

SECTION 02450 – MANHOLE AND INLET 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 02450 of the Standard Specifications except for the Section number and title with the following:

Descriptions

02450.00 Scope - This Section includes the requirements for precast manhole sump sections, metal frames, covers, grates, and manhole steps.

Materials

02450.10 Precast Concrete Manhole Sections - Furnish precast risers, cones, and cover slabs for precast concrete manholes according to the requirements of AASHTO M 199 (ASTM C478).

02450.15 Precast Concrete Catch Basins and Inlets - Furnish precast concrete catch basins and inlet according to the requirements of ASTM C913.

02450.20 Precast Concrete Sump Sections - Furnish precast rings and lids for precast concrete sumps of portland cement concrete according to AASHTO M 199 (ASTM C478).

02450.30 Metal Frames, Covers, Grates, and Steps - Comply with the following:

Projects on State Highways		
Item	AASHTO (ASTM) Designation	Grade
Manhole frames and covers	M 306	Class 35 B
Inlet frames and grates	M 306	Class 35 B
	M 227 (A663)	65
	M 270 (A709) (A36)	36
	M 103 (A27)	65 - 35
All Other Projects		
Item	AASHTO (ASTM) Designation	Grade
Manhole frames and covers	M 105	Class 30 B

Inlet frames and grates	M 227 (A663)	65
	M 270 (A709) (A36)	36
	M 103 (A27)	65 - 35

Furnish steps for manholes that are steel-reinforced plastic according to AASHTO M 199 (ASTM C478) and AASHTO T 280 (ASTM C497). Use deformed reinforcing bar according to AASHTO M 31 (ASTM A615) Grade 60, No. 4 minimum. Use plastic material that is injection molded, with a textured, non-slip surface and a minimum thickness over the steel of 1/16 inch. Voids in the plastic are cause for rejection of the step.

Provide welding according to AWS D1.1. Furnish frames, covers and grates for use one with another with even and uniform bearings. Furnish miscellaneous metal items and hardware according to the appropriate requirements of Section 00560.

Galvanize inlet frames and grates that are fabricated out of steel according to the appropriate requirements of Section 02530.

02450.40 Damaged Zinc or Aluminum Coating - Repair damaged zinc or aluminum coating according to 02420.10(d).

02450.50 Acceptance - Acceptance of manholes and inlets is according to 00165.35 and this Section.