Clear Form

Michigan Department
Of Transportation
2083 (06/17)

MDOT BRIDGE DECK OVERLAY CONSTRUCTION INSPECTION CHECKLIST

CONTROL SECTION	PROJECT NO.	DATE
STRUCTURE NO.	STRUCTURE LOCATION	
CONTRACTOR	CONCRETE SUPPLIER	
INSPECTOR	ENGINEER	

A. Prior to Hydrodemolition — Initials

- Contractor submit Hydrodemolition pH Control Plan. _____
- Contractor furnish engineer a copy of MDEQ Groundwater Discharge Permit. _____
- Review Hydrodemolition pH Control Plan and Checklist. _____
- Scarify bridge deck surface as shown on the plans. _____
- Place environmental controls (deck drains covered, downspouts plugged). _____

B. During Hydrodemolition

- Calibrate Hydrodemolisher per Section 712 of the Construction Manual. _____
- Ensure contractor following pH Control Plan. _____
- Ensure contractor performing pH sampling, testing. _____
- Ensure contractor neutralizing hydrodemolition runoff if necessary. _____
- Ensure contractor submitting samples for laboratory testing. _____
- Ensure contractor recording test results on the Hydrodemolition Log form. _____
- No vacuum trucks running on deep hydro areas. _____
- Contractor cleaning up debris. _____
- Sound deck prior to second pass. _____
- Contractor performing second pass. _____

C. Silica Fume Modified Concrete (SFMC)

- Contractor submitted concrete QC plan per subsection 701.03.F.1. _____
- Concrete supplier and contractor concrete testing personnel identified. _____
- Approved concrete mix design(s) submitted, including aggregate correction factor. _____
- Approved 4 cyd for silica fume modified concrete trial batch. _____

D. Latex Modified Concrete

- Calibrated mobile mixer for latex modified concrete. _____
- Approved mix design for latex modified concrete overlay mixture. _____
- Approved materials for latex modified concrete. _____

E. Prior to Pour — Initials

- 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. _____
- Ensure the contractor furnishes adequate fogging equipment that is on site and working properly. _____
- Inspect forms and check for grade, straightness, tightness, and location. _____
- Ensure epoxy coated steel reinforcement is properly stored and covered prior to placement to prevent damage from sunlight. _____
- Inspect steel reinforcement, including bar chair location and spacing. _____
- Verify bar size, quantity, location, spacing, clear cover laps, and ties of transverse, longitudinal and vertical steel reinforcement. Record quantities on *Form 1138, Bridge Reinforcing Computations.* _____
- Repair epoxy coating resteel per subsection 706.03.E. 8. Verify product on the qualified product list per subsection 905.03. Record product on IDR. _____
- Ensure the bulkheads for construction joints are in place, secure, and at the correct elevation. Check contractor's grades and verify during the dry run. _____
- Perform dry run per subsection 706.03.M.1 and record depth measurements on *Form 1131, Bridge Decks Concrete Depth Measurement.* Note locations. _____
- Ensure vibrators have rubber-coated heads per subsection 706.03.H.1. _____
- Ensure contractor furnishes a 10 foot straightedge 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.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 1174A, Inspector's Report of Concrete Placed.* _____
- Ensure the bridge deck is free from debris per subsection 706.03.H.1. _____
- Wet the deck surface one hour before placing the overlay mixture. _____
- Ensure air temp and existing concrete deck are at least 40 degrees and rising. _____
- Issue *Form 1125, Permit to Place.* _____

F. During the Pour

- For latex modified concrete, brush the initial layer of mixture onto the wetted prepared surface. _____
- Complete *Form 1174A, Inspector's Report of Concrete Placed* including Aggregate Correction Factor. _____
- Ensure contractor is performing QC testing, including yield tests. _____
- For silica fume, verify concrete delivery tickets match the concrete mix design _____
- Perform concrete QA testing. _____
- Test silica fume modified concrete at the pump discharge and correlate to testing at the concrete truck, according to MTM 207. _____
- 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 the concrete does not freefall more than 6 inches above the resteel. _____

F. During the Pour (continued) **Initials**

- Ensure contractor checks deck tolerance with a 10 foot straightedge both longitudinally and transversely. _____
- Ensure the contractor is fogging during placement of silica fume modified concrete. _____
- Inspect texturing per subsection 706.03.M. _____
- Verify the wet cure (burlap, soaker hoses, polyethylene) is being applied at the appropriate time. _____
- Verify the low temperature protection was applied as necessary per 706.03.J2.b. _____

G. After the Deck Pour

- For silica fume modified concrete, verify the wet cure is maintained for seven days. Check deck to verify soaker hoses are working and covering the entire deck. _____
- For latex modified concrete, verify the wet cure is maintained for two days and two days dry. Check deck to verify soaker hoses are working. _____
- Ensure that contractor waits a minimum of 15 hours to strip bulkheads after completion of the pour. _____
- Inspect deck tolerance 1/8 inch in 10 foot with 10 foot straightedge prior to acceptance. _____

MDOT HYDRODEMOLITION PROJECTS
pH CONTROL PLAN CHECKLIST

CONTROL SECTION/JOB NUMBER	DATE
PROJECT DESCRIPTION	
DELIVERY ENGINEER	LOCATION
PRIME CONTRACTOR	
HYDRODEMOLITION CONTRACTOR	
SITE IDENTIFICATION NUMBER FOR GENERATOR	
LIQUID INDUSTRIAL WASTE HAULER	
SITE IDENTIFICATION NUMBER FOR TRANSPORTER	

Items/Activities	**Yes**	**No**
pH Control Plan – Submitted	☐	☐
A. Personnel		
• pH control plan manager listed.	☐	☐
• Personnel identified who will be in charge of sampling.	☐	☐
• Personnel identified who will be in charge of testing .	☐	☐
• Personnel identified who will be in charge of neutralizing.	☐	☐
• Personnel identified who will be in charge of pH meter calibration.	☐	☐
B. Sampling and Testing		
• Is the method of field sampling identified?	☐	☐
• Is the name and model number of the pH meter listed?	☐	☐
• Is a written calibration method for pH meter submitted?	☐	☐
• Is there a sampling strategy included based on volume of runoff, site conditions, pH levels, consistency of pH?	☐	☐
• Is a MDEQ-certified laboratory listed to test split samples?	☐	☐
• Is a MDEQ-certified laboratory contact person and phone number listed?	☐	☐
• Is there a procedure listed for steps to be taken if field and lab results aren't compatible?	☐	☐
• Are test results being recorded on the hydrodemolition log?	☐	☐
C. Monitoring		
• Is there a procedure listed on how to meet the pH requirements?	☐	☐
• Are the treatment products listed?	☐	☐
D. pH Adjustment		
• Is there a procedure listed on how to meet the pH requirements?	☐	☐
• Has the location of the neutralization been identified by the contractor?	☐	☐
• Has the MSDS for the neutralizer been submitted?	☐	☐
• Has a copy of the product data sheet for the neutralizer been submitted?	☐	☐

Items/Activities (continued)

E. Generation

- Does the hydrodemolition contractor have a site identification number? ☐ ☐
- If not, does MDOT have a site ID for the project? ☐ ☐
- Is the proposed transporter a liquid industrial waste hauler? ☐ ☐
- Is the proposed transporter a hazardous waste hauler if necessary? ☐ ☐
- Has the hydrodemolition contractor provided a copy of a MDEQ certificate of coverage? ☐ ☐

F. Neutralization

- If the pH is higher than 12.5, will the contractor neutralize the slurry? ☐ ☐
- Is the location of where the neutralization site is to occur identified in the control plan? ☐ ☐
- Is the neutralization method listed in the plan? ☐ ☐
- Will the slurry be pretreated (supply water)? ☐ ☐
- Will the slurry be treated during generation? ☐ ☐
- Will the slurry be post treated after generation? ☐ ☐
- If the contractor elects to neutralize after generation, is the container tank- or transport-vehicle identified? ☐ ☐

G. Collecting and Hauling Slurry

- Will the runoff be collected and hauled? ☐ ☐
- Will the contractor be hauling the slurry? ☐ ☐
- If the contractor is hauling the slurry, does the contractor have a site Identification number either as the transporter or generator? ☐ ☐
- Is the transporter a licensed liquid industrial waste hauler? ☐ ☐
- If the slurry is hazardous and not neutralized, is a hazardous waste hauler identified to haul the slurry? ☐ ☐

H. Discharging Runoff Water

- Are there 3 peastone filter dams constructed prior to hydrodemolition? ☐ ☐
- Are the millings removed from the deck prior to hydrodemolition? ☐ ☐
- Are the peastone filters being maintained during hydrodemolition? ☐ ☐
- Is the discharge site within an MDOT right of way? ☐ ☐
- Has the engineer approved the discharge location? ☐ ☐
- Is the contractor recording the volume of runoff generated? ☐ ☐
- Is the contractor recording the pH of the runoff? ☐ ☐

I. Disposal of Runoff Water

- Is the runoff being collected and hauled? ☐ ☐
- Is the disposal facility a solid waste facility? ☐ ☐
- Is the disposal facility a licensed liquid waste disposal facility? ☐ ☐
- Is the disposal facility a wastewater treatment facility? ☐ ☐