



## Florida Department of Transportation

**CHARLIE CRIST**  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

**STEPHANIE KOPELOUSOS**  
SECRETARY

June 25, 2007

Dr. Leslie McCarthy, PhD, P.E.  
Program Operations Engineer  
Federal Highway Administration  
545 John Knox Road, Suite 200  
Tallahassee, Florida 32303

Re: Office of Design, Specifications  
Section 450  
Proposed Specification: 4500050-Precast Prestressed Concrete Construction-Shop  
Drawings

Dear Dr. McCarthy:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Precast Prestressed Concrete Construction-Shop Drawings.

This change was proposed by Andre Pavlov of the State Structures Office to correct references to the old AASHTO Bridge Specifications.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965DB or [duane.brautigam@dot.state.fl.us](mailto:duane.brautigam@dot.state.fl.us).

If you have any questions relating to this specification change, please call Duane F. Brautigam, State Specifications Engineer at 414-4110.

Sincerely,

Duane F. Brautigam, P.E.  
State Specifications Engineer

DFB/sh

Attachment

cc: General Counsel  
Florida Transportation Builders' Assoc.  
State Construction Engineer

**PRECAST PRESTRESSED CONCRETE CONSTRUCTION-SHOP DRAWINGS.  
(REV 6-25-07)**

ARTICE 450-5 (Page 450) is deleted and the following substituted:

**450-5 Shop Drawings.**

Submit shop drawings when the Contract Documents do not contain all the detailed information necessary to fabricate and/or erect the pretensioned prestressed concrete product. Ensure the submitted shop drawings meet the requirements of 5-1 and any additional Contract Document requirements.

Shop drawings are not required to depict supplemental reinforcing steel used to facilitate fabrication of products.

In lieu of shop drawings, furnish one copy of the following to the Engineer:

1. A copy of the Framing Plan with product designations for all superstructure components.
2. Strand detensioning schedule.
3. Tensioning and elongation calculations.
4. Details of supplemental steel that remains as part of the finished product.
5. Submit full plan details and Specifications, when proposing to use materials and/or methods that differ from the requirements of the Contract Documents. Ensure the alternate materials and methods meet the following requirements:
  - a. The provisions of the Contract Documents.
  - b. The AASHTO ~~Standard Specifications for Highway Bridges~~ *LRFD Bridge Design Specifications*, edition with interims as referenced in plans.
  - c. The recommendations of the material manufacturer.
  - d. Any materials change proposed by the Contractor and approved by the Engineer.
  - e. Net compressive stress in the concrete due to prestressing acting alone, after all losses, is not less than that provided by the stranding shown in the plans.
  - f. Ultimate strength of the structure with the proposed changes is not less than the ultimate strength of the original design.
  - g. The provisions of the Departments Structures Design Guidelines.

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