

505.6.2 WATER SERVICES LARGER THAN 2"

For the water services larger than 2" the valve shall be installed on the water service line adjacent to the water main. (Figure 22) The valve shall be installed in a roadway box.

505.6.3 Any valves, roadway boxes and precast concrete manhole vaults must have the approval of the Des Moines Water Works.

505.6.4 Curb stop boxes, roadway boxes and precast concrete manhole vaults shall be installed so that they will function properly and so that an access to the shut-off device is maintained. All shall be set vertically so the top is flush with the surrounding surface so as not to be a hazard to the public.

505.6.5 All service lines shall have a shut-off device or valve inside the building where the service enters the building. There shall be no appurtenances between this valve and the main, other than the curb stop or valve as previously described, or when an outside meter is approved. (Figures 1-2)

505.6.6 Tracer wire shall be installed with all water service lines except when the water service line is type K copper or red brass. The tracer wire shall be installed according to Des Moines Water Works' specifications (see figures 17, 18, 18A, 20, 20A, 24, 26, and 35). Tracer wire specifications shall be as follows:

- a. For open cut installations the tracer wire shall be No.14 AWG high-strength copper clad steel (HS-CCS) with a minimum 282 pounds break load manufactured by Copperhead Industries, or pre-approved equal. Insulation shall be 30 mil, high-density, high molecular weight polyethylene (HDPE) and rated for direct burial, 30 volts, and blue in color.
- b. When Directional Drilling/Boring the tracer wire shall be No. 12 AWG, extra-high strength copper clad steel conductor (EHS-CCS) with a minimum 1,150 pounds break load manufactured by Copperhead Industries, or pre-approved equal. Insulation shall be 45 mil, high-density, high molecular weight polyethylene (HDPE) and rated for direct burial, 30 volts, and blue in color.
- c. Anode Ground Rod shall be 1 Lb., 1.315" D x 18.5" L, magnesium drive in anode manufactured by Copperhead Industries. Anode Ground Rod shall be spliced to tracer wire

using 3M Scotchcast 3832 Buried Service Wire Splice Kit with  
Burndy KS15 8-14 AWG Splice Bolt.