



*Florida Department of Transportation*

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MIKE DEW  
SECRETARY

August 9, 2018

Khoa Nguyen  
Director, Office of Technical Services  
Federal Highway Administration  
3500 Financial Plaza, Suite 400  
Tallahassee, Florida 32312

Re: State Specifications Office  
Section: **948**  
Proposed Specification: **9480107 Optional Drainage Products and Liner Repair Systems.**

Dear Mr. Nguyen:

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

The changes are proposed by Chase Knight of the State Materials Office (SMO) to modify the language.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via email to [dan.hurtado@dot.state.fl.us](mailto:dan.hurtado@dot.state.fl.us).

If you have any questions relating to this specification change, please call me at 414-4130.

Sincerely,

Signature on file

Dan Hurtado, P.E.  
State Specifications Engineer

DH/dt

Attachment

cc: Florida Transportation Builders' Assoc.  
State Construction Engineer

**OPTIONAL DRAINAGE PRODUCTS AND LINER REPAIR SYSTEMS.****(REV ~~6-6-18~~ 8-9-18)**

SUBARTICLE 948-1.7 is deleted and the following substituted:

**948-1.7 PVC Pipe (12 Inches to 48 Inches):** PVC pipe for side drain, cross drain, storm drain and other specified applications shall conform to AASHTO M278 for smooth wall PVC pipe or ASTM F949 and AASHTO M304 for PVC ribbed pipe with plant certification from the National Transportation Product Evaluation Program (NTPEP). Resin shall contain a minimum of 1.5% by weight of titanium dioxide for UV protection. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of PVC.

PVC pipe shall be installed within two years from the date of manufacture.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.

**948-1.7.1 Material Acceptance:** Prior to use, submit to the Engineer a material certification from the manufacturer confirming that the requirements of this Section are met. The certification shall conform to the requirements of Section 6.

Project sampling shall be performed in accordance with 430-9.

SUBARTICLE 948-2.3.1 is deleted and the following substituted:

**948-2.3.1 General:** Class I (50-year design service life) corrugated HDPE pipe used for side drain, storm and cross drain or french drain shall meet the requirements of AASHTO M294(V) and with plant certification from the National Transportation Product Evaluation Program (NTPEP). Corrugations shall be annular. Pipe resin shall conform to ASTM D3350 with a minimum cell classification 435400C and between 2% to 4% carbon black. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of polyethylene.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.

SUBARTICLE 948-2.4.1 is deleted and the following substituted:

**948-2.4.1 General:** Steel reinforced polyethylene ribbed pipe used for side drain, storm and cross drain, or french drain shall meet the requirements of AASHTO ~~MP20-1335~~ or ASTM F-2562 with plant certification from the NTPEP and the testing requirements for stress crack and oxidation resistance in Table 948-1. Pipe resin shall conform to ASTM D3350 with a minimum cell classification 435400C and between 2% to 4% carbon black. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of steel reinforced polyethylene ribbed pipe.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.

SUBARTICLE 948-7.1 is deleted and the following substituted:

**948-7.1 Class I PP:** Class I (50-year design service life) PP pipe used for side drain, cross drain, storm drain, and french drain shall meet the requirements of AASHTO M330 ~~and~~with plant certification from the NTPEP. Corrugations shall be annular. Polypropylene compound shall conform to the requirements of ASTM F2881. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of polypropylene.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.

**OPTIONAL DRAINAGE PRODUCTS AND LINER REPAIR SYSTEMS.****(REV 8-9-18)**

SUBARTICLE 948-1.7 is deleted and the following substituted:

**948-1.7 PVC Pipe (12 Inches to 48 Inches):** PVC pipe for side drain, cross drain, storm drain and other specified applications shall conform to AASHTO M278 for smooth wall PVC pipe or ASTM F949 and AASHTO M304 for PVC ribbed pipe with plant certification from the National Transportation Product Evaluation Program (NTPEP). Resin shall contain a minimum of 1.5% by weight of titanium dioxide for UV protection. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of PVC.

PVC pipe shall be installed within two years from the date of manufacture.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.

**948-1.7.1 Material Acceptance:** Prior to use, submit to the Engineer a material certification from the manufacturer confirming that the requirements of this Section are met. The certification shall conform to the requirements of Section 6.

Project sampling shall be performed in accordance with 430-9.

SUBARTICLE 948-2.3.1 is deleted and the following substituted:

**948-2.3.1 General:** Class I (50-year design service life) corrugated HDPE pipe used for side drain, storm and cross drain or french drain shall meet the requirements of AASHTO M294(V) with plant certification from the NTPEP. Corrugations shall be annular. Pipe resin shall conform to ASTM D3350 with a minimum cell classification 435400C and between 2% to 4% carbon black. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of polyethylene.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.

SUBARTICLE 948-2.4.1 is deleted and the following substituted:

**948-2.4.1 General:** Steel reinforced polyethylene ribbed pipe used for side drain, storm and cross drain, or french drain shall meet the requirements of AASHTO M335 with plant certification from the NTPEP and the testing requirements for stress crack and oxidation resistance in Table 948-1. Pipe resin shall conform to ASTM D3350 with a minimum cell classification 435400C and between 2% to 4% carbon black. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of steel reinforced polyethylene ribbed pipe.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.

SUBARTICLE 948-7.1 is deleted and the following substituted:

**948-7.1 Class I PP:** Class I (50-year design service life) PP pipe used for side drain, cross drain, storm drain, and french drain shall meet the requirements of AASHTO M330 with plant certification from the NTPEP. Corrugations shall be annular. Polypropylene compound shall conform to the requirements of ASTM F2881. Post-consumer and post-industrial recycled resins are not allowed. Mitered end sections are not to be constructed of polypropylene.

Obtain pipe from a production facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion shall meet the requirements of Section 105.