State Highway Transportation Department Bridge Construction Post-Placement Inspection Checklist

A. Inspection of steel stay in place deck forms

1. After a minimum of two days of curing, inspect the forms for soundness and bonding per state specification xxx.

B. Straightedging (spec. ref.)

- 1. Inspect bridge deck and approach slab surface. It should not vary by more than 4 mm (1/8 inch) measured from bottom of straightedge.
- 2. Vertical steps at ends of decks and approach slabs shall not exceed 5 mm (3/16 inch).
- 3. Expansion joints shall be placed from 2 to 5 mm (1/16 inch to 3/16 inch) below grade.
- 4. Inspect entire deck for excess roughness, plastic shrinkage cracking, or surface tearing.
- 5. Correct deficiencies per spec ref.

C. Grooving Hardened Concrete

- 1. After straightedging and repair, the deck shall be grooved.
- 2. Width of grooves shall be 3mm +/- 0.5mm.
- 3. Depth of grooves shall be 3 to 6 mm (1/8" to 1/4").
- 4. Longitudinal grooves shall be spaced at 19mm center to center (approx. 3/4") constant spacing.
- 5. Transverse grooves shall have variable spacings from 13 to 22 mm (approx. $\frac{1}{2}$ " to $\frac{7}{8}$ ").
- 6. Removal of slurry shall be continuous and immediate.

D. Penetrating Water Repellent

1. After grooving, and after the concrete has achieved design strength, verify bridge decks and approach slabs receive a penetrating water repellent treatment. (spec ref.)

E. Sealing of Construction Joints and Cracks

After grooving and after applying the penetrating water repellent, Verify all construction joints and cracks visible on a dry deck have been sealed with appropriate materials (spec ref)