

**SECTION 00450 - STRUCTURAL PLATE SHAPED STRUCTURES**

*(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.)*

Comply with Section 00450 of the Standard Specifications modified as follows:-

**00450.42(a) General** - Replace the paragraph that begins "Assemble corrugated metal plates ..." with the following paragraph:

Assemble corrugated metal plates at the site of installation to the lines and grades shown or directed. Connect the plates at longitudinal and circumferential seams with bolts. Stagger joints so that no more than three plates come together at any one point. Curve each plate to one or more circular arcs as required, and according to 02430.10, to provide an assembled Structure of specified dimensions and design.

**00450.42(b) Plate Thickness** - Replace this subsection, except for the subsection number and title, with the following:

The thickness of the respective top, corner and bottom plates in any one Structure is as shown.

**00450.44 Arch Substructures and Headwalls** - Replace this subsection, except for the subsection number and title, with the following:

Rest each side of each arch in a groove formed in the concrete, or rest on a galvanized angle or channel securely anchored to or embedded in the Substructure. If the span of the arch is greater than 15 feet or the skew angle is more than 20 degrees, furnish a metal bearing surface having a width at least equal to the depth of the corrugation.

Furnish metal bearings at least 3/16 inch thick that are either rolled, structural, or cold-formed galvanized angles or channels. Anchor the horizontal leg securely to the Substructure on 24-inch centers or less. When the metal bearing is not embedded in a groove in the Substructure, punch one vertical leg and bolt to the bottom row of plates.

**00450.48 Contact Surfaces, Aluminum to Concrete** - Replace this subsection, except for the subsection number and title, with the following:

Where uncoated aluminum pipe is in contact with portland cement concrete, give the contact surfaces of the aluminum pipe a coating of asphalt mastic according to 00445.47.

**00450.49 Work Quality** - Replace the paragraph that begins "The following defects constitute ..." with the following paragraph:

The following defects constitute poor Work and the presence of any in an individual culvert plate or in a shipment is cause for rejection:

**00450.90 Payment** - Replace the paragraph that begins "In item (a), the ..." with the following paragraph:

In item (a), the nominal size diameter of the pipe is inserted in the blank.

Replace the paragraph that begins "In items (b), (c), (d) and (e), the size ..." with the following paragraph:

In items (b), (c), (d) and (e), the size of the span and rise of the Structures is inserted in the applicable blanks.

Replace the paragraph that begins "Payment will be payment ..." with the following paragraph:

Payment will be payment in full for furnishing and placing all Materials, and for providing all Equipment, labor, and Incidentals necessary to complete the Work as specified.