



*Florida Department of Transportation*

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**MEMORANDUM**

**DATE:** May 24, 2016  
**TO:** Specification Review Distribution List  
**FROM:** Dan Hurtado, P.E., State Specifications Engineer  
**SUBJECT:** Proposed Specification: **4000402 Concrete Structures.**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Charles Boyd of the State Structures Design Office to modify the language for current Department practice.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or online at

<http://www2.dot.state.fl.us/ProgramManagement/Development/IndustryReview.aspx> .

Comments received after **June 21, 2016**, may not be considered. Your input is encouraged.

DH/dt  
Attachment

## CONCRETE STRUCTURES.

(REV 5-~~16~~24-16)

SUBARTICLE 400-4.2 is deleted and the following substituted:

**400-4.2 Design and Erection:** Design and construct all falsework to provide the necessary rigidity and to support the loads without appreciable settlement or deformation. Use screw jacks or hardwood wedges to take up any settlement in the framework, either before or during the placing of concrete. If any weakness develops and the centering shows undue settlement or distortion, stop the work, remove any ~~masonry~~-affected concrete, and strengthen the falsework before resuming work. Support falsework which cannot be founded on a satisfactory footing on piling. Space, drive, and remove the piling in an approved manner.

SUBARTICLE 400-11.3 is deleted and the following substituted:

**400-11.3 Bearing Pads:** Use bearing pads for seating bridge shoes, ends of beams, and slabs of the types specified or required in the Plans.

Furnish and install ~~composite~~-neoprene pads as detailed in the Plans. Place neoprene pads, where specified or required, directly on ~~masonry~~concrete surfaces finished in accordance with the requirements of this Article. Ensure that pads, bearing areas of bridge seats, and metal bearing plates are thoroughly cleaned and free from oil, grease, and other foreign materials.

Exercise care in fabrication of related metal parts to avoid producing conditions detrimental to the performance of the pads, such as uneven bearing, excessive bulging, etc.

The Engineer will evaluate the degree of deformation and condition of bearing pads in the completed bridge on or before the final inspection required by 5-10 or when requested by the Contractor. As directed by the Engineer, correct horizontal bearing pad deformations that at the time of inspection exceed 50% of the bearing pad thickness or that the Engineer predicts will exceed 50% of the bearing pad thickness during future high or low temperature periods.

SUBARTICLE 400-22.5 is deleted and the following substituted:

**400-22.5 Composite and Plain Neoprene Bearing Pads:** The quantity to be paid for will be the original plan quantity, computed using the dimensions of the pads shown in the Plans.

ARTICLE 400-23 is deleted and the following substituted:

### **400-23 Basis of Payment.**

#### **400-23.1 Concrete:**

**400-23.1.1 General:** Price and payment will be full compensation for each of the various classes of concrete shown in the ~~proposal~~Plans~~Contract Documents~~.

**400-23.1.2 Concrete Placed below Plan Depth:** Authorized concrete placed in seal or footings 5 feet or less below the elevation of bottom of seal or footing as shown in the Plans will be paid for at the Contract price set forth in the ~~proposal~~Plans~~Contract Documents~~ under the pay items for substructure concrete.

Authorized concrete used in seal (or in the substructure where no seal is used) at a depth greater than 5 feet below the bottom of seal or footing as shown in the Plans will be paid for as Unforeseeable Work.

Such payment will be full compensation for the cofferdam construction, for excavation, and for all other expenses caused by the lowering of the footings.

**400-23.1.3 Seal Concrete Required but Not Shown in Plans:** When seal concrete is required as provided in 400-8 and there is no seal concrete shown in the Plans, it will be paid for as Unforeseeable Work.

**400-23.2 Precast Anchor Beams:** Price and payment will be full compensation for the beams, including all reinforcing and materials necessary to complete the beams in place and accepted.

No separate prices will be allowed for the various types of anchor beams.

**400-23.3 Reinforcing:** Reinforcing bars, wires and mesh will be measured and paid for as provided in Section 415, except that no separate payment will be made for the welded wire reinforcement used in concrete jackets on steel piles or reinforcement contained in traffic railings, barriers, traffic separators or parapets. Where so indicated in the Plans, the Department will not separately pay for reinforcing used in incidental concrete work, but the cost of such reinforcement shall be included in the Contract unit price for the concrete.

**400-23.4 Bridge Deck Grooving:** Price and payment will be full compensation for all grinding, grooving, equipment, labor, and material required to complete the work in an acceptable manner.

**400-23.5 Bridge Deck Grooving and Planing:** Price and payment will be full compensation for all grooving, planing, equipment, labor, and material required to complete the work in an acceptable manner.

**400-23.6 Composite and Plain Neoprene Bearing Pads:** Price and payment will be full compensation for all work and materials required to complete installation of the pads.

**400-23.7 Cleaning and Coating Concrete Surfaces:** Price and payment will be full compensation for all work and materials required. The cost of coating new concrete will not be paid for separately, but will be included in the cost of the item to which it is applied.

**400-23.8 General:** The above prices and payments will be full compensation for all work specified in this Section, including all forms, falsework, joints, weep holes, drains, pipes, conduits, bearing pads, setting anchor bolts and dowels, surface finish, and cleaning up, as shown in the Plans or as directed. Where the Plans call for water stops, include the cost of the water stops in the Contract unit price for the concrete.

Unless payment is provided under a separate item in the ~~proposal~~Plans~~Contract Documents~~, the above prices and payments will also include all clearing and grubbing; removal of existing structures; excavation, as provided in Section 125; and expansion joint angles and bolts.

The Department will not change the rate of payment for the various classes of concrete in which steel or FRP may be used due to the addition or reduction of reinforcing.

The Department will not make an allowance for cofferdams, pumping, bracing, or other materials or equipment not becoming a part of the finished structure. The Department will not pay for concrete placed outside the neat lines as shown in the Plans.

When using stay-in-place metal forms to form bridge decks, the forms, concrete required to fill the form flutes, attachments, supports, shoring, accessories, and all miscellaneous items or work required to install the forms shall be included in the Contract unit price of the superstructure concrete.

**400-23.9 Payment Items:**

Payment will be made under:

- Item No. 400- 0- Class NS Concrete – per cubic yard.
- Item No. 400- 1- Class I Concrete - per cubic yard.
- Item No. 400- 2- Class II Concrete - per cubic yard.
- Item No. 400- 3- Class III Concrete - per cubic yard.
- Item No. 400- 4- Class IV Concrete - per cubic yard.
- Item No. 400- 6- Precast Anchor Beams - each.
- Item No. 400- 7- Bridge Deck Grooving - per square yard.
- Item No. 400- 8- Class V Concrete - per cubic yard.
- Item No. 400- 9- Bridge Deck Grooving and Planing - per square yard.
- Item No. 400- 16- Class VI Concrete - per cubic yard.
- Item No. 400-143- Cleaning and Coating Concrete Surfaces - per square foot.
- Item No. 400-147- Composite Neoprene Pads - per cubic foot.
- Item No. 400-148- Plain Neoprene Bearing Pads - per cubic foot.