

## **AMENDMENT TO OPSS 909, NOVEMBER 2016**

---

---

Special Provision No. 109S24

~~March 2018~~**DRAFT** November 2024

### **909.04 DESIGN AND SUBMISSION REQUIREMENTS**

#### **909.04.01 Design Requirements**

##### **909.04.01.01 General**

Clause 909.04.01.01 of OPSS 909 shall be amended by the addition of the following:

The jacking force shall be calculated to achieve the theoretical prestressing force in the strand, immediately prior to transfer, as specified on the Contract Drawings.

In determining the jacking force, losses due to chuck slip, bed shortening and bulkhead rotation, including abutment tilt, temperature variation, deflected strand friction, sequential strand stressing, and initial relaxation of strand prior to transfer shall be included. Relaxation loss need not to be taken as greater than 15 MPa. During jacking, the strand may be stressed up to 0.80 fpu.

##### **909.04.02.05 Precast Report**

Clause 909.04.02.05 of OPSS 909 is deleted in its entirety and replaced with the following:

##### **909.04.02.05 Manufacturer's Certificate of Conformance and Precast Report**

A Manufacturer's Certificate of Conformance and a precast report shall be submitted to the Contract Administrator for each shipment of girders at least 5 Business Days prior to shipping from the precasting plant.

The precast report shall contain the following information:

- a) List of girders in the shipment, including their ID number, lot number, and description.
- b) The mill certificates for the strands, along with the elongation calculations based on the actual material properties specified in the mill certificate of the strands used in the work.
- c) Summary of all measurements and inspections carried out prior to concrete placement to verify compliance with the Contract Documents including reinforcement placement, hold-down positions and other pre-pour checks.
- d) Record of the jacking force, elongations, and corrections.
- e) Temperature records for formwork and steel at the time of concrete placement
- f) Temperature control records, including location of thermocouple wires and graphical plots verifying that neither the maximum temperature limit or maximum allowable temperature difference have been exceeded.
- g) Record of inspection of moist curing.
- h) Summary of material test results for plastic concrete: air content, slump, and concrete temperature.

- i) Summary of material test results for hardened concrete: transfer strength, confirmation of the projected 28-Day compressive strength. If test results are not available at the time of shipping, they may be submitted within 4 Business Days following completion of testing.
- j) Summary of all measurements and inspections required by this specification, including the concrete cover, crack measurement summary, tolerances, and surveys for geometric control.
- k) Documentation confirming that all repairable defects have been identified, evaluated, and repaired as detailed in the Repair of Defects and Deficiencies Repairable by Standard Methods clause.

March 2018 Page 1 of 2 SSP 109S24

- l) When steam curing is used, test results indicating that time of initial set was determined, unless standard delay periods are used, according to the Steam Curing and Other Application of Heat clause.

A Request to Proceed shall be submitted to the Contract Administrator before the delivery of each shipment of girders to the site.

The girders shall not be delivered to the site until the Contract Administrator has received the Manufacturer's Certificate of Conformance, the precast report, Request to Proceed, and issued a Notice to Proceed.

## **909.07 CONSTRUCTION**

### **909.07.06 Placing of Sheaths and Anchorages**

Clause 909.07.06 of OPSS 909 shall be amended by the addition of the following:

When debonding of strands are specified in the Contract Documents, only rigid unsplit polymer sheathing shall be used. Soft flexible split plastic sheathing shall not be permitted.

### **909.07.26 Certificate of Conformance**

Subsection 909.07.26 is deleted in its entirety and replaced with the following:

### **909.07.26 Inspection after the Installation of the Girders**

A Request to Proceed shall be submitted to the Contract Administrator, for each structure, after the installation of all girders within a construction stage.

The next operation shall not proceed until a Notice to Proceed has been received from the Contract Administrator.

## **909.08 QUALITY ASSURANCE**

### **909.08.10.03 Defects and Deficiencies Causing Rejection**

Clause 909.08.10.03 of OPSS 909 shall be amended by the addition of the following:

h) Horizontal or inclined cracks in the web, where the maximum width of crack is less than 0.2 mm, shall not be considered a defect or deficiency.

Table 2 is amended by the addition of the following.

Table 2 Defects and Deficiencies Repairable by Standard Methods

<u>Repairable Deficiencies</u>	<u>Defects and Condition</u>	<u>Repair Method</u>
<u>Cracks</u>	<u>For horizontal or inclined cracks with width of crack <math>\leq 0.2\text{mm}</math></u>	<u>No repair required.</u>

WARRANT: Always with OPSS 909, Construction Specification for Prestressed Concrete - Precast Girders.