

CHECKLIST FOR POURING BRIDGE SLAB

Prior to Pour

Concrete

- Where is it to be obtained?
- Is the calibration and verification of the plant up to date?
- How many yards are in the pour?
- Is all of the material to be used in the concrete certified (air-entraining agents, cements, stone)?

Falsework and Forms

- Do we have falsework drawings?
- Did the contractor follow these drawings?
- Has splicing and blocking been kept to a minimum?
- Is the falsework on sound footing?
- Was acceptable form lumber used?
- Will form ties break behind concrete surface?
- Are all forms nailed down?
- Do the forms fit tight?
- Was a mill cut molding used for bevels?
- Have the forms been oiled?
- Is there an excess of oil on forms?
- Is a method of checking settlement provided?
- Has line and grade of forms been checked?
- Are all jacks tight and secured?
- Read specifications for all material and equipment requirements.
- Have headers been checked for line and grade?
- Has the header been provided with a key?
- Are the end forms and ones for attaching temporary timber header in place?
- Is the method of bracing forms of overhang satisfactory and has the grade been checked?
- What is the sequence of falsework removal?
- Is housing provided if heating is necessary?

Reinforcing Steel

- Is reinforcing steel free of oil, rust, etc.?
- Is all reinforcing steel in place?
- Has it been checked against the bar bill and drawings?
- Are bar chair supports of proper size and spaced correctly?

- Was it checked for proper location?
- Has it been properly tied?
- Has the steel actually been measured by the inspector for location - horizontally and vertically?
- Be sure all steel is tied - Do not stick any reinforcing.

Finishing

1. How is the concrete to be placed?
 - Is the method satisfactory?
 - Has the contractor provided assurance that he can obtain specified rate of placement?
 - Has he demonstrated this season the ability to maintain the rate of placement?
 - Who is the inspector that will make the cylinders, slump, and air tests?
 - Does he know how to do these tasks?
2. Are the screed rails located out of the concrete?
 - Are they located to permit finishing the entire width of the pour?
 - Are they sturdy enough to hold the finishing machine?
 - Are they straight?
 - Has the grade of the rail been checked by the inspector?
 - Are the screed rail supports satisfactory? (adjustable)
3. Will the finishing machine move freely on the screed rails?
 - Has it been checked for the proper cross-section and grade?
 - Will it strike off the concrete uniformly?
 - Will it work up sufficient grout over the entire length to permit finishing?
 - Do we have sufficient and proper vibrators on hand for placing?
 - Do we have a supervisor for this phase of the work?
4. Do we have enough good bridges?
 - Do we have enough straight edges?
 - Do we have a texturing device?
 - Do we have the proper edging tools?
 - Do we have a competent finisher?
 - Are the mats on the job?
 - Are they wet and ready for use?
 - Are soaker hoses or sprinklers available to keep the mats continuously wet?
 - Will the contractor's superintendent be on the job during the pour?
 - Is there burlap on the job for emergency use? (rain, delay for finishing, etc.)

During the Pour

- Is concrete of proper consistency?

- Run air tests and slump tests on first batch and at frequent intervals thereafter.
- Is all equipment functioning properly?
- Is minimum specified pour rate being maintained?
- Make several passes with finishing machine. Use until there is no appearance of irregularity in the slab surface.
- Check straight edge operations to insure good riding surface.
- Checking surface with straight edge should be the last operation on the concrete surface before texturing.
- Check forms for settlement.
- Check screed rail grades after forms are loaded. (Voided slab and box girders)
- Check voids for location after pour.
- Check finished concrete for time to texture, cure, etc.
- Make the necessary cylinders.

Pre-Pour Meeting Topics:

These are a few items that should be covered at the pre-pour mtg.

1. Make sure there are adequate walk bridges to perform finishing and curing activities simultaneously.
2. Run a trial run of finishing machine to test for deck thickness and grade.
3. Make sure vibrators have rubber tips and are of adequate size and frequency.
4. Determine who is in charge so that the inspector has one source to go to in correcting deficiencies.
5. Remind contractor that rakes, shovels, etc. should not be hit on the green steel when excess concrete is removed.
6. Review the proper procedures expected on vibrating.
7. Make sure emergency plan header plan is thought out.
8. Check to see that duct tape does not run down the sides of slab drains
9. A laborer should be dedicated to cleaning off concrete splatters off of barrier wall steel. Wet burlap works well for this.
10. Place the burlap in a timely manner.
11. Burlap should be WET and clean before placing on fresh concrete.
12. The contractor should have a plan to check on the deck at intervals to assure it is fully saturated for the entire curing period.
13. **DO NOT** put water on the deck for finishing purposes. Excess water on the fresh concrete causes cracking. Make sure the finishers understand this practice will not be tolerated.
14. If it is extremely windy postponement of the deck paving should be considered.
15. The pump should be in good working order and no huge losses of air and slump should occur. Testing at the truck and at the pump discharge should be made to evaluate the correlation.
16. The pump should be configured so that no great free fall should occur in the pump line, i.e.: The pump arm should not be straight up and down.