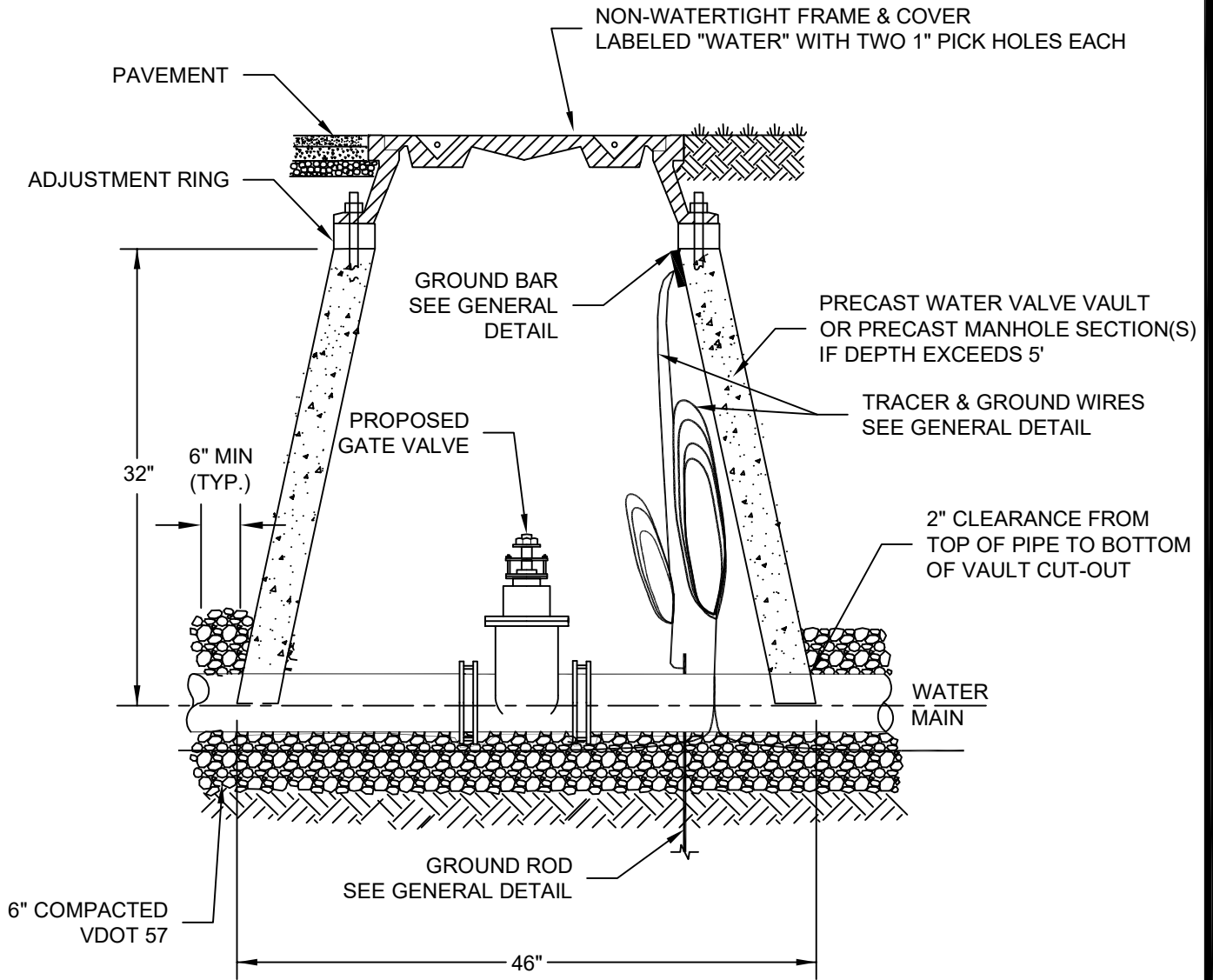


1. VALVE VAULTS TO BE USED ON ALL MAIN LINE VALVES.
2. VALVE BOXES SHALL ONLY BE ALLOWED ON FIRE HYDRANT VALVES OR ON OTHER INSTALLATIONS WHEN APPROVED IN WRITING BY PARTICIPATING UTILITY.
3. GROUND BAR TO HAVE CONNECTIONS FOR 3 PIPES AND GROUND WIRE.



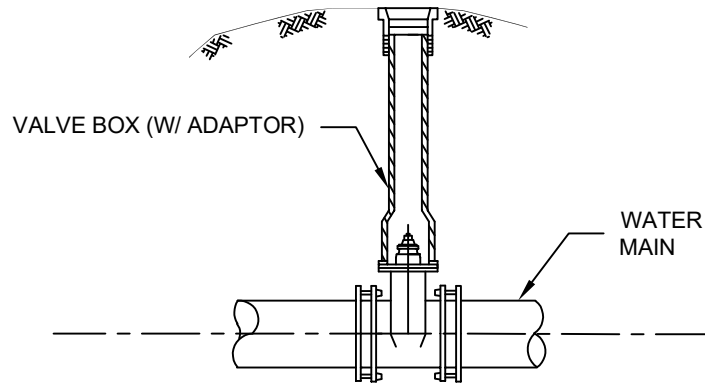
WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

**WATER LINE VALVE
& VAULT**

W-9

12/2025

1. VALVE BOXES SHALL ONLY BE ALLOWED ON FIRE HYDRANT VALVES OR ON OTHER INSTALLATIONS WHEN APPROVED IN WRITING BY PARTICIPATING UTILITY.
2. CAST IRON LID TO BE MARKED "WATER".



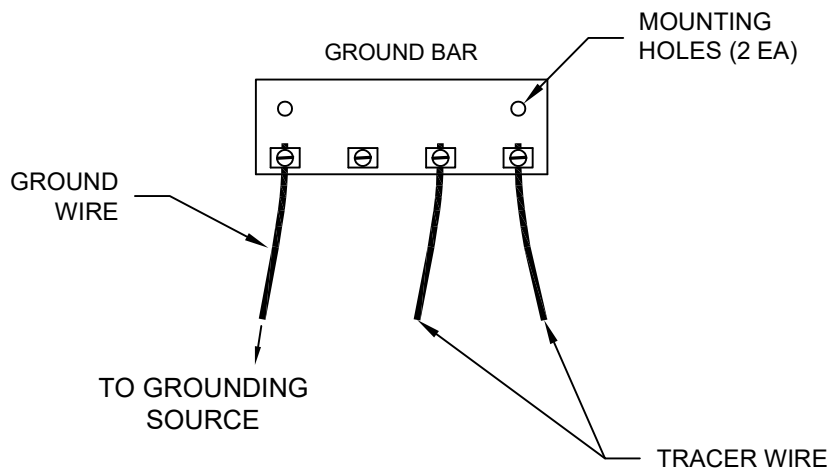
WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

SCREW TYPE
VALVE BOX

W-9A

12/2025

1. TRACER WIRE SHALL BE INSTALLED ON ALL NEW WATER AND SEWER PIPE INSTALLATION. THIS INCLUDES, BUT IS NOT LIMITED TO, DUCTILE IRON PIPE, PVC PIPE, AND POLYETHYLENE PIPE, INCLUDING SERVICE LINES. TRACER WIRE IS NOT REQUIRED FOR GRAVITY SEWER MAINS BETWEEN MANHOLES. TRACER WIRE WILL BE REQUIRED FOR SEWER LATERALS BETWEEN THE MAIN AND THE CLEANOUT AT THE PROPERTY LINE.
2. TRACER WIRE SHALL BE 12 GAUGE SOLID COPPER ELECTRICAL WIRE WITH A MINIMUM OF 45 MIL POLYETHYLENE COATING. THHN WIRE IS NOT ACCEPTABLE.
3. TRACER WIRE SHALL BE INSTALLED ALONG THE TOP OF THE PIPE AT 3:00 OR 9:00 O'CLOCK POSITION.
4. TRACER WIRE SHALL BE BROUGHT TO THE SURFACE AT LOCATIONS SUCH AS VALVES, WATER VAULTS, AIR VALVES, AND TRACER WIRE ACCESS BOXES IF NECESSARY.
5. TRACER WIRE SHALL BE INSTALLED WITH WATER AND SEWER PIPE INSTALLED BY ALL METHODS INCLUDING OPEN TRENCHING, DIRECTIONAL BORING, JACK AND BORE, OR PIPE BURSTING.
6. SPLICING OF TRACER WIRE SHALL BE MINIMIZED. THE CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING CONTINUITY AT ALL SPLICE LOCATIONS. IT IS THE INTENT OF THIS SPECIFICATION THAT THE SPLICE BE WATERPROOF, CORROSION-PROOF, AND UNABLE TO COME APART.
7. TRACER WIRE USED FOR DIRECTIONAL BORING, PIPE BURSTING, AND JACK AND BORING SHALL BE ATTACHED DIRECTLY TO THE PIPE. THREE STRANDS OF TRACER WIRE SHALL BE USED IN THIS APPLICATION. TRACER WIRE USED FOR BORING SHALL BE STRONGER THAN TYPICAL TRACER WIRE. SEE APPROVED PRODUCT LIST FOR SPECIFICATIONS. TRACER ACCESS BOXES SHALL BE INSTALLED AT EACH END OF ALL BORING/PIPE BURSTING OPERATIONS.
8. RECORD DRAWING SHALL SHOW TRACER WIRE ACCESS POINT LOCATIONS AND SPLICE LOCATIONS.
9. TRACER WIRE SHALL HAVE AN ACCESS POINT EVERY 500'. THIS MAY REQUIRE TRACER WIRE ACCESS BOXES IF OTHER ACCESS POINTS ARE NOT AVAILABLE. TRACER ACCESS BOXES SHALL BE USED IN LAWNS/SIDEWALKS/STREETS. IN FIELDS, USE AN ABOVE GROUND STATION THAT IS A HIGHLY VISIBLE POST.
10. LOCATION TRACER WIRE WILL BE TESTED BY THE PARTICIPATING UTILITY AS PART OF THE FINAL ACCEPTANCE. CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING THAT THE TRACER WIRE CAN BE LOCATED.
11. A GROUND ROD WILL BE REQUIRE AT ALL TRACER WIRE ACCESS POINTS. THIS MAY INCLUDE VALVE BOXES OR TRACER WIRE ACCESS BOXES OR POSTS. THE GROUND ROD SHALL BE COPPER COATED STEEL WITH A MINIMUM DIAMETER OF 5/8" AND SHALL BE BURIED A MINIMUM OF FOUR (4) FEET INTO THE GROUND. THE GROUND WIRE CONNECTED TO THE GROUND ROD SHALL BE #6 AWG COPPER WIRE AND SHALL BE OF ADEQUATE LENGTH TO EXTEND A MINIMUM OF FIVE (5) FEET BEYOND THE TOP OF THE ACCESS POINT.
12. TRACER WIRE SHALL BE GREEN FOR SEWER AND BLUE FOR WATER.



WHEN USING CONCRETE VAULT

WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

TRACER WIRE

G-4

12/2025