

## SECTION 02485 – HYDRANT AND APPURTENANCE MATERIALS

*(Follow all instructions and make all edits with “Track Changes” turned on. If there are no instructions [purple text] above a subsection, paragraph, sentence, or bullet, then include it in the Project. Delete all purple text before preparing the final document. All other modifications to this Section will require ODOT Technical Resource and State Specifications Engineer approval.)*

Replace Section 02485 of the Standard Specifications except for the Section number and title with the following:

### Description

**02485.00 Scope** - This Section includes the requirements for hydrants and hydrant appurtenances for potable water systems.

### Materials

**02485.10 Hydrants** - Furnish hydrants that are dry-barrel according to AWWA C502, of standard manufacture and of a pattern approved by the Agency. Furnish hydrants designed for a minimum working pressure of 150 psi.

Ensure all Materials in contact with potable water conform to ANSI/NSF Standard 61, Drinking Water System Components - Health Effects, or equivalent.

**02485.20 End Connections** - Furnish the end connections that are mechanical joint or flanged, meeting the requirements of AWWA C110 and AWWA C111.

### 02485.30 Hydrant Dimensions and Nozzle Features:

**(a) Hydrant Dimensions** - Furnish barrels that have a 7-inch minimum inside diameter. Hydrant length, measured from the bottom of the hydrant to the sidewalk ring, to provide proper cover at each installed location. Furnish valve openings with a minimum diameter of 5 1/4 inches.

**(b) Nozzle Features** - Furnish hydrants having two 2 1/2-inch diameter hose nozzles and one pumper nozzle to match the Agency's connection requirements.

Fit nozzles with cast iron threaded caps with operating nuts of the same design and proportions as the hydrant stem nuts. Thread caps to fit the corresponding nozzles and fit with suitable neoprene gaskets of positive water tightness under test pressures. Furnish a counterclockwise direction of opening that is clearly marked on the operating nut or hydrant top. Furnish hydrants that have O-ring stem seals. Ensure interior and exterior painting of the hydrant conforms to AWWA C502.

**02485.40 Hydrant Extensions** - Furnish hydrant extensions that are gray cast iron or ductile iron with an inside diameter of at least 6 inches, and conform to the AWWA Standards for such castings. Match the drillings of the connecting flanges on the extensions to the drillings of the flanges on the hydrant.

Include the necessary hydrant operating stem extensions with hydrant extensions.

**02485.50 Traffic Flange** - Furnish hydrants with a traffic flange. Equip hydrants with breaking devices at the traffic flange that allow the hydrant barrel to separate at this point with a minimum breakage of hydrant parts in case of damage. Also provide, at this point, a safety stem coupling on the operating stem that will shear upon impact.

**02485.60 Tie Rods** - Furnish tie rods that are 3/4-inch diameter with threaded ends, galvanized according to 02560.40 and 02560.30.

**02485.80 Acceptance** - Acceptance of hydrants and hydrant appurtenances is according to 00165.35 and this Section.