CHECK LIST FOR HAUL, PLACEMENT, AND FINISHING OF BRIDGE DECK CONCRETE

HAULING

1.) Are all trucks used for transporting concrete equipped with working revolution counters?

2.) Have trucks been checked to insure the drums and blades are adequate and in good repair?

3.) Are all trucks equipped with a method of accurately measuring water added at the job site?

4.) Are initial mixing revolutions being placed on the haul tickets?

5.) If water is added at the site are an additional 30 mixing revolutions being accomplished and is this recorded on tickets?

6.) Are the total mixing and agitating revolutions being placed on the haul tickets? This number can not exceed 300.

7.) Are the batch (when cement contacts aggregate) and discharge times being placed on the tickets?

8.) Are the proper batch proportions being placed on the haul tickets?

PLACEMENT

1.) Are forms and reinforcing steel being lightly wetted in front of placement?

2.) Has all debris been removed from forms?

3.) Is concrete being deposited at or near it final position?

4.) Is the free fall of the concrete from the end of the pump or bucket 5’ or less?

5.) Is the required pour rate being met? Unless otherwise shown in the contract the minimum pour rate should be 30 ft/hr for entire width of pour or 20 ft/hr for slab bridges.

6.) If epoxy coated re-bar is used is the vibrator covered with nonmetallic sleeve?

7.) Are vibrators being used properly? They should not be used to move concrete around.

8.) Have vibrators been properly certified within the last 90 days to insure proper impulses per minute?

9.) Does the contractor have adequate tools and personnel to properly place and finish the deck? There should be back up vibrators, concrete pump or crain and bucket, and generator.

10.) If more than 45 minutes have elapsed since concrete has been placed the contractor should place a bulk head and stop the pour.

11.) If the temperature of the superstructure concrete is 80°F. or above the time of discharge is 60 minutes. If below 80°F. the time of discharge is 90 minutes or 300 revolutions.

12.) Are instruments available on site to measure wind velocity, concrete temperature, air temperature, and relative humidity? These are needed to determine the rate of surface evaporation of concrete. The evaporation rate can't exceed 0.20 lbs/sq.ft./hr (0.98 kg/m²/hr).

13.) If the wind should increase during the pour does the contractor have material to erect windbreaks?

14.) Does the contractor have 10 foot straight edge or float to check the trueness of the deck so corrections can be made while the concrete is still plastic?

TESTING

1.) Do the project personnel have all of the required equipment to perform the testing? This should include 2 pressure meters or two roll-a-meters, slump cone. thermometers, scales, wheelbarrow, tamping rods, rubber mallet, and all of the scoops and shovels needed to complete the tests.

2.) Are the testers ACI certified?

3.) Are there sufficient personnel to adequately accomplish the testing? Should be 2 to 3.

4.) Are there sufficient cylinder molds?