Standard Specifications
Construction of
Transportation Systems

Approved by The
State Transportation Board
April 18, 2013

No separate measurement and payment will be made unless a pay item for the work is included in the Proposal. If no pay item is included in the Proposal, include the cost of the joint sealing and resealing in the overall bid price submitted.

No separate measurement or payment will be made for any sawcutting required to seal or reseal the joint.

461.4.01 Limits

General Provisions 101 through 150.

461.5 Payment

When listed as a pay item in the Proposal, joints and cracks sealed or resealed will be paid for at the Contract Unit Price bid per linear foot (meter). Payment is full compensation for furnishing materials, equipment, tools, labor, and incidentals to complete the work.

Payment will be made under:

Item No. 461	Resealing roadway joints and cracks, type___	Per linear foot (meter)
Item No. 461	Resealing bridge joints, type___	Per linear foot (meter)
Item No. 461	Sealing roadway joints and cracks, type___	Per linear foot (meter)
Item No. 461	Sealing bridge joints, type___	Per linear foot (meter)

461.5.01 Adjustments

General Provisions 101 through 150.

Section 500—Concrete Structures

500.1 General Description

This work consists of manufacturing and using Portland cement concrete to construct structures. See the Contract Plans for the specified color and locations for placing integrally colored concrete.

500.1.01 Definitions

General Provisions 101 through 150.

500.1.02 Related References

A. Standard Specifications

Section 104—Scope of Work

Section 211—Bridge Excavation and Backfill

Section 431—Grind Concrete Pavement

Section 507—Prestressed Concrete Bridge Members

Section 511—Reinforcement Steel

Section 530—Waterproofing Fabrics

Section 531—Dampproofing

Section 621—Concrete Barrier

Section 800—Coarse Aggregate

Section 801—Fine Aggregate

Section 830—Portland Cement

a. If plywood is the type made for general concrete forms and is at least 5/8 in (16 mm) thick, use it in place of 1 in (25 mm) thick lumber to construct forms, if necessary.

b. Ensure that plywood used to form open joints and to line forms is at least 1/4 in (6 mm) thick.

c. When nailing plywood directly to form studs, do not space the studs more than 16 in (400 mm) apart.

d. Use plywood in full sheets wherever practical. Do not do patchwork with small, irregular pieces.

e. Have the Engineer inspect and approve plywood sheet layout.

3. Metal or Plastic Forms

Construct metal or plastic forms as follows:

a. Use metal or plastic to form concrete only if the Engineer approves the forms and if the forms produce satisfactory results.

b. Use metal forms that produce finished concrete equal to or superior to concrete made from comparable wooden forms.

c. Countersink bolts and rivets in the surfaces of metal forms that touch concrete.

d. Grind welds smooth in the surfaces of metal forms to provide a smooth plane surface.

4. Other Material Uses

Use tempered fiberboard for form liners when necessary if it is at least 1/4 in (6 mm) thick. Use tempered fiberboard 1/8 in (3 mm) thick only to form open joints. Support the fiberboard with suitable spacers arranged properly.

Use approved synthetic materials for forming open joints and for other special uses, if necessary.

E. Construct Form Supports

Construct form supports using metal ties, anchors, and hangers as follows:

1. Construct supports that will remain in the finished concrete so they can be removed from the concrete face to a depth of at least 1 in (25 mm) without damaging the concrete.
2. Weld form supports to girder or beam flanges in continuous or cantilever spans only in the flange areas which are in compression.
3. When ordinary wire ties or snap ties are permitted, cut them back at least 3/8 in (10 mm) from the face of the concrete.
4. Design metal tie fittings that minimize the cavities made when they are removed. Fill all cavities after removing metal tie fittings.

F. Construct Temporary Forms

Construct temporary forms as follows:

1. Construct and maintain forms in a mortar-tight condition.
2. Construct forms so that they can be removed easily without damaging the concrete, unless using forms that will remain in place.
3. Build, line, and brace forms so that the formed concrete surface conforms with the dimensions, lines, and grades shown on the Plans.
4. Build headwall forms for skewed pipe parallel to the roadway centerline or at right angles to the radius on curves. Construct headwall forms as follows:

a. Lay enough pipe to extend through the headwall form.

b. After the concrete is poured and hardened, carefully cut and dress the protruding pipe ends so no ragged edges remain.

The Contractor may choose, as an alternate to the above method, to build a circular form that exactly fits the pipe circumference and face of the headwall form.

5. Construct form liner using plywood or other approved form liner as follows:

a. Use form liner in large sheets. Do not do patchwork.