and brass nuts. The gaskets shall be tight sealing and resistant to acids, alkalis, and water. Saddles shall be of the two (2) strap design and shall have a pressure rating equal to or greater than the pressure rating of the pipe. The saddles shall be Ford 202b brass service saddles or equal.
- Tubing
 - Copper Line: Copper service pipe shall be a seamless copper tubing cold drawn to size. It shall be Type K soft annealed and shall meet the requirements of ASTM B 88.
 - Crosslinked Polyethylene Pipe: Crosslinked Polyethylene (PEX-A) service line shall be Uponor Aqua PEX or Rehau MUNICIPEX meeting requirements of 3306 designation according to ASTM F876.
 - ¾" meters shall be supplied by a single 1" PEX line
 - Service taps shall match the line nominal diameter.
 - 1" meters shall be supplied by a single 1-1/2" PEX line.
 - Service taps shall match the line nominal diameter.
- Fittings including Corporation Stop, Curb Stop and Meter Nipple: All fittings shall be of cast brass or bronze and shall be finished in a thoroughly workmanlike manner. They shall be sound, clean, free from blow holes, porous places, cracks, or any other defects affecting their strength or appearance, which would indicate inferior quality of metal. All moving parts shall be accurately fitted up so as to work smooth and freely, without binding. They shall be of standard type commonly used and shall be the product of a recognized manufacturer of such fittings. Each casting shall bear the name or trademark of the manufacturer, permanently cast in the metal. Connectors shall be flare or compression type.



Construction Method for Taps and Meters

Water taps shall not be installed on main lines larger than 12". For larger lines, the permit must be changed to a City Installed Water Tap. Once the Permit has been changed and the additional fee paid, the City of Broken Arrow will install the tap and set the meter.

All new services requiring a street crossing (bore) shall be performed by the City of Broken Arrow Utilities Department. If the mainline is across the street from the new building, the Permit must be changed to include a Street Crossing fee. Once the Permit has been changed and the additional fee paid, the City of Broken Arrow will make the tap and install the crossing. The licensed Plumber or Water Tap Contractor may then install the meter.

If the street crossing has already been installed for an adjacent property (Copper crossings only) and both services are ¾" meters, the crossing will be teed as shown in Standard WM1.

Neither a Plumber nor Water Tap Contractor shall, under any circumstance, operate any of the City's water main valves.

Construction shall be in accordance with the following Standard Drawings which are included in this set of instructions and listed below:

- WM1 – ¾" Meter Setting on a Copper Line Street Crossing**
- WM1A – ¾" Meter Setting on a PEX Line Street Crossing**
- WM2 – ¾" Meter Setting for a Copper Line**
- WM2A – ¾" Meter Setting for a PEX Line**
- WM3 – 1" Meter Setting on a Copper Line Street Crossing**
- WM3A – 1" Meter Setting on a PEX Line Street Crossing**
- WM4 – 1" Meter Setting for a Copper Line**
- WM4A – 1" Meter Setting for a PEX Line**
- WM5 – Copper Water Service Street Crossing Detail**
- WM5A – PEX Water Service Street Crossing Detail**

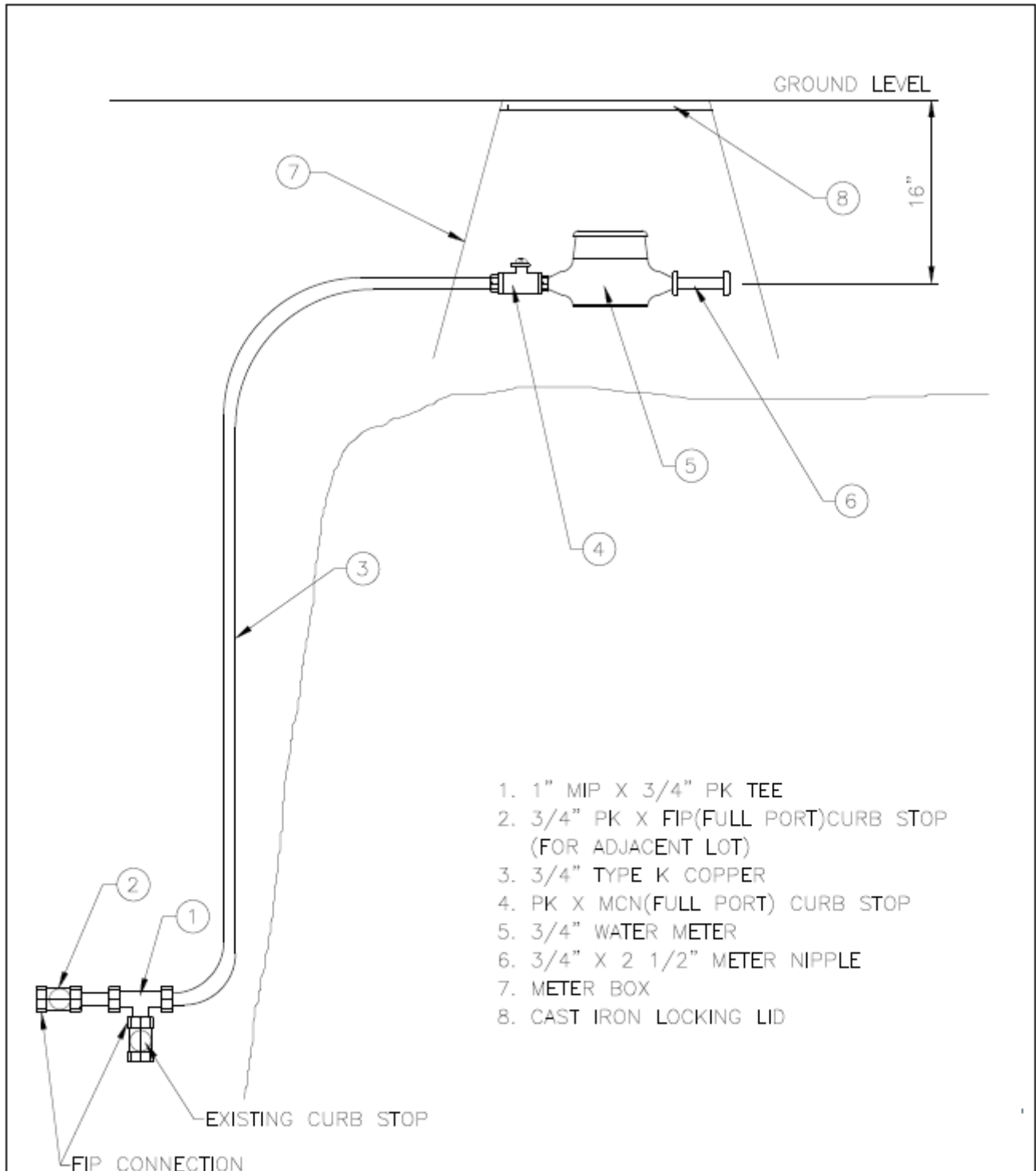
Questions?

For questions regarding **construction procedures**, please contact Travis Schemonia in the Water Distribution Division at 918-259-7000x7436 or email at tschemonia@brokenarrowok.gov

For questions regarding the **material procurement process**, please contact the Purchasing Division at 918-259-6530 or bapurchasing@brokenarrowok.gov

For questions regarding the **meter or water service**, please contact the Meter Reading Division at 918-259-7000x7330 or dbynum@brokenarrowok.gov

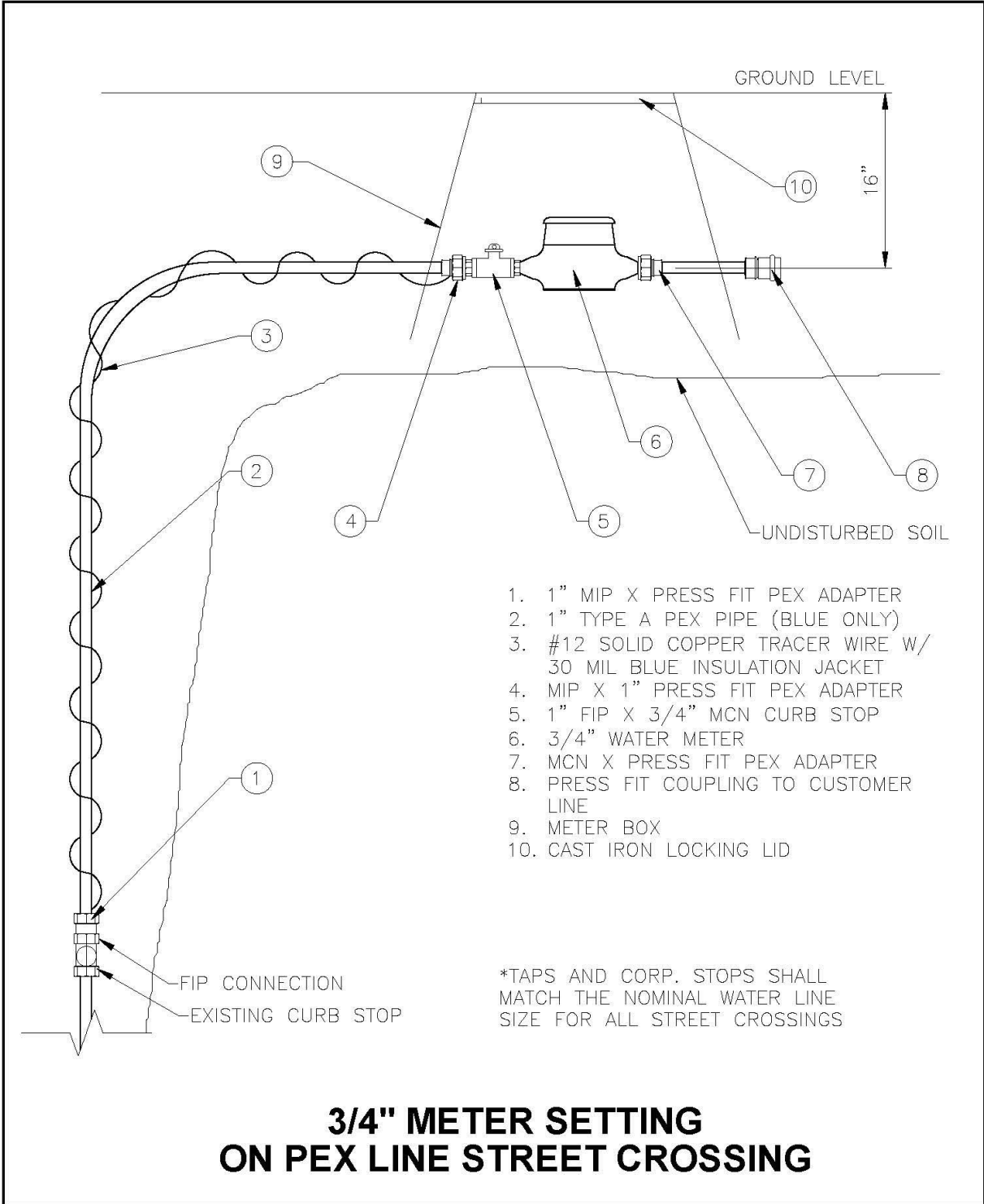
Thank you for building in Broken Arrow!



1. 1" MIP X 3/4" PK TEE
2. 3/4" PK X FIP(FULL PORT)CURB STOP (FOR ADJACENT LOT)
3. 3/4" TYPE K COPPER
4. PK X MCN(FULL PORT) CURB STOP
5. 3/4" WATER METER
6. 3/4" X 2 1/2" METER NIPPLE
7. METER BOX
8. CAST IRON LOCKING LID

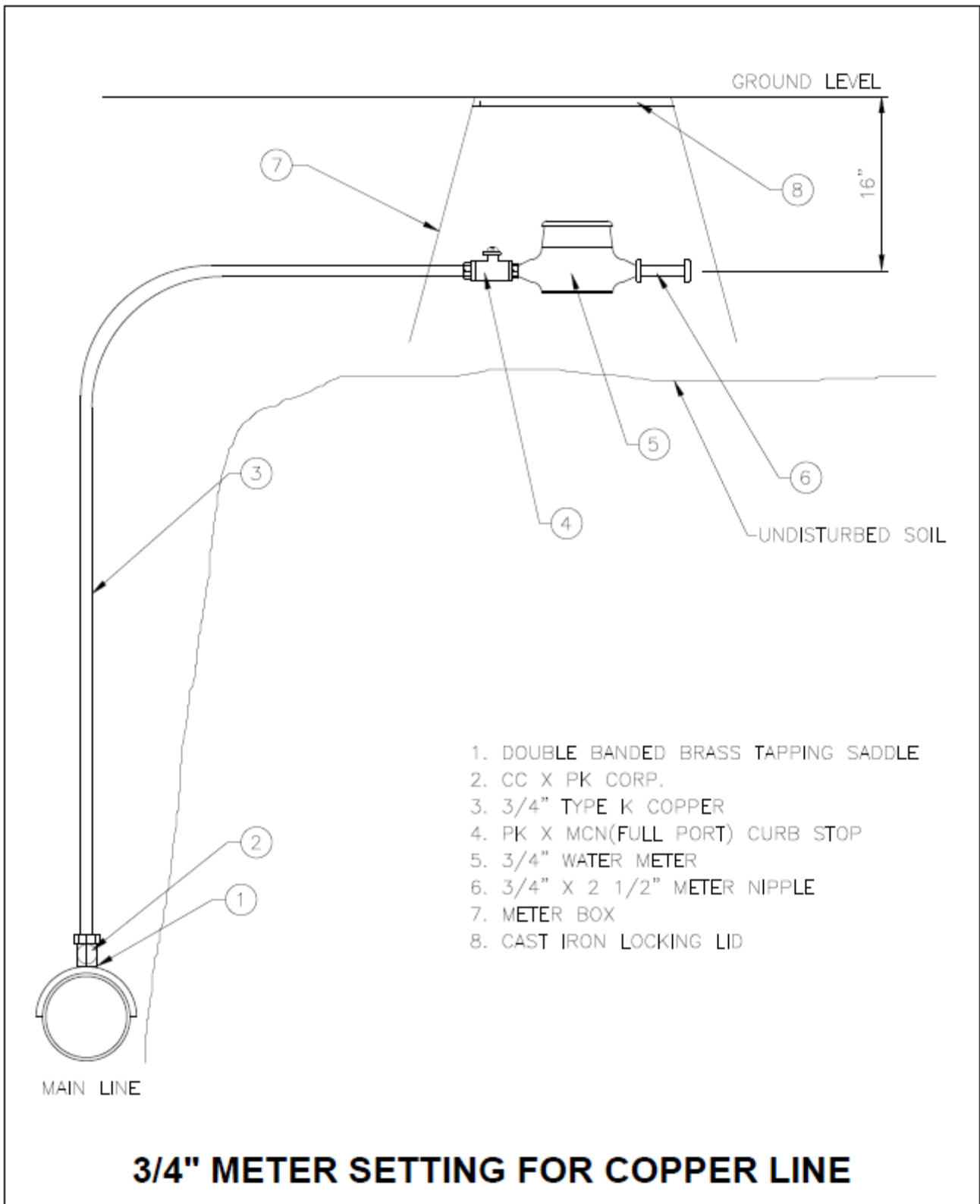
3/4" METER SETTING ON COPPER LINE STREET CROSSING

CITY OF BROKEN ARROW	STANDARD DRAWING: WM1		
	LAST REVISION DATE: 3/23/2023		
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: TSR	DATE: 9/6/2023

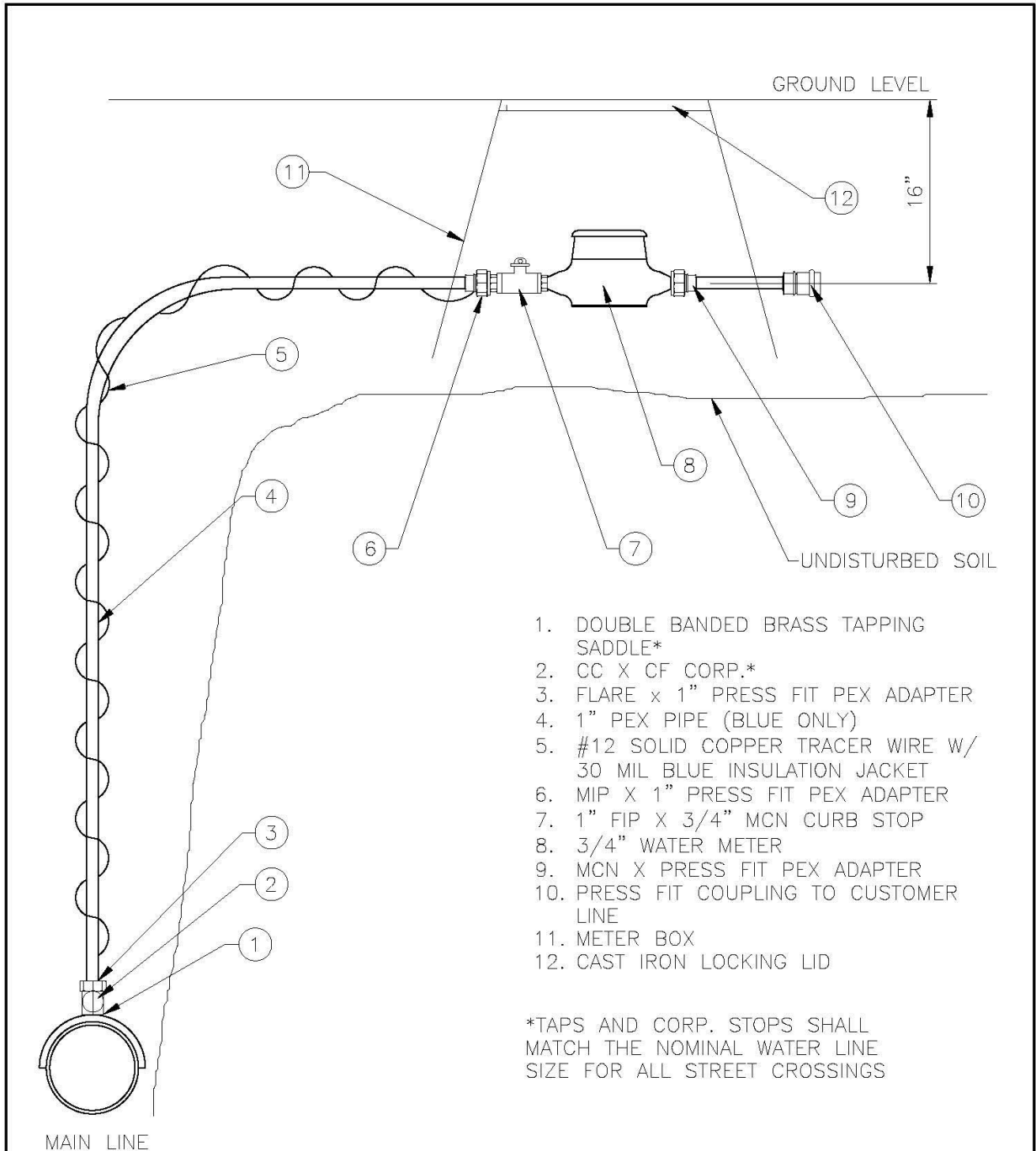


3/4" METER SETTING ON PEX LINE STREET CROSSING

	STANDARD DRAWING: WM1A		
	LAST REVISION DATE: N/A		
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: SLT	DATE: 3/23/2023



	CITY OF BROKEN ARROW		STANDARD DRAWING: WM2
			LAST REVISION DATE: 3/23/2023
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: TSR	DATE: 9/6/2023

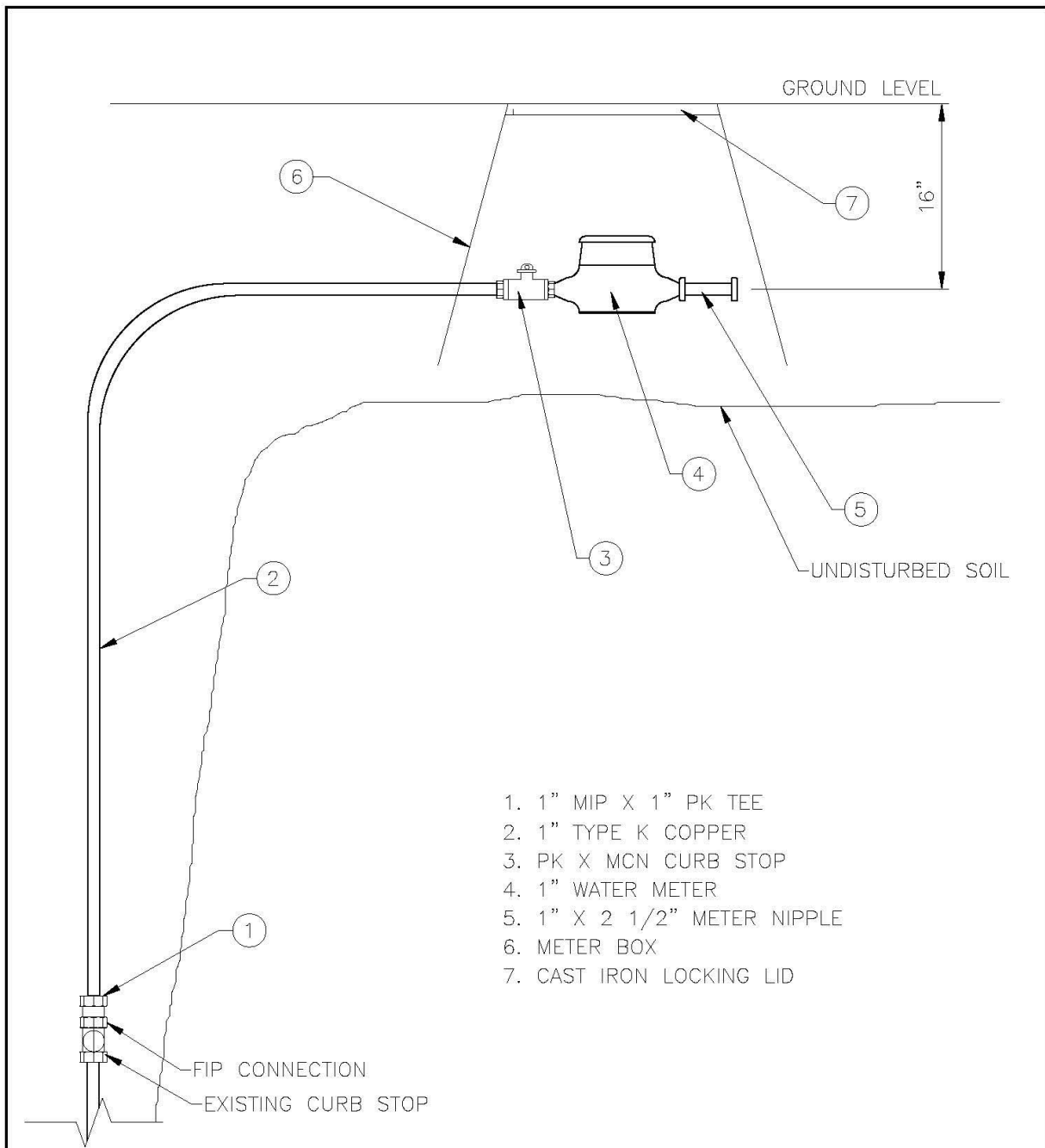


1. DOUBLE BANDED BRASS TAPPING SADDLE*
2. CC X CF CORP.*
3. FLARE x 1" PRESS FIT PEX ADAPTER
4. 1" PEX PIPE (BLUE ONLY)
5. #12 SOLID COPPER TRACER WIRE W/ 30 MIL BLUE INSULATION JACKET
6. MIP X 1" PRESS FIT PEX ADAPTER
7. 1" FIP X 3/4" MCN CURB STOP
8. 3/4" WATER METER
9. MCN X PRESS FIT PEX ADAPTER
10. PRESS FIT COUPLING TO CUSTOMER LINE
11. METER BOX
12. CAST IRON LOCKING LID

*TAPS AND CORP. STOPS SHALL MATCH THE NOMINAL WATER LINE SIZE FOR ALL STREET CROSSINGS

3/4" METER SETTING FOR PEX LINE

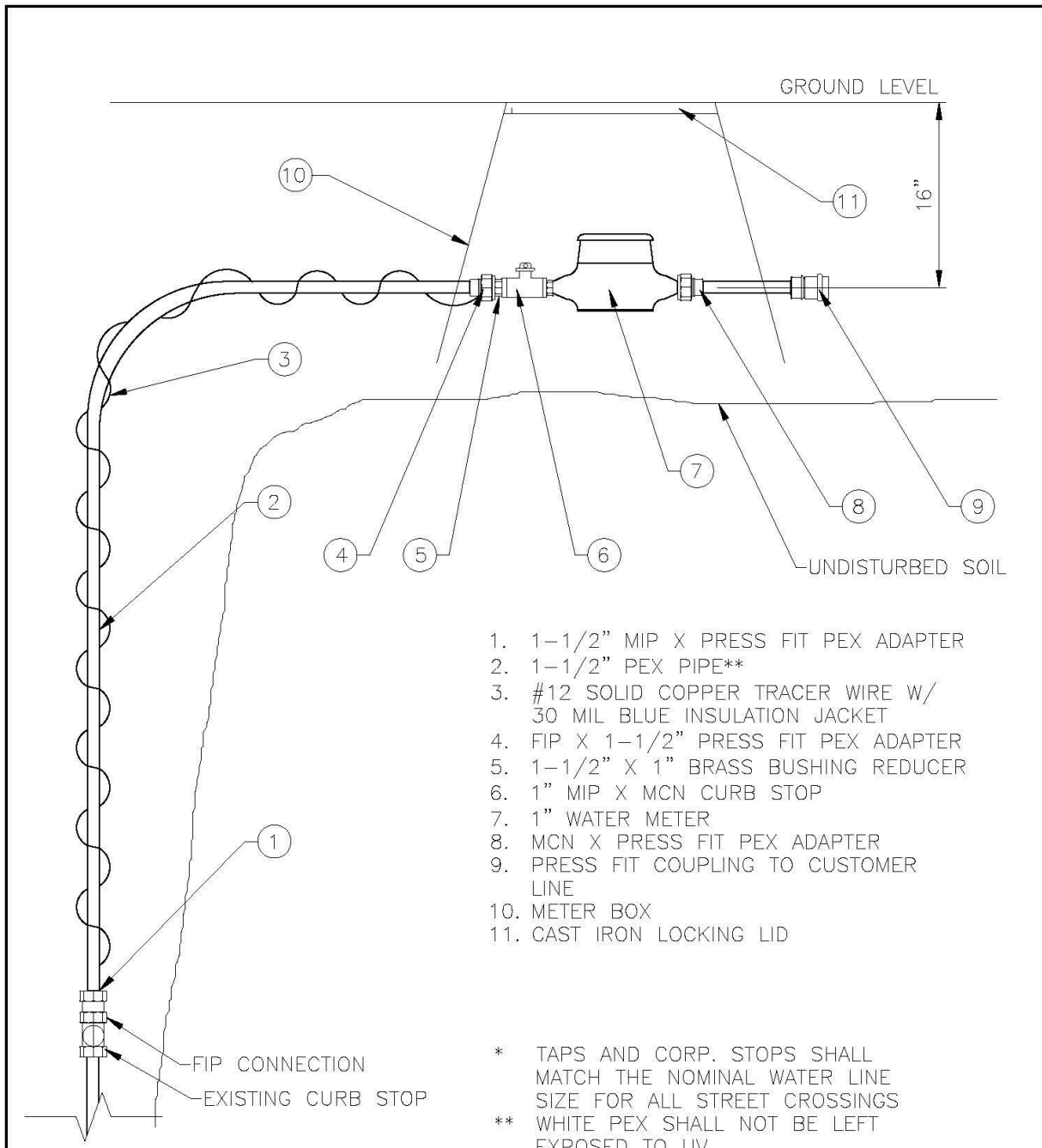
			STANDARD DRAWING: WM2A
			LAST REVISION DATE: N/A
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: SLT	DATE: 3/23/2023



1. 1" MIP X 1" PK TEE
2. 1" TYPE K COPPER
3. PK X MCN CURB STOP
4. 1" WATER METER
5. 1" X 2 1/2" METER NIPPLE
6. METER BOX
7. CAST IRON LOCKING LID

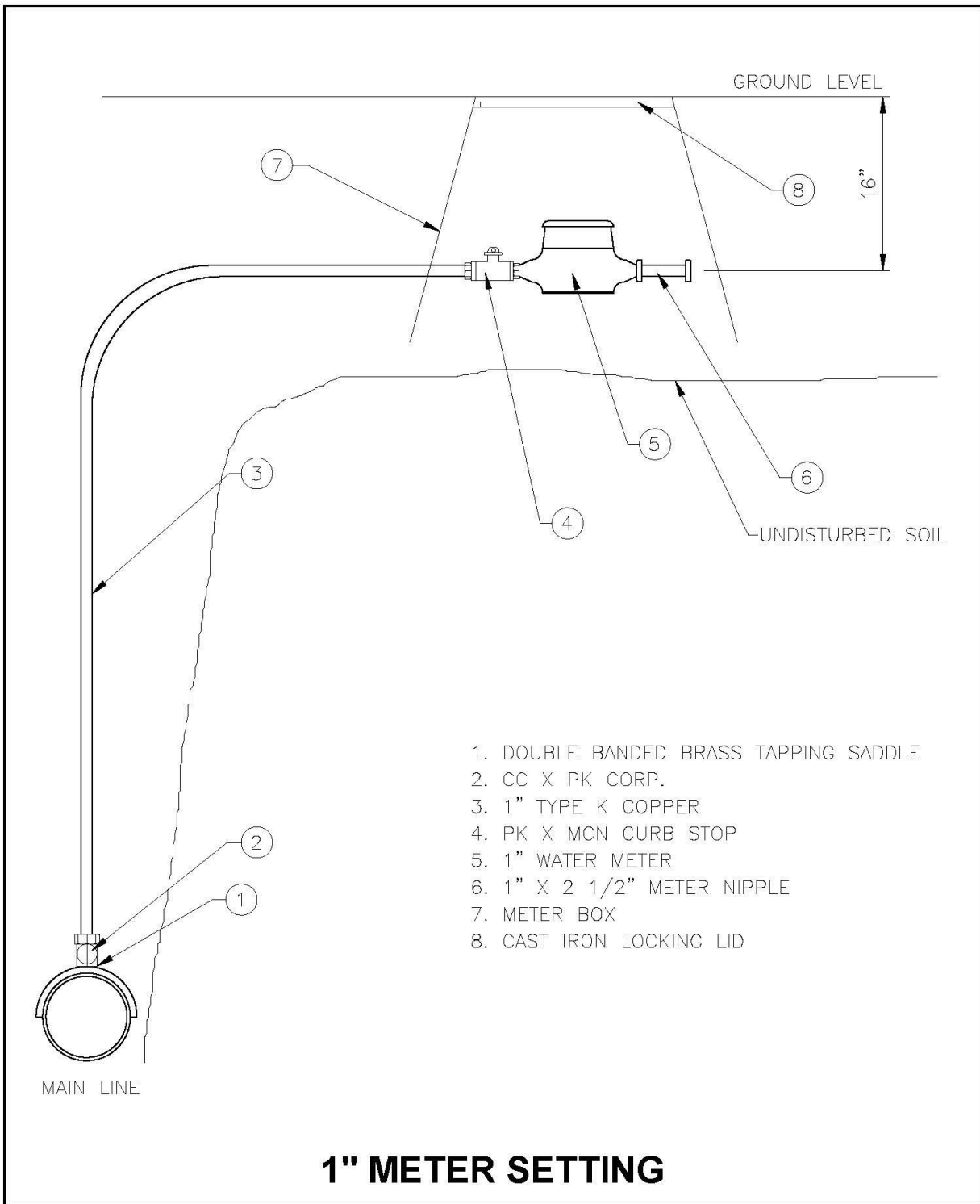
1" METER SETTING ON COPPER LINE STREET CROSSING

CITY OF BROKEN ARROW	STANDARD DRAWING: WM3		
	LAST REVISION DATE: N/A		
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: SLT	DATE: 3/23/2023



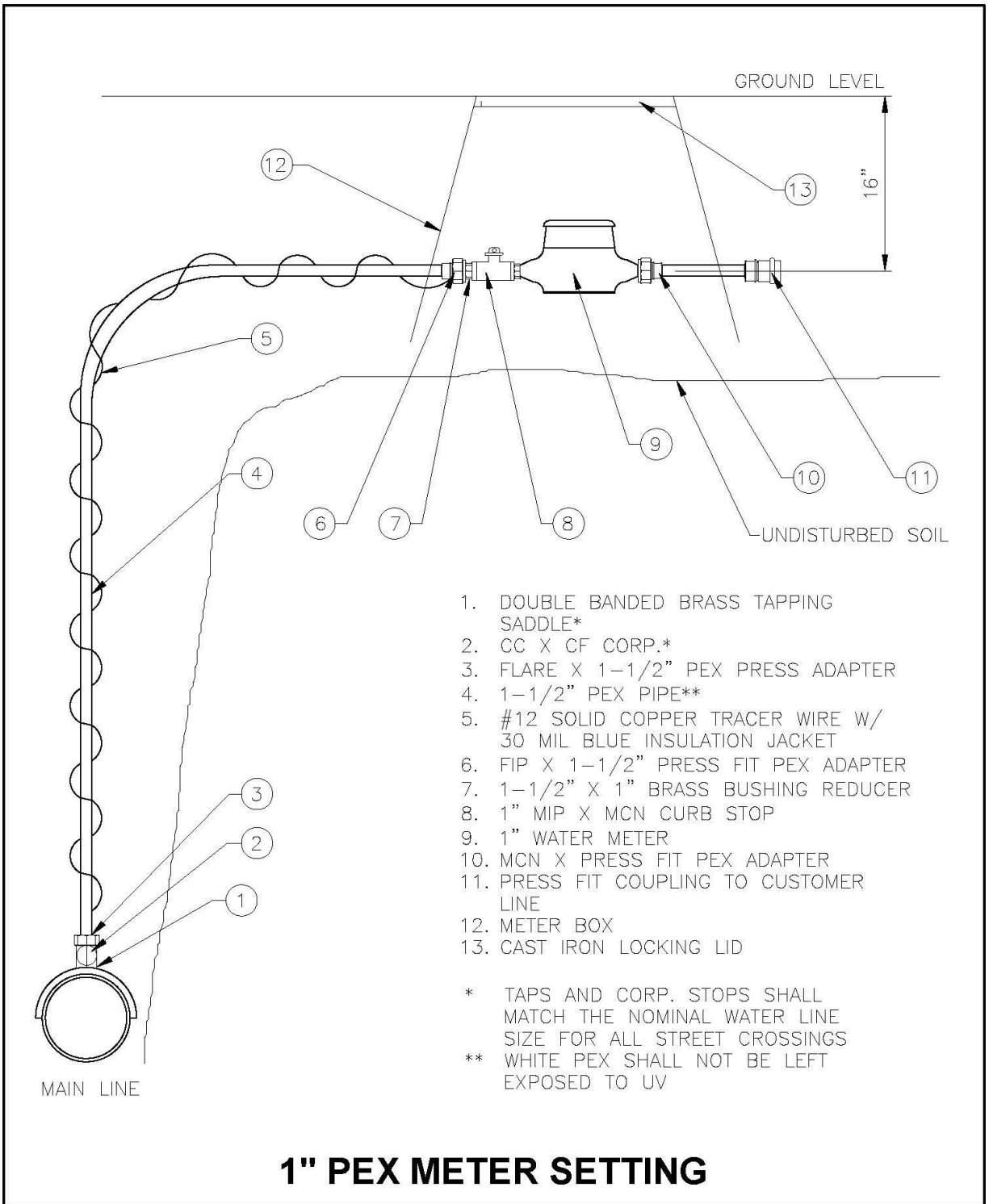
1" PEX METER SETTING ON PEX LINE STREET CROSSING

CITY OF BROKEN ARROW	STANDARD DRAWING: WM3A		
	LAST REVISION DATE: N/A		
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: SLT	DATE: 3/23/2023

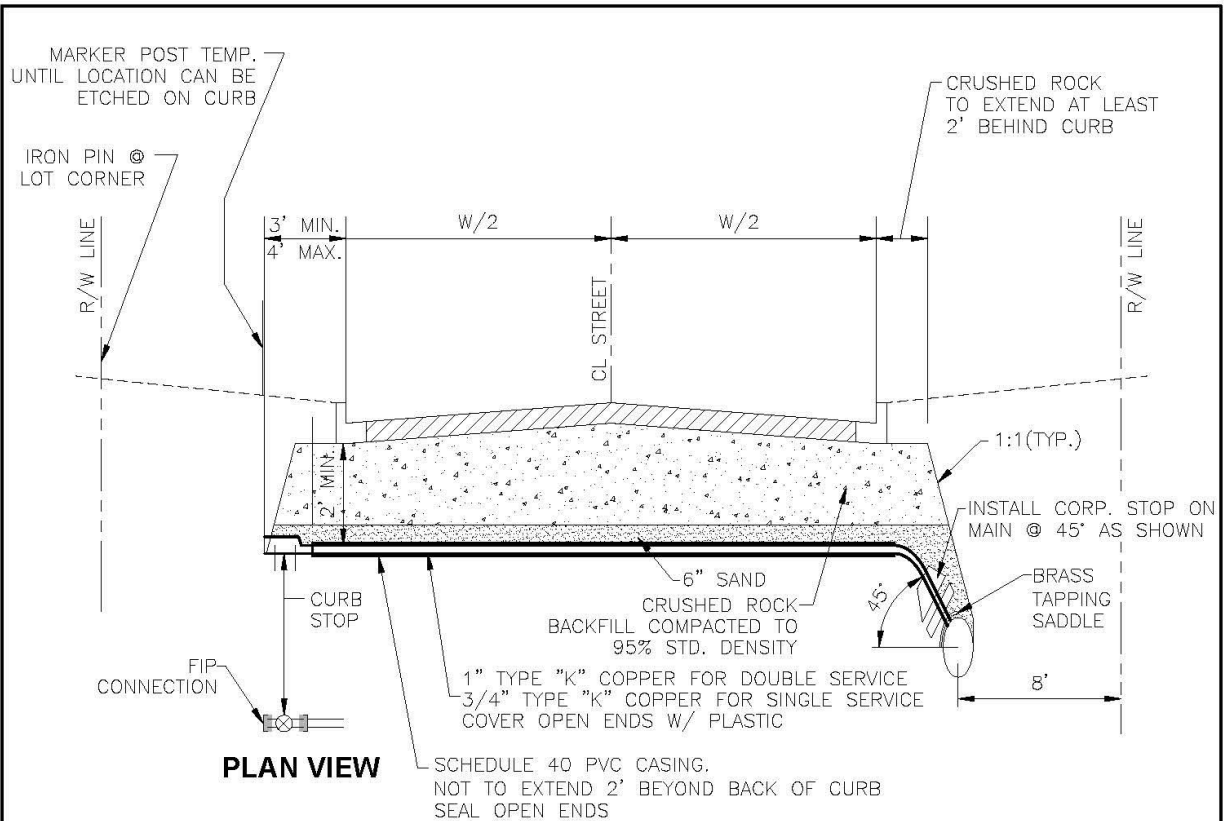


1" METER SETTING

 CITY OF BROKEN ARROW		STANDARD DRAWING: WM4	
		LAST REVISION DATE: N/A	
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: SLT	DATE: 3/23/2023



		STANDARD DRAWING: WM4A	
		LAST REVISION DATE: N/A	
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: SLT	DATE: 3/23/2023

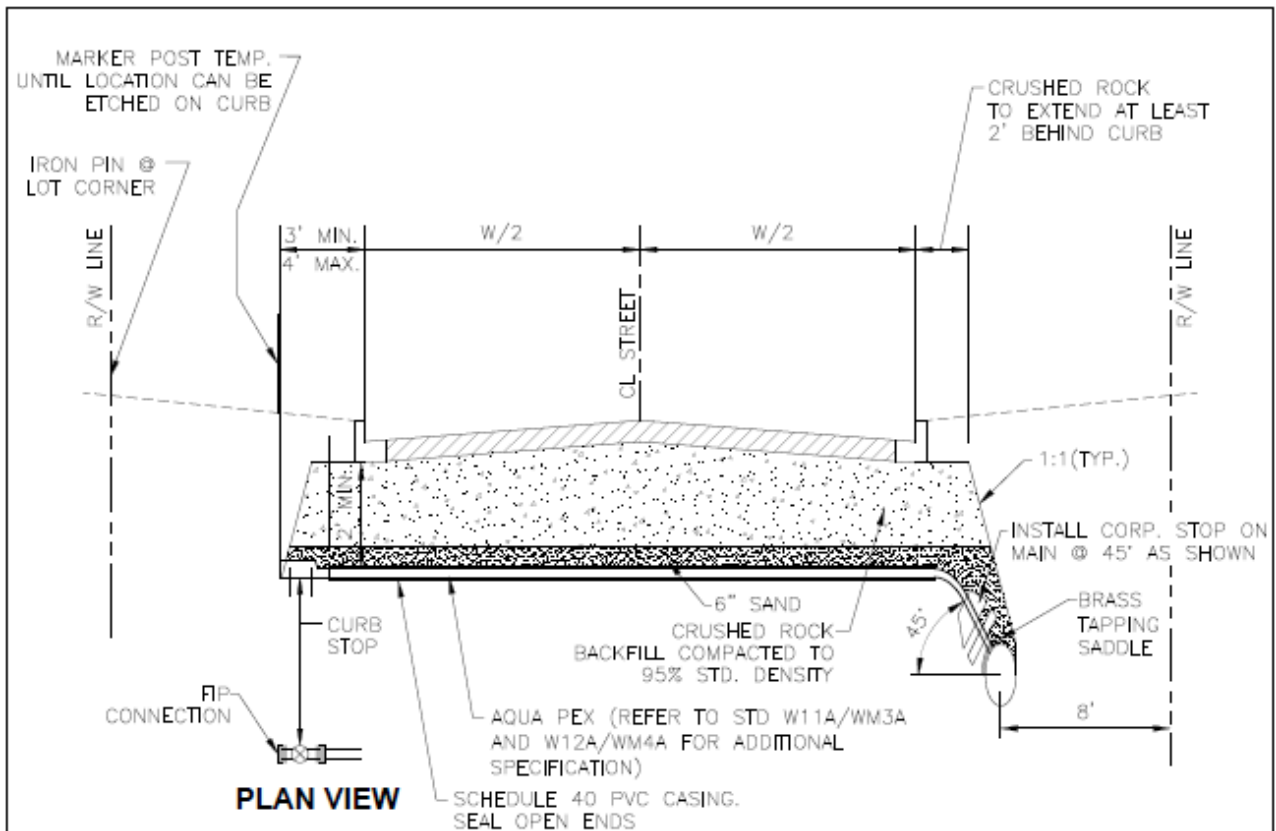


NOTES:

1. LOT CORNERS SHALL BE STAKED PRIOR TO CONSTRUCTION OF SERVICE LINES, CROSSING TO BE ON LOT LINE.
2. DETECTABLE MYLAR MARKING TAPE (LIFEGUARD TYPE II OR EQUAL) TO BE INSTALLED OVER SERVICE AS SHOWN.
3. CROSSING NOT REQUIRED IN LOOPED CUL-DE-SAC.
4. SERVICE LINE SHALL NOT BE SPLICED.
5. CROSSING TO BE INSPECTED BEFORE TRENCH IS BACKFILLED.
6. SERVICE LINES SHALL BE PERPENDICULAR TO MAIN UNLESS OTHERWISE APPROVED.
7. CASING SHALL BE SCHEDULE 40 PVC AND EXTEND NO MORE THAN 2' BEYOND BACK OF CURB.

COPPER WATER SERVICE STREET CROSSING DETAIL

 CITY OF BROKEN ARROW		STANDARD DRAWING: WM5
		LAST REVISION DATE: N/A
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: SLT
		DATE: 3/23/2023



NOTES:

1. LOT CORNERS SHALL BE STAKED PRIOR TO CONSTRUCTION OF SERVICE LINES, CROSSING TO BE ON LOT LINE.
2. DETECTABLE MYLAR MARKING TAPE (LIFEGUARD TYPE II OR EQUAL) TO BE INSTALLED OVER SERVICE AS SHOWN.
3. CROSSING NOT REQUIRED IN LOOPED CUL-DE-SAC.
4. SERVICE LINE SHALL NOT BE SPLICED.
5. CROSSING TO BE INSPECTED BEFORE TRENCH IS BACKFILLED.
6. #12 SOLID COPPER TRACER WIRE W/ 30 MIL BLUE INSULATION JACKET SHALL BE TAPED TO SERVICE LINE EVERY 5' MINIMUM.
7. EACH LOT SHALL HAVE ITS OWN SERVICE LINE CROSSING AT PROPERTY LINE.
8. SERVICE LINES SHALL BE PERPENDICULAR TO MAIN UNLESS OTHERWISE APPROVED.
9. CASING SHALL BE SCHEDULE 40 PVC AND EXTEND NO MORE THAN 2' BEYOND BACK BACK OF CURB.

PEX WATER SERVICE STREET CROSSING DETAIL

		STANDARD DRAWING: WM5A	
		LAST REVISION DATE: 3/23/2023	
DRAWN BY: ZSS	CHECKED BY: JMH	APPROVED: TSR	DATE: 9/6/2023