



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

December 23, 2008

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 449
Proposed Specification: 4490300, Precast Concrete Drainage Products – Construction
Requirements

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

This change was proposed by Linda Seigle of the State Drainage Office to delete reference to fiber reinforced concrete pipe, no longer produced in the US.

Please review and transmit your comments, if any, within four weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

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

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/dr

Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

PRECAST CONCRETE DRAINAGE PRODUCTS – CONSTRUCTION REQUIREMENTS.

(REV 10-06-08)

ARTICLE 449-3 (Page 441) is deleted and the following substituted:

449-3 Construction Requirements.

Unless otherwise stipulated within the Contract Documents, meet the following requirements for concrete mix, product design, fabrication, transportation, and installation:

Three-Sided Precast Culverts.....	Section 407
Precast Concrete Box Culvert.....	Section 410
Pipe Culverts and Storm Sewers.....	Section 430
French Drains.....	Section 443
Inlets, Manholes, and Junction Boxes.....	Section 425 and ASTM C 478
Underdrains.....	Section 440 and ASTM C 444
Steel Reinforced Round Concrete Pipe.....	ASTM C 76
Reinforced Elliptical Concrete Pipe.....	ASTM C 507
Non-reinforced Concrete Pipe	ASTM C 985
Fiber Reinforced Concrete Pipe.....	ASTM C 1450

Meet the special requirements for the applicable pipes as described in 449-4 through 449-6.

ARTICLE 449-5 (Page 443) is deleted.

449-5 Fiber Reinforced Concrete Pipe.

~~449-5.1 Special Requirements for Fiber Reinforced Concrete Pipe:~~ Use fiber reinforced concrete pipe meeting the requirements of ASTM C 1450. Use only pipes that are properly marked.

~~Use pipe meeting the applicable material requirements set forth in 449-2. In addition, fiber reinforced concrete pipe must be designated Class S, Class I, Class II, Class III or Class IV. The corresponding strength requirements are given in the following table:~~

Minimum Long-Term Service D-Load	
Pipe Class	Lb/ft/ft
S	600
I	800
II	1,000
III	1,350
IV	2,000

~~Ensure the relationship between short-term crush loads required to achieve 100-year long-term design loads and the relationship between the saturated and dry crush loads are provided. The minimum dry crush load can not be less than a factor of 2 times~~

4490300

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~~the long term service load. The short term crush load will be determined as required in Section 10.2 of ASTM C 1450 except the specimen will be tested by the appropriate section of ASTM C 497, External Load Crushing Strength by the Three Edge Bearing Test Method.~~

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