

SECTION 00557 - PREMIXED POLYMER CONCRETE OVERLAYS

(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 00557 of the Standard Specifications modified as follows:-

00557.02 Submittals - Replace the bullet that begins "The type of scarifying Equipment ..." with the following bullet:

- The type of scarifying Equipment used for deck preparation according to Section 00504.

Replace the bullet that begins "Notice when bulk resin ..." with the following bullet:

- Notice when bulk resin is used on the Project. Bulk resin is resin that is stored in containers exceeding 55 gallons.

00557.05(a) Supervisory Personnel - Replace this subsection, except for the subsection number and title, with the following:

Hold a mandatory pre-placement conference with all supervisory personnel, Subcontractors, Suppliers, the System Provider's technical representative (SPTR), the quality control technician (ACI Concrete Field Testing Technician Grade 1), and all other personnel who are involved in the PPC pavement overlay work. Meet at a mutually agreed time at least 14 Calendar Days before placing the PPC pavement overlay including the trial overlay. Schedule the pre-placement conference after all submittals have been reviewed and approved. Present and discuss all phases of the PPC pavement overlay work.

00557.12(d) Aggregate - Replace the bullet that begins "When Aggregate retained on ..." with the following bullet:

- When Aggregate retained on the No. 4 and No. 8 sieves is combined, ensure the Aggregate has a maximum of 45 percent crushed particles with at least one fractured face when tested according to AASHTO T 335.

00557.16(a) General - Replace this subsection, except for the subsection number and title, with the following:

Acceptance of PPC is based on Contractor's modulus of elasticity and bond strength test results.

00557.16(b) Required Properties and Tolerances - Replace the paragraph that begins "Perform acceptance testing according ..." with the following paragraph:

Perform acceptance testing according to the referenced tests, and provide samples to the Engineer as required. Failing test results may be cause for rejection of the mix with removal and replacement of the affected material at no additional cost to the Agency. If the Engineer determines that the PPC is suitable for the intended purpose, the PPC may be allowed to remain in place, subject to a price adjustment according to 00150.25.

00557.16(c) Density - Replace this subsection, except for the subsection number and title, with the following:

Determine the unit weight of the PPC mixture according to AASHTO T 121 (ASTM C138). Submit test results to the Engineer. The correlation factor established through density testing is used to determine equivalency between weight and volume for purposes of payment. Perform density testing at the rate of one test per batch.

00557.21 Mixing Equipment - Replace the paragraph that begins "Furnish mechanically operated ..." with the following paragraph:

Provide mechanically operated continuous mixers specifically built or modified for PPC that:

Replace the bullet that begins "Has a readout gauge ..." with the following bullet:

- Has a readout gauge, visible to the Engineer at all times, that displays the weights being recorded.

00557.22 Finishing Equipment - Replace this subsection, except for the subsection number and title, with the following:

Provide slip-form finishing equipment with an automatic grade control device to strike off the PPC mixture to the established grade and Cross Section, or other Equipment such as 30-foot floating beams as approved by the Engineer. Fit the finishing equipment with vibrators or other means of consolidating the PPC.

00557.23(a) Hand Tools - Replace this subsection, except for the subsection number and title, with the following:

Provide hand tools for placing and finishing the PPC. Use manual type screeds with approved vibrators attached to consolidate and finish smaller areas where it is impractical to use a finishing machine.

00557.23(b) Straightedge - Replace this subsection, except for the subsection number and title, with the following:

Provide a 12-foot metal straightedge.

00557.23(c) Coring Equipment - Replace this subsection, except for the subsection number and title, with the following:

Provide core cutting equipment that can cut a core at least 2 inches in diameter.

00557.23(d) Bond Testing Equipment - Replace the paragraph that begins "Furnish bond testing equipment ..." with the following paragraph:

Provide bond testing equipment that:

00557.23(e) Diamond Grinders - Replace this subsection, except for the subsection number and title, with the following:

Provide power-driven self-propelled machines with the cutting head made up of diamond cutting blades to correct non-specification surface variations.

00557.23(f) Concrete Moisture Meter - Replace this subsection, except for the subsection number and title, with the following:

Provide a pin-type, instant read, concrete moisture meter meeting ASTM F2659. Provide current calibration documentation.

00557.30 Personnel Qualifications - Replace the bullet that begins "The name of the company ..." with the following bullet:

- The name of the company that is performing the PPC pavement overlay work.

Replace the bullet that begins "A project reference list ..." with the following bullet:

- A project reference list of at least three PPC pavement overlay projects, successfully completed within the last five years, that has used the same PPC pavement overlay system and materials that are used on this Project. The minimum PPC overlay qualification area is 2,000 square feet. Include the following information for each qualifying project:

00557.41 Trial Overlay Strip - Replace the paragraph that begins "Construct trial overlays meeting ..." with the following paragraph:

Construct trial overlays meeting the acceptance criteria of 00557.16, except test the modulus of elasticity at 24 ± 1 hours. Perform testing at locations designated by the Engineer. Construct each trial overlay 12 feet wide by at least 20 feet long, and at the same thickness as the final PPC overlay. Construct trial overlays when weather conditions are similar to those expected during construction of the PPC overlay. Use the same equipment, including deck preparation equipment, that is used for the PPC overlay.

00557.43 Placing Prime Coat - Replace the bullet that begins "A noticeable increase in viscosity ..." with the following bullet:

- A noticeable increase in viscosity of the prime coat resin before it is placed is cause for rejection.

00557.44(c) Placing PPC - Replace the bullet that begins "Place PPC in Panel widths ..." with the following bullet:

- Place PPC in Panel widths that hold the location of the longitudinal joints to the lane lines.

00557.44(g) Batch Weight - Replace the paragraph that begins "Furnish a batch ticket ..." with the following paragraph:

Provide a batch ticket to the Engineer at the end of each work shift or as requested. Provide batch tickets that contain the following information:

00557.45(c) Surface Tolerance - Replace the paragraph that begins "The finished surface ..." with the following paragraph:

Ensure the finished surface of the PPC overlay, when tested with a 12-foot straightedge, does not vary by more than 1/4 inch. Provide and operate the straightedge under the direction of the Engineer.

00557.90 Payment - 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.