

**Supplemental Specification  
2017 Standard Specification Book**

**SECTION 03310M**

**STRUCTURAL CONCRETE**

Delete Article 1.4 and replace with the following:

**1.4 DEFINITIONS**

- A. Finishing Machine – a bridge deck finishing machine or bridge deck paver with automated systems to spread, compact, and finish concrete.

**Add the following to Article 1.5:**

- B. Concrete Placing and Finishing Plan for review when placing cast-in-place concrete in bridge decks and approach slabs.
  - 1. Include at least the following:
    - a. Description of equipment, materials, methods, and personnel for placing, finishing, and curing concrete
    - b. Quality control plan
    - c. Placement schedule for each bridge, including placement rates, time of day, duration, placement sequence, and placement direction
    - c. Screed elevations for deck and approach slabs of each bridge

**Delete Article 2.1 and replace with the following:**

**2.1 CONCRETE**

- A. Bridge Decks, Approach Slabs, and Concrete Diaphragms cast with bridge decks:
  - 1. Standalone pedestrian, shared use or multi-use overpass or underpass structures.
    - a. Use Class AA(AE). Refer to Section 03055.
  - 2. Other bridge types.
    - a. Use Class AA(LSF). Refer to Section 03055.
      - 1) Includes top slabs and approach slabs of box culverts with traffic directly on the slabs.
  - 3. Use Structural Concrete – Lightweight where shown. Refer to Section 03057.

- a. Use the concrete class shown.
  4. Use Class AA(ES) only where shown for closure pours with full-depth precast concrete deck panels. Refer to Section 03055.
- B. Concrete Slope Protection:
  1. Class A(AE). Refer to Section 03055.
- C. Other Structural Elements:
  1. Use Class AA(AE), unless shown otherwise. Refer to Section 03055
  2. Use Structural Concrete – Lightweight where shown. Refer to Section 03057.
    - a. Use the concrete class shown.
  3. Self-Consolidating Concrete (SCC) may be used at the Contractor's option. Refer to Section 03056.
    - a. Use the concrete class shown.
    4. Use Class AA(ES) only where shown. Refer to Section 03055.

**Delete Article 2.9 and replace with the following:**

## **2.9 EPOXY ADHESIVE**

- A. Refer to AASHTO M 235, Type V, Grade 3.

**Add the following to paragraph 3.1 D:**

3. Hold a pre-activity meeting before placing cast-in-place concrete in bridge decks and approach slabs.
  - a. Contractor, Department, and supplier personnel involved with completing the work must attend the pre-activity meeting.
  - b. Conduct pre-activity meeting no more than seven calendar days before the first scheduled concrete placement.
  - c. Provide notification of the meeting to the Engineer at least seven calendar days in advance.
  - d. Discuss at least the following items specific to the concrete work for each bridge deck and approach slab:
    - 1) Material requirements
    - 2) Schedule, quality control procedures, and verification testing.
    - 3) Authorized concrete placing and finishing plan
    - 4) Placement sequence and limits (including pouring sequence, direction of pour)

- 5) Construction details (for example, bridge skew angle, superelevation, and transitions)
  - 6) Locations of finishing machine rail supports and construction joints (for example, grade control)
  - 7) Concrete conveyance, placement equipment and methods, and rates (including haul distance, haul time, and placement)
  - 8) Special equipment
  - 9) Finishing methods
  - 10) Curing plan (equipment and application rates)
  - 11) Method of verifying placement and clearances of reinforcing steel
  - 12) Contingency plans
- e. Additional meetings may be required as determined by the Engineer.

**Delete subparagraph 3.7 D2 and replace with the following:**

2. Bridge decks and approach slabs – use a finishing machine unless otherwise permitted.

**Delete subparagraph 3.9 E1 and replace with the following:**

1. Use a finishing machine on exposed surfaces unless otherwise permitted.

**Delete subparagraph 3.9 E7 and replace with the following:**

7. Place finishing machine parallel to the abutments and bents within 10 degrees.

**Delete subparagraph 3.9 E10 and replace with the following:**

10. Place concrete in a uniform heading approximately parallel to the finishing machine.

**Delete subparagraph 3.9 E17 and replace with the following:**

17. Furnish a 10 ft straightedge to check the surface tolerance, placed both longitudinally and transversely, immediately behind the finishing machine and in hand-finished areas.

**Delete paragraphs 3.12 A and 3.12 B and replace with the following:**

- A. Bridge decks and approach slabs
  - 1. Follow the authorized concrete placing and finishing plan when placing cast-in-place concrete.
  - 2. Do not place parapet forms or parapet for at least seven days after deck placement and until the deck has attained the specified 28 day minimum compressive strength based on field cured cylinders, unless falsework is left in place and is designed to carry the additional loads that are part of the parapet placement process.
    - a. Do not allow the installation of the parapet and parapet forms to interrupt the curing of the deck and approach slabs when installed before curing is complete.
  
- B. Slab Span
  - 1. Place concrete in one continuous operation.