

**MDOT BRIDGE DECK CONSTRUCTION INSPECTION CHECKLIST 0395**

Control Section:	Project No.:	Date:
Structure No.:	Structure Location:	
Contractor:	Concrete Supplier:	
Inspector:	Engineer:	
<b>A. Pre-Pour Meeting</b>		<b>Initials</b>
Contractor submitted Concrete QC plan for subsection 701.03.F.1		
Concrete Supplier and Contractor Concrete Testing Personnel identified		
Generate random numbers for concrete quality assurance sampling		
Approved Concrete Mix Design(s) submitted, including Aggregate Correction Factor		
Contractor to submit deck lighting scheme for approval 706.03.I.2		
Contractor to submit for approval of equipment to be used to determine relative humidity and wind velocity at site per subsection 706.03.H.2		
<b>B. Prior to Pour</b>		
Inspect forms and check for grade, straightness, tightness, and location 706.03.D		
Review approved stay-in-place forms and shop drawings prior to installation		
If using metal stay-in-place forms ensure that Styrofoam is in the corrugations and secured (if required). Ensure ¼ inch weep holes are drilled 12 inches on center along transverse and longitudinal construction joints 706.03.D.4		
Ensure the epoxy coated steel reinforcement is properly stored and covered prior to placement to prevent damage from sunlight 706.03.E.1		
Inspect steel reinforcement, including bar chair location and spacing 706.03.E.4		
Verify bar size, quantity, location, spacing, clear cover, laps, and ties of transverse, longitudinal and vertical steel reinforcement. All bars must be tied in accordance with subsection 7.06.03.E. Record quantities on Form 1138, Bridge Reinforcing Computations		
Repair epoxy coated re-steel per subsection 706.03.E.8. Verify product on the Qualified Product List per subsection 905.03. Record product on IDR		
Ensure the bridge deck is free from debris per subsection 706.03.H.1		
Verify that quality assurance testing personnel are on site to perform verification testing		
Ensure the bulkhead for construction joints are in-place, secure, and at the correct grade. Check contractor's grades and verify during the dry run		
Ensure vibrators have rubber coated heads per subsection 706.03.H.1		
Perform dry run per subsection 706.03.M.1 and record wet depth measurements on Form 1131, Bridge Decks Contract Depth Measurement. Note locations. Saw cut bulkheads after dry run approval		
Ensure contractor furnishes a 10-foot straight edge per subsection 706.03.M.1		

Ensure the burlap has been soaking a minimum of 12 hours before the pour, per subsection 706.03.N.1.b. and excess water has been removed	
Ensure the equipment to determine relative humidity, temperature, and wind velocity is on site and working properly. Record evaporation rate on Form 1174S, Inspector's Report of Concrete Placed (Figure 706-1)	
Ensure the equipment for applying curing compound is in working condition	
Issue Form 1125, Permit to Place	
<b>C. During the Pour</b>	
Record Aggregate Correction Factor on Form 1174S, Inspector's Report of Concrete Placed	
Ensure contractor is performing QC testing, including yield tests	
Complete Form 1174S, Inspector's Report of Concrete Placed	
Verify concrete delivery tickets match the concrete mix design	
Perform concrete QA testing	
Ensure engineer tags the quality assurance cylinders	
Test concrete at the pump discharge and the concrete truck, according to 12SP604(B) QUALITY CONTROL AND ACCEPTANCE OF PORTLAND CEMENT CONCRETE	
Record elapsed time interval on every delivery ticket between charging the mixer and the placement of the concrete. Sign the concrete delivery tickets	
Vibrator with rubber coated heads being used within 15 minutes of placement	
Ensure contractor does not over vibrate or over finish the concrete	
Ensure concrete does not freefall more than 6 inches to the top mat deck reinforcement	
Ensure a sufficient head of concrete is maintained in front of the finishing machine to provide mix consistency during placement.	
Perform wet depth checks near locations of the dry run checks and record measurements on Form 1131, Bridge Decks Concrete Depth Measurement	
Ensure contractor checks deck tolerance with a 10 foot straight edge both longitudinally and transversely. Address deficiencies greater than 1/8 inch in any 10 feet.	
Do not allow the contractor to apply water to the deck surface to aid in finishing. If necessary, allow only with an approved fog sprayer and only when approved by the engineer	
Inspect texturing per subsection 706.03.M.	
Verify the white curing compound was applied at the appropriate time and at the correct application rate	
Verify the wet cure (burlap, soaker hoses, and polyethylene) was applied at the appropriate time	
Verify the low temperature protection was applied as necessary per 706.03.J2.b.	
<b>D. After the Deck Pour</b>	
Ensure that the contractor waits a minimum of 15 hours to strip bulkheads after completion of the pour	
Do not allow casting of succeeding structure portions until the deck concrete has met 7 day minimum flexural or compressive strength. Resume wet cure immediately after succeeding structure portions have sufficiently hardened. Saw cut construction joints within 24 hours after the deck pour. Inspect deck tolerance 1/8 inch in 10-foot with 10-foot straight edge prior to acceptance	