



July 2022 Specification Revisions



Special Provision 004

The Changes are proposed by Tim Lattner from the Office of Design to delete the summary of pay items statement because it will be included in the Estimated Quantities Report and will no longer be listed in the Plans.

SCOPE OF WORK – INTENT OF CONTRACT. (REV 10-25-21)

ARTICLE 4-1 is expanded by the following:

The Improvements under this Contract consist of [Place description here.](#)
[The summary of pay items for this project is listed in the Plans.](#)



SP0040100 Scope of Work – Intent of Contract.

The summary of pay items are included in the Estimated Quantities Report and will no longer be listed in the Plans, therefore this statement needs to be deleted to avoid conflict/confusion.

Section 005

The changes are proposed by Ben Goldsberry from the Structures Design Office to allow PT systems to be accepted through the shop drawing submittal process instead of through a pre-approved list. The proposed specification change is associate with the changes made to Section 452, 462, and 960.

1. Includes ~~approved post-tensioning systems and project specific~~ integration details of the ~~approved~~ post-tensioning system.
2. Does not include formwork complying with Standard Plans, Index 102-600 (concrete placement is not permitted directly over traffic). Also, does not include critical temporary walls that are fully detailed in the plans unless redesigned by the Contractor. Does not include specialized equipment if traffic is removed from under equipment while equipment is being loaded, launched, and while loads are being transported by equipment.
3. In lieu of a Specialty Engineer, originator may be a licensed Architect.
4. In lieu of the Design Engineer of Record, the reviewer may be the Design Architect of Record.



SS0050104- Control of the Work.

PT systems will be accepted through the shop drawing submittal process instead of through a pre-approved list. Updated Footnote 1 in Table 5-1 to reflect that PT systems will be accepted through the shop drawing submittal process instead of through a pre-approved list.

Special Provision 007 (Smalltooth Sawfish)

The changes are proposed by Katasha Cornwell from the State Environmental Management Office to remove an unnecessary pre-construction meeting item and to clarify when to operate at Idle Speed/No Wake.

SUBARTICLE 7-1.4 is expanded by the following:

~~7. The need to avoid collisions with these species.~~
~~5. The need to avoid any actions that would jeopardize the existence of these species.~~
~~6. The civil and criminal penalties for harming, harassing, or killing of these species.~~
Advise all work crews of this information.
Provide sediment and turbidity barriers constructed of material in which a smalltooth sawfish cannot become entangled. Secure and monitor the sediment and turbidity barriers to avoid protected species entrapment. Sediment and turbidity barriers may not block smalltooth sawfish entry to or exit from designated critical habitat without prior approval of the Engineer and concurrence from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.
Operate all vessels at the minimum safe speed when transiting and maintain vigilant watch for smalltooth sawfish to avoid striking them. Operate at "Idle Speed/No Wake" ~~at all times~~ speeds while in the construction area and ~~while~~ in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom and in all depths ~~after~~ smalltooth sawfish has been observed and recently departed the area. Follow marked channels or routes of deep water whenever possible. Maintain a distance of 150 feet or greater between smalltooth sawfish and the vessel. When visibility is limited, assign a designated individual to observe for smalltooth sawfish and limit vessel operation to only daylight hours.



SP0070104-5 Legal Requirement and Responsibility to the Public – Small tooth Sawfish.

As a result of the agencies updating their requirements. Removed unnecessary pre-construction meeting item and to clarify when to operate at idle speed/ no wake.

This is a special provision so only applies on an as needed basis.

Special Provision 007 (Sea Turtle)

The changes are proposed by Katasha Cornwell from the State Environmental Management Office to remove an unnecessary pre-construction meeting item and to clarify when to operate at Idle Speed/No Wake.

SUBARTICLE 7-1.4 is expanded by the following:

- ~~4. The need to avoid collisions with these species.~~
- ~~5. The need to avoid any actions that would jeopardize the existence of these species.~~
- 6. The civil and criminal penalties for harming, harassing, or killing these species.

Advise all work crews of this information.

Provide sediment and turbidity barriers constructed of material in which a sea turtle cannot become entangled. Secure and monitor the sediment and turbidity barriers to avoid protected species entrapment. Sediment and turbidity barriers may not block sea turtle entry to or exit from designated critical habitat without prior approval of the Engineer and concurrence from the National Marine Fisheries Service's Protected Resources Division, St. Petersburg, Florida.

Operate all vessels at the minimum safe speed when transiting and maintain vigilant watch for sea turtles to avoid striking them. Operate at "Idle Speed/No Wake" ~~at all times~~ speeds while in the construction area ~~and while~~ in water depths where the draft of the vessel provides less than a four-foot clearance from the bottom, and in all depths after sea turtles have been observed and recently departed the area. Follow marked channels or routes of deep water whenever possible. Maintain a distance of 150 feet or greater between sea turtles and the vessel. When visibility is limited, assign a designated individual to observe for sea turtles and limit vessel operation to only daylight hours.



SP0070104-6 – Legal Requirement and Responsibility to the Public – Sea Turtle.

As a result of the agencies updating their requirements. Removed unnecessary pre-construction meeting item and to clarify when to operate at idle speed/ no wake.

Removed unnecessary pre-construction meeting item and to clarify when to operate at idle speed/ no wake.

Section 007

The changes are proposed by Alan Autry to require railroad protective liability insurance documents be submitted at the preconstruction conference.

• SUBARTICLE 7-13.3 is deleted and the following substituted:¶

→ ~~7-13.3 Insurance Required for Construction at Railroads:~~ When the Contract includes the construction of a railroad grade crossing, railroad overpass or underpass structure, or any other work or operations within the limits of the railroad right-of-way, including any encroachments thereon from work or operations in the vicinity of the railroad right-of-way, you shall, in addition to the insurance coverage required pursuant to 7-13.2 above, procure and maintain Railroad Protective Liability Coverage (ISO Form CG0035) where the railroad is the Named Insured and where the limits are not less than \$2,000,000 combined single limit for bodily injury and/or property damage per occurrence, and with an annual aggregate limit of not less than \$6,000,000. The railroad shall also be added along with the Department as an Additional Insured on the policy/ies procured pursuant to subsection 7-13.2 above. ~~Prior to the execution of the Contract~~ At the preconstruction conference, and at all renewal periods which occur prior to final acceptance of the work, both the Department and the railroad shall be provided with an ACORD Certificate of Liability Insurance reflecting the coverage described herein. The insurance described herein shall be maintained through final acceptance of the work. Both the Department and the railroad shall be notified in writing within ten days of any cancellation, notice of cancellation, renewal, or proposed change to any policy or coverage described herein. The Department's approval or failure to disapprove any policy/ies, coverage, or ACORD Certificates shall not relieve or excuse any obligation to procure and maintain the insurance required herein, nor serve as a waiver of any rights the Department may have.¶



SS0071303 – Legal Requirements and Responsibility to the Public – Insurance Required for Construction at Railroads.

Align submittal of railroad protective liability insurance documents with the expectations of the district/state railroad coordinators. Require railroad protective liability insurance documents be submitted at the preconstruction conference.

Special Provision 007

The changes are proposed by Melissa Hollis from the Product Evaluation Office to move general note text for Utility Locations to Subarticle 7-11.5.1.

**LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC –
PRESERVATION OF EXISTING PROPERTY - UTILITIES – UTILITY
ADJUSTMENTS (UTILITY WORK SCHEDULES).
(REV 5-19-21)**

SUBARTICLE 7-11.5.1 is expanded by the following:

The location(s) of the utilities shown in the Plans (including those designated Vx, Vh, and Vyh) are based on limited investigation techniques and should be considered approximate only. The verified locations/elevations apply only at the points shown. Interpolations between these points have not been verified.

SUBARTICLE 7-11.5.3 is expanded by the following:

The utility work which will be accomplished concurrently with the highway construction Contract will involve facilities owned by other agencies. Utility Schedules (Utility Relocation and/or Work Schedules) for these agencies are posted on the Department's website at the following URI address:



SP0071153B Legal Requirements and Responsibility to The Public – Preservation of Existing Property - Utilities – Utility Adjustments (Utility Work Schedules).

Moved General Note (FDM Chapter 311/914) text for Utility Locations to specification Subarticle 7-11.5.1.

Section 008

The changes are proposed by Melissa Hollis from the Product Evaluation Office to move general note text for Special Events to a Special Provision with a listing of the Date.

PROSECUTION AND PROGRESS (REV 8-17-21)

SUBARTICLE 8-6.4 is ~~deleted~~ and the following substituted:

8-6.4 Suspension of Contractor's Operations - Holidays and Special Events: Unless the Contractor submits a written request to work during one or more days of a Holiday or Special Event at least ten calendar days in advance of the beginning date of the Holiday or Special Event and receives written approval from the Engineer, the Contractor shall not work on the following days: Martin Luther King, Jr. Day; Memorial Day; the Saturday and Sunday immediately preceding Memorial Day; Independence Day; Independence Day (Observed); Labor Day; the Friday, Saturday, and Sunday immediately preceding Labor Day; Veterans Day; Veterans Day (Observed); the Wednesday immediately preceding Thanksgiving Day; Thanksgiving Day; the Friday, Saturday and Sunday immediately following Thanksgiving Day; December 24 through January 2, inclusive; and Special Events noted in the [Plans/Contract Documents](#). Contract Time will be charged during these Holiday and Special Event periods. Contract Time will be adjusted in accordance with 8-7.3.2. The Contractor is not entitled to any additional compensation beyond any allowed Contract Time adjustment for suspension of operations during such Holiday and Special Event periods.



SS0080604 - Prosecution and Progress.

Moved General Note (FDM Chapter 311/914) text for Special Events to specification subarticle 8-6.4, with listing of Date/Event.

Special Provision 008

The changes are proposed by Melissa Hollis from the Product Evaluation Office to move general note text for Special Events to a Special Provision with a listing of the Date.

**PROSECUTION AND PROGRESS - SUSPENSION OF CONTRACTOR'S
OPERATIONS- SPECIAL EVENTS.
(REV 5-19-21)**

ARTICLE 8-6.4 is expanded by the following:

**8-6.4 Suspension of Contractor's Operations - Holidays and Special Events: For this
Contract, Special event days for this project include:**
{List special events}



SP0080604 (NEW) Prosecution and Progress - Suspension of Contractor's Operations-
Special Events.

Moved General Note (FDM Chapter 311/914) text for Special Events to specification
subarticle 8-6.4, with listing of Date/Event.

Section 102

The changes are proposed by Derwood Sheppard from the Roadway Design to consolidate information from FDOT Standard Plans and to clarify that Pedestrian and Bicycle accommodations should be addressed in the Contract Plans.

MAINTENANCE OF TRAFFIC (REV 12-10-21)

SUBARTICLE 102-3-4 is ~~deleted~~ and the following substituted:

102-3.4 Pedestrian and Bicycle Accommodations: ~~When an existing pedestrian or bicycle way is located within a traffic control work zone, accommodation must be maintained and provision for the disabled must be provided. Provide accommodations for pedestrians as shown in the Temporary Traffic Control (TTC) plans or as directed by the Engineer.~~
Accommodate pedestrians with a safe, accessible travel path around work sites separated from mainline traffic in compliance with the Americans with Disabilities Act (ADA) Standards for Transportation Facilities. Provide appropriate signs for advanced notification of sidewalk closures and marked detours. Only approved pedestrian longitudinal channelizing devices may be used to close or delineate a pedestrian walkway.

Provide accommodations for the closure of bicycle facilities (i.e., marked bicycle lanes or paved outside shoulders 4 feet or greater in width on non-limited access roadways) as shown in the TTC plans or as directed by the Engineer. Maintain existing or detour bicycle facilities satisfactorily throughout the project limits. Advanced notification of sidewalk closures and marked detours shall be provided by appropriate signs. Only approved pedestrian longitudinal channelizing devices may be used to delineate temporary traffic control zone pedestrian walkway.



SS1020304 - Maintenance of Traffic.

Added clarification that the Ped/Bicycle Accommodations are included in the TTCP and also clarified that paved shoulders 4' or greater in width on non-limited access facilities are considered a "Bicycle Facility".

Section 102

The changes are proposed by Derek Vollmer from the Traffic Engineering and Operations Office to include the 12-hour requirement as stated in SSRBC. Changes also include PCMS requirements that were inadvertently left out of the July 2021 eBook and are being added back in.

102-9.11 Portable Changeable Message Sign (PCMS): Furnish PCMSs or truck mounted changeable message signs that meet the requirements of Section 990 as required by the Plans and Standard Plans to supplement other temporary traffic control devices used in work zones. Ensure that the PCMS display panel is raised to a fully upright position and is visible to motorists from $\frac{1}{2}$ mile, or a distance approved by the Engineer, under both day and night conditions. Use PCMS with a minimum letter height of 18 inches. For facilities with posted speed limits of 45 mph or less, PCMS with a minimum letter height of 12 inches may be used.

For roadways with speed limits greater than 45 mph, the message displayed on the PCMS must be unobstructed from 800 feet. For roadways with speed limits of 45 mph or less, the message displayed must be unobstructed from 650 feet.

Messages must have no more than two phases. The display time for each phase must be at least two seconds but no more than three seconds. The sum of the display time must be a maximum of six seconds.

SUBARTICLE 102-9.15 is deleted and the following substituted:

102-9.15 Temporary Traffic Detection and Maintenance: Provide temporary traffic detection and maintenance at existing, temporary, and new signalized intersections. Provide temporary traffic detection equipment listed on the APL. Restore any loss of detection within 12 hours. If permanent traffic detection cannot be restored within 12 hours, provide temporary detection. Ensure 90% accuracy per signal phase, measured at the initial installation and after



SS1020912 - Maintenance of Traffic.

Added "If permanent traffic detection cannot be restored within 12 hours, provide temporary detection.

Section 102

The changes are proposed by Karen Byram to change the black retroreflectivity value.

102-10.3.3 Retroreflectivity: Apply white and yellow removable tape pavement markings that will attain an initial retroreflectivity of not less than 300 mcd/lx·m² for white and contrast markings and not less than 250 mcd/lx·m² for yellow markings. Black portions of contrast tapes and black masking tapes must be non-reflective and have a retroreflectance of less than 520 mcd/lx·m². At the end of the six-month service life, the retro reflectance of white and yellow removable tape shall not be less than 150 mcd/lx·m².

Measure, record and certify on the Department approved form and submit to the Engineer, the retroreflectivity of white and yellow removable tape pavement markings in accordance with FM 5-541.



SS1021000 – Maintenance of Traffic.

The Retroreflectivity value for black has been changed from 5 to 20 mcd/lx·m² based on asphalt and concrete retroreflectivity baseline values.

Section 104

The changes are proposed by Melissa Hollis from the Production Evaluation Office to be consistent with formatting of PATH/APL requirements.

**PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION
(REV 9-3-21)**

ARTICLE 104-4 is ~~deleted~~ and the following substituted:

104-4 Materials for Temporary Erosion Control.

~~_____The Engineer will not require testing of materials used in construction of temporary erosion control devices other than as provided for geotextile fabric in 985-3 unless such material is to be incorporated into the completed project. When no testing is required, the Engineer will base acceptance on visual inspection.~~

~~_____For materials that are part of the permanent work, meet the testing requirements of the applicable permanent materials.~~

~~_____For materials not part of the permanent work, no testing is required; the Engineer will base acceptance on visual inspection. _____The Contractor may use new or used material for the construction of temporary silt fence, staked turbidity barriers, and floating turbidity barrier not to be incorporated into the completed project, subject to the approval of the Engineer.~~

~~_____For geotextile fabrics, use a product on the Approved Product List (APL) meeting the requirements of Section 985.~~



SS1040400 - Prevention, Control, and Abatement of Erosion and Water Pollution.

Added clarification that the Ped/Bicycle Accommodations are included in the TTCP and also clarified that paved shoulders 4' or greater in width on non-limited access facilities are considered a "Bicycle Facility".

Section 110

The changes are proposed by Melissa Hollis from the Product Evaluation Office to update terminology to be consistent with FDM, CADD software, CPAM, and Section 120.

Perform standard clearing and grubbing within the following areas:

1. All areas where excavation is to be done, including borrow pits, lateral ditches, right-of-way ditches, etc.

~~2. If constructing over an existing road, remove existing asphalt pavement. If shown in the Contract Documents, remove existing pavement base.~~

~~3. All areas where roadway embankments will be constructed, unless constructing over an existing road. If constructing over an existing road, remove asphalt pavement and base in accordance with 120-4.2 and the Plans.~~

4. All areas where structures will be constructed, including pipe culverts and other pipe lines.

~~SUBARTICLE 110-6.2 is deleted and the following substituted:~~

110-6.2 Method of Removal:

110-6.2.1 General: Remove the structures in such a way so as to leave no obstructions to any proposed new bridge or to any waterways. Pull, cut off, or break off pilings to the requirements of the permit or other Contract Documents, or if not specified, not less than 2 feet below the finished ~~graded surface ground line~~. In the event that the Plans indicate channel excavation to be done by others, consider the finished ~~graded surface ground line~~ as the limits of such excavation. For materials which are to remain the property of the Department or are to be



SS1100201 - Clearing and Grubbing.

Updated the limits for Clearing and Grubbing.

Section 120

The changes are proposed by Melissa Hollis from the Product Evaluation Office to update terminology to be consistent with FDM, CADD software, CPAM, and Section 120.

EXCAVATION AND EMBANKMENT (REV 12-15-21)

SECTION 120 is deleted and the following substituted:

120-1 Description.

120-1.1 General: Excavate and construct embankments as required for the roadway, ditches, channel changes and borrow material. Use suitable excavated material or authorized borrow to prepare subgrades and foundations. Construct embankments in accordance with Standard Plans, Index 120-001. Compact and dress excavated areas and embankments. Meet the requirements of Section 110 for excavation of material for clearing and grubbing and Section 125 for excavation and backfilling of structures and pipe. Material displaced by the storm sewer or drainage structure system is not included in the earthwork quantities shown in the Contract Documents Plans. ~~The original ground line is defined as the contour of existing natural topography. The finished grading template is defined as the contour of the finished side slopes, unpaved shoulders, and the bottom of the roadway base and shoulder base for flexible or rigid pavement.~~

120-2 Classifications of Excavation.

120-2.1 General: The Department may classify excavation specified under this Section for payment as any of the following: regular excavation, subsoil excavation, lateral ditch excavation, and channel excavation.

~~If the proposal does not show subsoil excavation or lateral ditch excavation as separate items of payment, include such excavation under the item of regular excavation.~~

~~If the proposal shows lateral ditch excavation as a separate item of payment, but does not show channel excavation as a separate item of payment, include such excavation under the item of lateral ditch excavation. Otherwise, include channel excavation under the item of regular excavation.~~

120-2.2 Regular Excavation: Regular excavation includes roadway excavation and borrow excavation, as defined below for each.

120-2.2.1 Roadway Excavation: Roadway excavation consists of the excavation and the utilization or disposal of all materials necessary for the construction of the roadway, ditches, channel changes, etc., ~~except for removal of existing pavement as defined in Section 110.~~

120-2.2.2 Borrow Excavation: Borrow excavation consists of the excavation and utilization of material from authorized borrow pits, including only material that is suitable for the construction of roadway embankments or of other embankments covered by the Contract.

A Cost Savings Initiative Proposal (CSIP) submittal based on using borrow material from within the project limits will not be considered.

120-2.3 Subsoil Excavation: Subsoil excavation consists of the excavation and disposal of muck, clay, rock, or any other material that is unsuitable in its original position and that is excavated below the existing surface ~~finished grading template~~. For pond and ditches that identify the placement of a blanket material, ~~consider the finished grading template~~ existing surface is ~~the bottom of the blanket material~~. Subsoil excavation also consists of the excavation of all suitable material within the above limits as necessary to excavate the unsuitable material. Consider the limits of subsoil excavation indicated in the Plans as being particularly variable, in accordance with the field conditions actually encountered.

~~The quantity of material required to replace the excavated material and to raise the elevations of the roadway to the bottom of the template will be paid for under embankment or borrow excavation (Truck Measure).~~



SS1200100 - Clearing and Grubbing.

*Updated terminology to be consistent with FDM.

*Updated measurement and payment to use Plan Quantity items.

Section 125

The changes are proposed by Melissa Hollis from the Product Evaluation Office to eliminate the inconsistent use of the 125 pay item; all excavation will be paid in accordance with Section 120.

125-13 Method of Measurement.

~~When direct payment for excavation for structures is provided in the proposal, and such payment is on a unit basis, the basis of payment is the cubic yard volume of the material excavated below the original ground line or stream bed, but not including that shown in the Plans to be paid for either as regular excavation, subsoil excavation, lateral ditch excavation or channel excavation, or which is included in the item for grading, and except that no payment will be made for material removed in excavating for footings or foundations outside of an area which is bounded by vertical planes 12 inches outside of the limits of the footing and parallel thereto. For pipe trenches the width used to be in the calculation shall be the diameter of the pipe, plus 24 inches. No separate measurement or payment will be made for work under this Section.~~

ARTICLE 125-14 is ~~deleted~~ and the following substituted:

125-14 Basis of Payment.

~~Payment for excavation of bridge structures will be made under Section 120. Payment for excavation of drainage system items will be incidental to those items.~~

~~125-14.1 When No Direct Payment Provided: When direct payment for excavation for structures is not provided for in the proposal, all work specified in this Section, other than as specified in 125-14.3 through 125-14.7, shall be included in the Contract price for the concrete or for other items covering the applicable structure.~~

~~125-14.2 Direct Payment: When direct payment for work under this Section is provided, the Contract price per cubic yard (measured as provided in 125-13), as shown in the proposal, shall be full compensation for all the work specified in this Section, except such work as is specifically stipulated to be paid for separately in 125-14.3 through 125-14.7.~~



SS1251300 - Excavation for Structures and Pipe.

Eliminate the inconsistent use of the 125- pay item; all excavation will be paid in accordance with Section 120.

Section 160

The changes are proposed by Dino Jameson from the State Materials Office to add resolution for LOT based testing.

STABILIZING (REV 10-11-21)

SUBARTICLE 160-4.5.2 is ~~deleted~~ and the following substituted:

160-4.5.2 Modified Proctor Maximum Density Determination: Meet the requirements of 120-10.4.1 except replace FM 1-T099 with FM 1-T180. The Engineer will randomly select one of the retained split samples referenced in 160-4.1.4.1. The Engineer will compare the Verification test results to the corresponding Quality Control (QC) test results. If the test result is within 4.5 lb/ft³ of the QC test result, the LOTs will be verified. Otherwise, the Engineer will collect the Resolution split sample corresponding to the Verification sample tested. The State Materials Office or an AASHTO accredited laboratory designated by the State Materials Office will perform Resolution testing. The material will be sampled and tested in accordance with FM 1-T180.

The Engineer will compare the Resolution Test (RT) results with the QC test results. If the RT result is within 4.5 lb/ft³ of the corresponding QC test result, the Engineer will use the QC test results for material acceptance purposes for each corresponding pair of LOTs. If the RT result is not within 4.5 lb/ft³ of the corresponding QC test, the Engineer will collect and test the remaining Verification split samples for the LOTs in question. Verification test results will be used for material acceptance purposes for the remaining LOTs in question.



SS1600405 - Stabilizing.

To include the original language for comparison/resolution was excluded during past revisions.

Section 300

The changes are proposed by Wayne Rilko to remove EPR language, add criteria for distributor nozzle openings, and tack application requirements when using a spray paver.

300-2.2 Cover Material for Prime Coat: Uniformly cover the primed base by a light application of cover material. ~~However, if using EPR-1 prime material, the Engineer may waive the cover material requirement if the primed base is not exposed to general traffic and construction traffic does not mar the prime coat so as to expose the base.~~ The Contractor may use either sand or screenings for the cover material. For the sand, meet the requirements as specified in 902-2 or 902-6, and for the screenings, meet the requirements as specified in 902-5. If the primed base course will be exposed to general traffic, apply a cover material coated with 2 to 4% asphalt cement. Apply the asphalt coated material at approximately 10 pounds per square yard. Roll the entire surface of asphalt coated prime material with a traffic roller as required to produce a reasonably dense mat.

SUBARTICLE 300-3.1 is deleted and the following substituted:

300-3 Equipment.

300-3.1 Pressure Distributor: Provide a pressure distributor equipped with pneumatic tires having a sufficient width of rubber in contact with the road surface to avoid breaking the bond or forming a rut in the surface. Ensure the distance between the centers of openings of the outside nozzles of the spray bar is equal to the width of the application required, plus or minus two inches. Ensure the outside nozzle at each end of the spray bar has an area of opening greater than the opening of an interior nozzle by not less than 25% or more than to 75% in excess of the other nozzles. Ensure all other nozzles have uniform openings. When the application covers less than the full width, the Contractor may allow the normal opening of the end nozzle at the



SS3000303 - Prime And Tack Coats.

Removed EPR language, added criteria for distributor nozzle openings, and tack application requirements when using a spray paver.

Section 320

The changes are proposed by Wayne Rilko to add the maximum temperature for polymer mixtures.

HOT MIX ASPHALT - PLANT METHODS AND EQUIPMENT.
(REV 10-12-21)

SUBARTICLE 320-6.3.3 is deleted and the following substituted:

320-6.3.3 Rejection Criteria: Reject any load or portion of a load of asphalt mix at the plant or at the roadway with a temperature outside of its respective master range shown in Table 320-2. Notify the Engineer of the rejection immediately. The maximum temperature for any load of mixture containing PG 76-22 PMA or High Polymer binder shall not exceed 355°F.

Table 320-2 Mix Temperature Master Range Tolerance	
Location	Acceptable Temperature Tolerance
Plant	Mixing Temperature ± 30 F*
Roadway (mix in truck)	Compaction Temperature ± 30 F*
Roadway (mix in windrow)	Compaction Temperature $+30$ F*, -40 F*
*Not to exceed 355°F for mixtures containing PG 76-22 PMA or High Polymer binder.	

Table 320-3 Mix Temperature Tolerance from Verified Mix Design	
Any Single Measurement	± 25 F



SS3200603 - Hot Mix Asphalt - Plant Methods And Equipment.

Added the maximum temperature for polymer mixtures.

Section 330

The changes are proposed by Rich Hewitt to eliminate manufacturer letter requirement and allow the contractor to select the repair method for high and low straightedge deficiencies in the structural course.

HOT MIX ASPHALT - GENERAL CONSTRUCTION REQUIREMENTS. (REV 11-15-21)

SUBARTICLE 330-5.2.3 is deleted and the following substituted:

330-5.2.3 Screed Width: Provide an asphalt paver with a screed width greater than 8 feet when required to use screed extensions. Use a strike-off device on shoulders 5 feet or less and on shoulders 5 feet or less of an adjustable screed extension and thickness.

When the full width lane or shoulder extension, paddle, or kicker device is used, the Contractor shall submit written documentation from the manufacturer stating these are not necessary. **the Contractor can demonstrate the ability to achieve an acceptable pavement with respect to density, surface texture, and pavement smoothness without such devices.**



SS3300502 - Hot Mix Asphalt - General Construction Requirements.

5.2.3-Eliminates manufacturer letter requirement, allows contractor to demonstrate ability to pave with screed extension without augers, paddles, etc. 9.5.1.1-Allows contractor to select repair method for low and high straightedge deficiencies in the structural course.

Section 334

The changes are proposed by Wayne Rilko to update test language and replace the warm mix hyperlink link in the Standard Specification.

SUPERPAVE ASPHALT CONCRETE. (REV 10-12-21)

SUBARTICLE 334-2.3.3 is deleted and the following substituted:

334-2.3.3 RAP Stockpile Approval: Prior to the incorporation of RAP into the asphalt mixture, stockpile the RAP material and obtain approval for the stockpile by one of the following methods:

(Paragraph Break)

information, if available, is: <https://www.fdot.gov/materials/mac/default.shtm>,
<https://www.fdot.gov/materials/laboratory/asphalt/index.shtm>.

When warm mix technologies are used, for mixtures containing a PG 52-28, PG 58-22, or PG 67-22 binder, a mixture will be considered a warm mix asphalt design if the mixing temperature is 285°F or less. For mixtures containing a PG 76-22 or High Polymer binder, a mixture will be considered a warm mix asphalt design if the mixing temperature is 305°F or less.



SS3340302 – Superpave Asphalt Concrete.

The hyperlink was replaced with one that goes directly to the bituminous material Systems. The test language updates corrected AASHTO and ASTM test method names to remove the year from the test.

Section 337

The changes are proposed by Wayne Rilko to update tables, add the warm mix hyperlink, and add language regarding production cessation in the Standard Specification.

**ASPHALT CONCRETE FRICTION COURSES.
(REV 10-12-21)**

ARTICLE 337-2 is deleted and the following substituted:

337-2 Materials.

337-2.1 General Requirements: Meet the requirements specified in Division III as modified herein. The Engineer will base continuing approval of material sources on field performance. Warm mix technologies (additives, foaming techniques, etc.) listed on the Department's website may be used in the production of the mix. The URL for obtaining this information is: <https://www.fdot.gov/materials/mae/default.shtm>.
<https://www.fdot.gov/materials/laboratory/asphalt/index.shtm>.

337-2.2 Asphalt Binder: Meet the requirements of Section 916, and any additional requirements or modifications specified herein for the various mixtures.

337-2.3 Coarse Aggregate: Meet the requirements of Section 901, and any additional requirements or modifications specified herein for the various mixtures.

337-2.4 Fine Aggregate: Meet the requirements of Section 902, and any additional requirements or modifications specified herein for the various mixtures.

337-2.5 Hydrated Lime: Meet the requirements of AASHTO M 303-89-(2019), Type 1. Provide certified test results for each shipment of hydrated lime indicating compliance with the specifications.



SS3370201 - Asphalt Concrete Friction Courses.

1. Update website for warm mix technologies.
2. Show FC-5 binder content in Table 337-2.
3. Requirements for the FC-5 fiber supply system.
4. Requirements for the FC-5 hydrated lime supply system.
5. Small Quantity Pay Table Pay Factor up to 1.05.

Section 346

The changes are proposed by Jose Armenteros from the State Materials Office to eliminate Class I concrete to reduce the need for excessive mix design laboratory trial batches. Requirements on the number of compressive strength cylinders for a LOT has been clarified and fine aggregate is now required for its use in internal curing.

346-2.2 Types of Cement: Unless a specific type of cement is designated in the Contract Documents, use Type I, Type II, Type IP, Type IT, Type IS, Type II, Type II (MH) or Type III cement in all classes of concrete. Use Type II, Type IT, or Type II (MH) for all mass concrete elements.

346-2.3 Supplementary Cementitious Materials: Supplementary cementitious materials (SCMs) are required to produce binary or ternary concrete mixes in all classes of concrete specified in Table 346-3, except for the following when used in slightly aggressive environments: ~~Class I~~, Class I (Pavement), and Class II.

The quantity of ~~portland cement replaced with supplementary cementitious materials~~ SCMs must be on an ~~equal weight~~ replacement percentage basis of the total cementitious materials in accordance with Table 346-2. When using Type IP, IS or IT blended cements, the total quantity of SCMs, including the blended cement added separately at the concrete plant shall meet the requirements of Table 346-2.



SS3460200 – Structural Portland Cement Concrete.

The statistical analysis of the concrete compressive strength production test data indicates that the strengths of the Class I mixes meet the strength requirements of Class II concrete. Therefore, there is need for the elimination of Class I concrete. The upgrading of Class I to Class II will reduce the need for excessive mix design laboratory trial batches. Table 346-1 excludes Type IT Cement, which should be added. The LOT size definition of Class I pavement in Section 346 is repeat of the definition in Section 350. In Section 346 only reference should be given to Section 350 regarding LOT size definition, reduced frequency for acceptance testing, and other requirements of Class I pavement described in Table 346-3. The requirements of the number of compressive strength cylinders for a LOT has to be clarified, whether it is only based the average compressive strengths of three cylinders or average compressive strengths of two cylinders. A subarticle on lightweight fine aggregate was required for its use in internal curing. Implementation of three research projects related to internal curing: BDV31-977-47, BDV31-977-86 and BDV31-977-114. Article 346-3 and other related articles and sub-articles of Section 346 are modified by replacement of Class I concrete with Class II concrete. Type IT Cement has been added to the list of types of cement in Table 346-1. The LOT size definition of Class I pavement in Section 346 has referenced

Section 350 in lieu of repeating the requirements of Section 350. Additionally, Section 350 has been referenced regarding the LOT size definition, reduced frequency for acceptance testing, and other requirements of Class I pavement, described in Table 346-3. The requirements of the number of compressive strength cylinders for a LOT has been clarified, which is based on the average compressive strengths of at least two test cylinders. Addition of Subarticle 346-2.5 Lightweight Fine Aggregate (LWFA) for Internal Curing.

Section 350

The changes are proposed by Jose Armenteros to delete repetitive language requirements in the Standard Specification.

350-2 Materials.

Meet the following requirements except as modified herein:

Concrete	Section 346
Grinding Concrete Pavement	Section 352
Curing Materials	Section 925
Embedded Items	Section 931
Joint Seal	Section 932

~~Submit a mix design to the Engineer for approval prior to use.~~ Provide concrete with a minimum 28-day compressive strength of 3,000 psi and maximum water to cementitious materials ratio of 0.50. ~~The requirements of Sections 346-3 and 346-4 do not apply. Notify the Engineer if any of the component quantities are adjusted. If any material sources change, resubmit the mix design to the Engineer for approval prior to use.~~

For concrete pavement placed using the slip-form method of construction, utilize concrete with a target slump of 1.5 inches plus or minus 1 inch. For concrete pavement placed by hand in constructed forms, utilize concrete with a target slump of 3 inches plus or minus 1.5 inches. ~~The air content for concrete pavement mixes will not apply.~~



SS3500200 - Cement Concrete Pavement.

The proposed article 350-2 has been modified by deletion of the statement "The requirements of Sections 346-3 and 346-4 do not apply" and repeated requirements that are covered in Section 346.

Section 353

The change is proposed by Tom Kunzen to specify that demonstration slabs are to be located "at the project site" in the Standard Specification.

CONCRETE PAVEMENT SLAB REPLACEMENT. (REV 10-12-21)

SUBARTICLE 353-3.3 is deleted and the following substituted:

353-3.3 Demonstration Slab: Prior to batching production concrete, demonstrate the ability to furnish replacement slabs by constructing a demonstration slab at the project site. Demonstrate production techniques for slab removal, dowel installation, concrete placement, finishing, slab curing, sample preparation and curing, and proper timing of joint sawing. Demonstrate the ability to achieve the required compressive strengths. Demonstrate proficiency to the Engineer the ability to determine when the concrete has achieved a compressive strength of 1,600 psi by testing concrete cylinders or by using the maturity-strength curve. Use cylinders to verify the concrete compressive strength at 28 days. Schedule construction of the demonstration slab at the time specified in the Contract Documents. If the Engineer determines that elements of the demonstration slab fail to meet requirements of the Contract Documents, propose adjustments to the construction processes and/or materials for the Engineer's approval.

The demonstration slab may be used in the final work with the approval of the



SS3530303 - Concrete Pavement Slab Replacement.

Specifies demonstration slabs are to be located "at the project site".

Section 400

The changes are proposed by Melissa Hollis from the Product Evaluation Office and Jose Armenteros from the State Materials Office. The changes were made to update APL references for filter fabric and eliminate Class I concrete from the list of concrete classifications with Class II.

400-2 Materials.

Meet the following requirements:

Concrete	Sections 346 and 347
Penetrant Sealer	Section 413
High Molecular Weight Methacrylate (HMWM)**	Section 413
Reinforcing for Concrete	Section 415
Water	Section 923
Curing Materials**	Section 925
Epoxy Bonding Compounds**	Sections 926 and 937
Post Installed Anchor Systems**	Section 937
Joint Materials**	Section 932
Bearing Pads	Section 932
Non-Shrink Grout**	Section 934
Class 5 Applied Finish Coatings**	Section 975
Galvanizing Compound**	Section 562
Dowel Bar Assembly**	Section 931
Filter Fabric**	Section 985

400-16 Curing Concrete.

400-16.1 General: Concrete curing includes the materials and methods used internally during mixing of concrete and externally after concrete placement.

400-16.1.1 Internal curing: At the Contractor's option use internal curing in combination with one or more of the external curing methods listed in 400-16.1.2. Use lightweight fine aggregates from Department-approved sources meeting the requirements of ASTM C1761.

400-16.1.2 External curing: Cure cast-in-place and precast (non-prestressed)

*The Engineer will allow clean sand and sawdust for certain curing, when and as specified.
**Use products listed on the Department's Approved Product List (APL).



SS4000200 – Concrete Structures.

Updating APL references for filter fabric, to be consistent with other Division II references.

The proposed Section 346 will eliminate Class I concrete from the list of concrete classes. Accordingly, there is need to delete Class I Concrete from the entire specifications, including Sub-article 400-23.9 Payment Items.

Section 413

The changes are proposed by Ronald Simmons from the State Materials Office to clarify requirements and update test methods.

Table 413-2
Physical Properties of Methacrylate Resin System

Viscosity (Brookfield RVT)	14-20 cps at 50 rpm
Density (ASTM D1481)	8.5 - 9.0 lb/gal at 77° F
Flash Point (ASTM D93)	> 200°F (Pensky Martens CC)
Odor	Low
Bulk Cure Speed	3 Hours @ 73°F (max.)
Surface Cure	8 Hours @ 73°F (max.)
Gel Time ⁽¹⁾	60 minutes (max.) @ 73.4 ± 1.8°F
Tack Free Time	4-6 Hours (max.) (at 72°F and 50% Relative Humidity)
Compressive Strength (ASTM D695/AASHTO-T106)	6,500 psi (min)
Tensile Strength (ASTM C307/D638)	1,300 psi (min)
Shear Bond Adhesion (ASTM C882)	600 psi (min)
Elongation ⁽²⁾ (ASTM D638)	10% to 30% Report
Physical Properties of Methacrylate monomer (Part A)	
Viscosity (ASTM D2196, Method A) Wax Content	14-20 cps using Ultra Low Adapter

1. Use a test method capable of measuring the gel time to the nearest 0.5 minute.
2. Do not use methacrylate with elongation less than 20% for concrete decks supported by steel girders.



SS4130302 – Sealing Cracks and Concrete Structure Surfaces.

Existing language needed to be changed to clarify requirements and update test methods. Adjusted language to make clear it is a system, replaced 2 test methods, clarified an additional method, and increased the initial rate of dispersion based on field comments that it was too low.

Section 430

The changes are proposed by Melissa Hollis from the Product Evaluation Office to provide consistent formatting of PATH/APL requirements.

430-2 Materials.

430-2.1 Pipe: Meet the following requirements:

Concrete Pipe	Section 449
Steel Pipe	556-2.1
Round Rubber Gaskets	Section 942
Resilient Connectors*	Section 942
Corrugated Steel Pipe and Pipe Arch	Section 943
Corrugated Aluminum Pipe and Pipe Arch	Section 945
Corrugated Polyethylene Pipe	Section 948
Steel Reinforced Polyethylene Ribbed Pipe	Section 948
Steel Reinforced Polyethylene Corrugated Pipe	Section 948
Corrugated Polypropylene Pipe	Section 948
Corrugated Polyvinyl Chloride (PVC) Pipe	Section 948
Fiberglass Reinforced Polymer Pipe	Section 948
<u>Liner Repair Systems</u>	<u>Section 948</u>
Metal Grates	Section 962

*Use resilient connector products listed on the Department's Approved Product List (APL).

430-2.6 Filter Fabric: Use a Type D-3 filter fabric meeting the requirements specified in Section 985, and listed on the Department's Approved Product List (APL).



SS4300201 – Pipe Culverts.

Consistent formatting of PATH/APL requirements

430-2.1: Removed reference to repair system not addressed in this Section.

430-2.6: Added text to refer to Section 985 and APL

430-4.1: Updated filter fabric installation, per manufacturer's instructions.

Section 440

This change was proposed by Melissa Hollis from the Product Evaluation Office to provide consistent formatting of PATH/APL requirements.

440-2 Materials.

Meet the following requirements:

Concrete Pipe	Section 449
Filter Aggregate.....	Section 902
Corrugated Steel Pipe.....	Section 943
Corrugated Aluminum Pipe	Section 945
Polyvinyl-Chloride Pipe.....	Section 948
Corrugated High Density Polyethylene Pipe	Section 948
Corrugated Polypropylene Pipe	Section 948
Steel Reinforced Polyethylene Ribbed Pipe.....	Section 948
Filter Fabric Sock.....	Section 948
Geotextile Fabrics*	Section 985

*Use products listed on the Department's Approved Product List (APL).

Use bitumized-fiber pipe only when called for in the Contract Documents.

440-4.7 Underdrain Outlet Pipe: Use non-perforated pipe. Construct underdrain bends in accordance with Standard Plans, Index 440-002.



SS4400200 – Underdrains.

Consistent formatting of PATH/APL requirements

440-2: Updated materials list to be consistent with APL format

440-4.7: Added text for outlet pipe, consistent with standard plans

440-7: Clarified no separate measurement, consistent with standard plans and Section 400

Section 450

This change was proposed by Frank Thomas from the State Materials Office to clarify the language.

Sweep (in) = (0.0125 in/ft) x Length (ft) of beam or pile

Measure and record the sweep and camber of the beams immediately after detensioning and monthly. Beyond 120 days after casting, monthly sweep and camber measurements may be reduced to quarterly if there are no identified issues with the beam, and if the sweep and camber measurements are in tolerance. Once the reduced frequency is applied, camber and sweep shall be measured no more than 7 calendar days prior to shipping. Keep the measurement records on file for review upon request by the Engineer.

Notify the Engineer immediately when the sweep or camber exceeds the specified tolerances.

Obtain prior approval of any adjustments to the shop drawings which will result in a net change of prestressing force within the product. Shop drawings are not required to depict negligible, supplemental reinforcement used to facilitate fabrication of products if the additions do not affect the performance of the product.



SS4500203 Precast Prestressed Concrete Construction.

2.3: Adjust monthly camber measurement requirement beyond 120 days. 5: Strengthen language regarding supplemental reinforcement. 10.7.1: Include requirement to follow CFRP strand manufacturer's instructions. 12.2: Remove "pre-approved" repair language.

Section 452

This change was proposed by Ben Goldsberry from the Structures Design Office to allow PT systems to be accepted through the shop drawing submittal process instead of through a pre-approved list. The proposed specification change is associated with the changes made to Section 5, 462, and 960.

452-4.2 Information Required: Submit integrated detailed shop drawings, calculations, manuals and other information, including, but not limited to, the following:

452-4.2.1 Segment Shop Drawings:

1. A schedule of materials for segment fabrication including concrete, reinforcing steel, prestressing steel, duct filler, and other similar items.

2. Each segment number and the direction of erection.

3. Segment dimensions including widths, lengths, thicknesses, tapers, fillets, radii, working points, post-tensioning, clearances, rebar dimensions and spacing, embedded items, holes, anchorage positions, and other similar items.

4. Post-tensioning hardware components meeting the requirements as outlined in Section 462. ~~Check post-tensioning for consistency with pre-approved post-tensioning hardware and provide part numbers for Department pre-approved systems on the shop drawings. Substitution of parts or materials is not allowed.~~



SS4520402 Precast Segmental Bridge Construction.

PT systems will be accepted through the shop drawing submittal process instead of through a pre-approved list.

Revisions to accept PT systems through the shop drawing submittal process instead of through a pre-approved list.

Section 455

The changes are proposed by Juan Castellanos from the State Construction Office to include monitoring plan as part of the installation plans, polymer as an APL product, and modify the requirements for drilled shaft construction.

455-5.11.2 Bearing Criteria: For foundations requiring 100% dynamic testing, the Engineer will determine the bearing of all piles using the data received from dynamic load testing equipment utilizing internally or externally mounted sensors according to the methods described in 455-5.12.1.

For foundations not requiring 100% dynamic testing, the Engineer will determine the number of blows required to provide the required bearing according to the methods described herein. Determine the pile bearing by computing the penetration per blow with less than 1/4 inches rebound averaged through 12 inches of penetration. When it is considered necessary by the Engineer, determine the average penetration per blow by averaging the penetration per blow through the last 10 to 20 blows of the hammer.

The Engineer will accept piles within two Working Days after the final drive is performed, including any instrumented restrikes performed to ensure bearing has been met and that any potential relaxation will not reduce the required capacity to less than the required nominal bearing resistance (NBR).



SS4550511 – Structures Foundations.

To address a request from FTBA to indicate a timeline for FDOT pile acceptance, to include a monitoring plan as part of the Installation Plans, to include the polymer as an APL product and to address a request from LESS contractors to give them some flexibility in the requirements of drilled shaft construction.

455-5.11.2: Add a paragraph indicating FDOT pile acceptance time. 455-10.1: Add an item requesting a vibration and settlement monitoring plan. 455-14.3: Sub-article added as part of the introduction of polymer slurry in the APL. 455-15.1.2: Revised language in one item as part of the introduction of polymer slurry in the APL. Added an item to require a monitoring plan in the Installation Plan. 455-18.1 Change language to allow LESS contractors to introduce polymer slurry in the casing under certain conditions. Change language to allow LESS contractors to test up to every 12 hours under certain conditions. 455-15.8.3: Change language as part of the introduction of polymer slurry into the APL. 455-15.8.4: Added table to specify polymer properties at the time of concreting. 455-16.3 Changed language to allow flexibility to LESS contractors in the centralizing methods when two different casing sizes are used. 455-47: Added an item to require a settlement monitoring plan in the ACP installation plan. Changes apply to Conventional Projects that use the Standard Specification SS455.

Section 455

This change was proposed by Juan Castellanos from the State Construction Office to include performance tests within the costs of temporary sheet piling.

STRUCTURES FOUNDATIONS (REV 11-9-21)

SUBARTICLE 455-12.6.2 is deleted and the following substituted:

455-12.6.2 Temporary Sheet Piling: For critical temporary steel sheet pile walls, walls which are necessary to maintain the safety of the traveling public or structural integrity of nearby structures, roadways and utilities during construction, that are detailed in the Plans, price and payment will be full compensation for all labor, equipment, and materials required for furnishing and installing steel sheet piling including preformed holes when shown in the Plans, and including wales, anchor bars, dead men, soil anchors, proof tests, performance tests, creep tests, and other incidental items when an anchored wall system is required. Removal of the sheet piling, anchors, and incidentals will be included in the cost per square foot for steel sheet piling (critical temporary). When the temporary steel sheet pile walls are not detailed in the Plans, the cost of furnishing and installation shall be incidental to cost of other related items and no separate payment shall be made. If the wall is not shown in the Plans, but deemed to be critical as determined by the Engineer, then a design shall be furnished by the Department and paid for separately under steel sheet piling (critical temporary).



SS4551206 Structures Foundations.

To add language to include performance tests within the costs of temporary sheet piling. Add "performance tests" to the items that must be included within the cost of temporary sheet piling. Changes apply to Conventional Projects that use the Standard Specification SS455.

Special Provision 455 (Design Build)

The changes are proposed by Juan Castellanos from the State Construction Office to include monitoring plan as part of the installation plans, polymer as an APL product, and modify the requirements for drilled shaft construction.

455-14 Materials.

455-14.1 Concrete: Use concrete meeting the requirements of Section 346, unless otherwise shown in the Plans.

455-14.2 Reinforcing Steel: Meet the reinforcing steel requirements of Section 415.

455-14.3 Polymer Slurry: Use a product listed on the Department's Approved Product List (APL) meeting the requirements of 932.5.

455-15.1.2.1 Acceptance of the Drilled Shaft Installation Plan (DSIP)

The Engineer will evaluate the DSIP for conformance with the Contract Documents. Within five working days, excluding weekends and Department observed holidays, after receipt of the plan, the Engineer will notify the Contractor of any comments and additional information required and/or changes that may be necessary ~~in the opinion of the Engineer to meet the above requirements and~~ satisfy the Contract Documents. The Engineer will reject any part of the plan that ~~does not meet specifications, plans or has the potential to affect the integrity of adjacent structures or negatively affect the environmental conditions is unacceptable.~~ Submit changes agreed upon for reevaluation. The Engineer will notify the Contractor within two working days, excluding weekends and Department observed holidays, after receipt of proposed changes of their acceptance or rejection. All equipment and procedures are subject to trial and satisfactory performance in the field.



SP4550000DB – Structures Foundations (Design Build).

To include the polymer as an APL product and to address a request from LESS contractors to give them some flexibility in the requirements of drilled shaft construction.

455-14.3: Sub-article added as part of the introduction of polymer slurry in the APL. 455-15.1.2: Revised language in one item as part of the introduction of polymer slurry in the APL. 455-18.1 Change language to allow LESS contractors to introduce polymer slurry in the casing under certain conditions. Change language to allow LESS contractors to test up to every 12 hours under certain conditions. 455-15.8.3: Change language as part of the introduction of polymer slurry into the APL. 455-15.8.4: Added table to specify polymer properties at the time of concreting. 455-16.3 Changed language to allow flexibility to LESS contractors in the centralizing methods when two different casing sizes are used.

Section 446

The changes are proposed by Melissa Hollis from the Product Evaluation Office be consistent with formatting of PATH/APL requirements.

446-2 Materials.

Meet the following requirements:

Portland Cement Concrete – Class NS*	Section 347
Coarse Aggregate	Section 901
Portland Cement	Section 921
Water	Section 923
Polyvinyl-Chloride Pipe	Section 948
Polyethylene Pipe	Section 948
Filter Fabric**	Section 985

*For draincrete, the concrete requirements of Section 347 are modified as follows:
Use Type I or II portland cement (no supplementary cementitious materials permitted).

Composition:

Grade of coarse aggregate (stone)....#57, #67 or #89	
Maximum Water/Cement ratio	0.38
Minimum cement factor	385 lb/yd ³ of <u>Draincrete</u>
Maximum Slump Range	Not Applicable
Fine Aggregate	None
Admixtures	None

Do not use materials which contain hardened lumps, crusts, or frozen matter, or are contaminated with dissimilar material.

**Use products listed on the Department's Approved Products List (APL).



SS4460200 – Edgedrain (Draincrete).

Consistent formatting of PATH/APL requirements.

446-2: Updated materials list to be consistent with APL format.

Section 462

This change was proposed by Ben Goldsberry from the Structures Design Office to provide PT systems will be accepted through the shop drawing submittal process instead of through a pre-approved list. The proposed specification change is associated with changes to Section 5, 452, and 960.

2. With the exception of mild reinforcing and prestressing steel, furnish all PT system components from a single supplier (vendor).
3. Submit PT system shop drawings in accordance with Section 5. Perform PT system testing in accordance with Section 960. Include in the PT system testing all possible combinations of components to be incorporated into the structure.
- 4a. Use only approved PT systems meeting the requirements of Section 960 and approved by the Engineer in accordance with Section 5 and selected from the Structures Design Office (SDO) website for Approved Post-Tensioning Systems.
 - a. Use only PT systems of appropriate type and size required to construct tendons shown in the Contract Documents.
 - b. Use only the exact manufacturer and/or model of major components, as defined in 960-2, that were used in system testing and as listed on the approved PT system shop drawings.
 - c. With the exception of local zone reinforcement, do not substitute, modify, or delete any major components, as defined in 960-2, of an approved PT system approved by the Engineer for use on the project. Inclusion of all possible subcomponents is required for PT system and component testing; however, subcomponents of approved systems may be eliminated from final installations based on project-specific requirements, provided all component-to-component interface hardware are included as necessary to maintain connections and PT system integrity.
5. Provide a mockup test in accordance with this Section. PT system acceptance testing may be performed concurrent with mockup testing if performed prior to installation of any PT system hardware.



SS4620100 – Post-Tensioning.

PT systems will be accepted through the shop drawing submittal process instead of through a pre-approved list. Revisions to accept PT systems through the shop drawing submittal process instead of through a pre-approved list.

Section 462

This change was proposed by Ben Goldsberry from the Structures Design Office to allow PT systems to be accepted through the shop drawing submittal process instead of through a pre-approved list.

7. For tendons in which vacuum assisted injection is used, provide a minimum of 90% vacuum in the duct prior to injection. Connect both the anchorage outlet and the cap outlet to the vacuum system. After the vacuum is established, lock off the air supply to the duct and monitor the vacuum for 1 minute. If the loss of vacuum after 1 minute exceeds 10%, repair leaks as directed by the Engineer and retest the duct. If the results are acceptable, reestablish and maintain a minimum 90% vacuum using the outlets at the higher end anchorage shown on Standard Plans, Index 462-001 while injecting wax using the inlet at the lower end anchorage shown on the same Standard. Close all outlets, inlets, and ports other than at injection and vacuum locations during injection procedure. Pump wax into inlet and continuously vacuum air at the outlet until duct is fully injected with wax. After the duct is fully injected with wax and the wax reaches the vacuum end, close the outlet valve, turn off the vacuum pump and continue the injection pump. Bleed all outlets starting at the anchorage cap at the injection end and proceed to bleed every valve thereafter from injection end to vacuum end, ending with the anchorage cap at the vacuum end. When bleeding each valve, collect a minimum of two gallons of continuously flowing wax free from air before closing the valve. Close outlet valve at anchorage when filled with wax. After all outlet valves are closed, close inlet valve with locking pressure between 30 psi and 45 psi. Do not reuse discharged wax.



SS4620704 – Post – Tensioning.

PT systems will be accepted through the shop drawing submittal process instead of through a pre-approved list. Revisions to accept PT systems through the shop drawing submittal process instead of through a pre-approved list.

Section 520

This change was proposed by Richard Hewitt from the State Construction Office to establish elevation tolerance for curb and gutter to ensure surface paved between curb and gutter meets cross slope and longitudinal profile (elevations) in the Plans.

520-10 Surface Requirements.

520-10.1 Straightedge: Test the gutter section of curb and gutter with a 10 foot straightedge laid parallel to the centerline of the roadway and while the concrete is still plastic. Perform straightedging along the edge of the gutter adjacent to the pavement or along other lines on the gutter cross-section, as directed by the Engineer. Immediately correct irregularities in excess of 1/4 inch.

520-10.2 Elevation: For curb and gutter, the Department will allow the elevation of the edge of gutter adjacent to the pavement to vary no more than 1/2 inch from the elevation determined from information shown in the Plans, provided that the Contractor's work meets all cross slopes and straightedge requirements and contains suitable transitions.

Check elevation of the edge of gutter adjacent to the pavement every 100 ft prior to placement of adjacent asphalt courses and correct any curb and gutter not meeting the elevation requirements in 520-10.2. Notify the Engineer a minimum of 24 hours before elevation checks are performed so the Engineer may witness elevation checks.



SS5200100 – Concrete Gutter, Curb Elements, and Traffic Separator.

Establish elevation tolerance for curb and gutter to ensure surface paved between curb and gutter meets cross slope and longitudinal profile (elevations) in the plans. Added 1/2" elevation tolerance for curb and gutter.

Section 521

The changes are proposed by Melissa Hollis to update the Materials Article to be consistent with changes to barrier delineators in Section 705. This revision is associated with proposed Standard Specification revision 9930000.

CONCRETE BARRIERS, TRAFFIC RAILINGS, AND PARAPETS. (REV 11-10-21)

ARTICLE 521-2 is deleted and the following substituted:

521-2 Materials.

Meet the following requirements:

Flowable Fill	Section 121
Concrete	Sections 346 and 347
Reinforcing Steel	Section 415
Joint Materials	932-1.1
Joint Materials*	932-1.2 and 932-1.3
Barrier Delineators *(+)	Sections 705 and 993

*Use products listed on the Department's Approved Product List (APL).

~~+) Mount delineators on the barriers by adhesive or mechanical means as per the manufacturer's recommendations and in accordance with the details shown in the Plans and the Standard Plans.~~



SS5210200 - Concrete Barriers, Traffic Railings, and Parapets.

This revision will update the Materials Article to be consistent with changes to barrier delineators in Section 705. See proposed 9930000 for Division III associated change.

Section 522

The changes are proposed by Dino Jameson to clarify the language for density testing on sidewalk in the Standard Specification.

CONCRETE SIDEWALK AND DRIVEWAYS. (REV 10-12-21)

ARTICLE 522-4 s deleted and the following substituted:

522-4 Foundation.

Shape and compact the foundation materials with suitable equipment to a firm, even surface, true to grade and cross-slope. ~~Compact cut-and-fill areas within 1 foot beyond each side of the sidewalk or driveway, when right-of-way conditions allow.~~ Meet the testing frequency and maximum lift thickness requirements of Section 120. Record density test results in the Earthwork Records System (ERS) section of the Department's database. ~~Compact cut-and-fill areas within 1 foot beyond each side of the sidewalk or driveway, when right-of-way conditions allow.~~ Compact for the foundation material below the bottom of concrete for a minimum depth of 1 foot for cut areas, 1 foot for fill areas less than 1 foot, and 2 feet for all other fill areas, and 1 foot for cut areas; to a density not less than 95% of the maximum density as determined by FM-1-T099. Compact the material in the remaining fill areas to match the adjacent area density.



SS5220400 - Concrete Sidewalk and Driveways.

The new language covers the three scenarios for density testing on sidewalk: cut areas, fill areas less than 1-foot, and fill areas greater than 1-foot.

Section 523

The changes are proposed by Karen Byram to remove Non-Vehicular references and associated pay item. Also added language consistent with other pavement marking installation instructions.

This proposal is associated with SS9740000 in Division III.

523-1 Description.

Patterned pavement is defined as a post applied surface marking overlay material to either the pavement surface or to an imprinted pavement surface. Vehicular traffic areas are defined as areas subject to vehicles within the traveled-way, shoulders and bicycle lanes. Non-vehicular traffic areas include medians, islands, curb extensions, sidewalks, borders, plazas and other areas typically subject to foot traffic only.

523-2 Materials.

ment products approved for use in vehicular and non-vehicular areas.

523-5 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section.

Payment will be made under:

Item No. ~~523-3~~ Patterned Pavement (Vehicular Areas) - per square yard.
Item No. ~~523-2~~ Patterned Pavement (Non-Vehicular Areas) - per square yard.

ment products listed on the Department's Approved Product List

ments of Section 974.
submit pattern and color samples to the Engineer for confirmation
pattern and color specified in the Plans. Do not begin installation until

The Engineer will take random samples of all material in accordance with the Department's Sampling, Testing and Reporting Guide schedule.

523-3 Construction Requirements.

Install patterned pavement on asphalt or concrete locations with the color and pattern as specified in the Plans. Prepare the surface and install patterned pavement in accordance with the manufacturer's installation instructions, using materials and equipment recommended and approved by the manufacturer. Color shall be integral and consistent throughout the installation.

Install overlay products in areas subject to vehicular traffic to a thickness not exceeding 180 mils.

Patterns and variations within the installation shall comply with ADA requirements.

Complete all utility, traffic loop detector, and other items requiring a cut and installation



SS5230000 - Patterned Pavement.

*Associated with proposed Standard Specification revision 9740000.

Skid Resistance test is being changed in Specification 974 from BPN to DFT testing to better reflect the pavement values and ease of testing. It has been decided that all patterned pavement should be high friction and therefore the Non-Vehicular type has been eliminated.

Section 524

The changes are proposed by Melissa Hollis from Product Evaluation Office to update materials list to be consistent with APL format, update requirements to be consistent with Standard Plans, add reference to sod paid under Section 570, and remove payment information from the Standard Plans.

524-1 Description.
Construct concrete pavement in the flow channel of drainage ditches and on slopes in accordance with the notes and details shown in the Standard Plans.

524-2 Materials.

Concrete.....	Section 347
Preformed Expansion Joint Material and Hot Poured Sealer.....	Section 932
Filter Fabric.....	Section 985
Reinforcing Steel.....	Section 415

*Use products listed on the Department's Approved Product List (APL).

524-5.1 Joints: Form open or tooled (dummy) type contraction joints, as shown in the Plans spaced at 25-foot maximum intervals. Open joints will not be permitted. Form open joints by staking a metal bulkhead in place and placing the concrete on both sides of it. When the concrete has set sufficiently to preserve the width and shape of the joints, remove the bulkhead. Upon finishing the pavement over the joint, open and edge the slot with a tool having a 1/4-inch radius.

Construct expansion joints with 1/2-inch preformed joint filler at all inlets, sidealls, and at intervals of not more than 200 feet.

524-5.2 Method of Placing Slope Pavement: Place slope pavement in vertical strips, 4 feet, plus or minus 1 inch, wide, except taper radii strips from the 4-foot width at the bottom to a minimum width of 1 foot at the top. Score the strips horizontally at intervals of 2 feet, plus or minus 1 inch, with a tool having a double 1/4-inch radius. Edge construction joints between strips with a tool having a 1/4-inch radius. The Engineer will allow construction joints at horizontal scorings.

524-5.3 Weep Holes: Locate and construct weep holes as shown in the Plans. Construct weep holes at the toe of slope for all slope pavements.

524-5.4 Filter Fabric: Locate and construct filter fabric as shown in the Plans and Standard Plans. Place filter fabric under all concrete ditch pavement.



SS5240100 - Concrete Ditch and Slope Pavement.

This change will make the Specification consistent with PATH/APL formatting requirements.

This includes updated materials list to be consistent with APL format, updated requirements to be consistent with Standard Plans, and adding reference to sod paid under Section 570, and removing payment information from Standard Plans.

Section 530

The changes are proposed by Melissa Hollis to update formatting to be consistent with APL requirements.

REVETMENT SYSTEMS. (REV 11-23-21)

ARTICLE 530-2 is deleted and the following substituted:

530-2 Materials.

530-2.1 Riprap:

530-2.1.1 General Filter Fabric: Meet the following requirements:

Type D-2 Geotextile Fabric* Section 985

*Use products listed on the Department's APL.

Schedule work so that covering the fabric with the specified material does not exceed the manufacturer's recommendations for exposure to ultraviolet light or five days, whichever is less. If the Engineer determines the exposure time was exceeded, the Contractor shall replace the fabric at no expense to the Department.

Place the filter fabric (fabric) at locations as shown in the Plans, in accordance with the manufacturer's directions. Place the fabric on areas with a uniform slope that are reasonably smooth, free from mounds, windrows, and any debris or projections which might damage the fabric.

Loosely lay the material. Do not stretch the material. Replace or repair any fabric damaged or displaced before or during placement of overlying layers. Repair in accordance with the manufacturer's instructions.

The Contractor may sew the seams to reduce overlaps as specified in 985-3.

Follow the manufacturer's instructions for all seams and overlaps.

530-2.1.2 Prepackaged Sand-Cement Bags: Provide prepackaged sand-cement



SS5300200 - Revetment Systems.

The filter fabric reference was updated to be consistent with APL format. (Moved text from Section 514.)

Section 530

The changes are proposed by John Shoucair to eliminate the requirement for Sodium Sulphate Soundness in ditch-lining erosion protection for aggregate products made with broken concrete.

REVETMENT SYSTEMS.
(REV 11-23-21)

SUBARTICLE 530-2.1.3.3 is deleted and the following substituted:

530-2.1.3.3 Physical Requirements of Broken Stone and Broken Concrete: Use broken stone and broken concrete meeting the following physical requirements:

Absorption (EM 1-T 85)	Maximum 5%
Los Angeles Abrasion (ASTM C535)	Maximum loss 45%*
Soundness (ASTM C685)	

Drop Test*(EM 1110-2-2302)** widened additional 0.1 inch, or final largest dimension greater than or equal to 90% original largest dimension of dropped piece.

* Ensure that granite does not have a loss greater than 55% and that broken concrete does not have a loss greater than 45%.
 ** The Engineer may accept rubble exceeding the soundness loss limitation if performance history shows that the material will be acceptable for the intended use. The Engineer will waive the soundness specification for rubble riprap (broken stone and broken concrete) when project documents indicate it will be placed in or adjacent to water or soil with a sulfate content less than 150 parts per million and a pH greater than 5.0. **Soundness is not required for broken concrete.**
 *** The Engineer will waive the Drop Test unless required to ensure structural integrity. Provide all equipment, labor and testing at no expense to the Department. EM refers to the US Army Corps of Engineer's Specification Engineering Method.



SS5300201 - Revetment Systems.

The Sodium Sulphate Soundness (SSS) is suitable for measuring physical durability in natural aggregates, but it has been shown to react chemically with cement paste in broken concrete/Reclaimed Concrete Aggregate (RCA) and produce false results for physical durability. SSS is not used in other RCA applications.

Section 611

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to provide clarification to the language.

611-4.2 Intelligent Transportation System Device Installation: Test all stand-alone functions of the ITS devices as detailed in the Contract Documents and as approved by the Engineer.

For the managed field Ethernet switch (MFES), complete FDOT Form Number 750-040-07 for all installed field switches or other procedure approved by the Engineer.

For the closed-circuit television (CCTV) camera, complete FDOT Form Number 750-040-08 for all installed CCTV cameras or other procedure approved by the Engineer.

For microwave vehicle detection system (MVDS), complete FDOT Form Number 750-040-09 for all installed MVDS sensors or other procedure approved by the Engineer.

For the camera lowering device (CLD), complete FDOT Form Number 750-040-10 for all installed CLD or other procedure approved by the Engineer.

For ITS devices without official FDOT forms, evaluate ITS devices as per Contract Documents and as approved by the Engineer.

Complete approved data forms and turn them over to the Engineer for approval. Provide a minimum notice of 10 calendar days prior to all tests to permit the Engineer or their representative to observe each test.

If any unit fails to pass its stand-alone test, correct the unit, or substitute another unit in its place, then repeat the test.

If a unit has been modified as a result of a stand-alone test failure, prepare a report describing the nature of the failure and the corrective action taken and submit it to the Engineer prior to re-testing the unit. If a failure pattern develops, the Engineer may direct that modifications be made to all units without additional cost to the Department or an extension of the Contract Time.



SS6110203 – Acceptance Procedures for Traffic Control Signals, Devices, and Intelligent Transportation System Devices.

Subarticle "611-2.3.3 Compensation: All costs incurred in submitting as-built documentation are incidental to the other items of work associated with traffic control signals and devices. Payment for ITSFM files will be compensated as specified in this Section" should be listed under Article 611-9 Method of Measurement, not 611-2 Acceptance of Traffic Control Signal and Device Installations. New stand-alone test plan has been finalized.

Add new article, "611-9.4 As-Built Drawings: All costs incurred in submitting as-built drawings are incidental to the other items of work associated with traffic control signals and devices." Added the camera lowering device stand alone test plan form number.

Section 620

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to update term splice vault to splice box for consistency with other Sections and the Standard Plans.

GROUNDING AND LIGHTNING PROTECTION (REV 11-10-21)

SUBARTICLE 620-3.2.2 is deleted and the following substituted:

620-3.2.2 Minimum Resistance Not Required: Install a single ground rod assembly for the following applications. No resistance to ground measurements are required.

1. Conventional lighting
2. External lighting for signs
3. Signal cable & span wire
4. Aerial interconnect messenger wire
5. Pedestals for pedestrian signals
6. Pull boxes with metal covers when 120 volts (or greater) AC power is present
7. Splice ~~vaults~~ ~~boxes~~ with wire grounding units.



SS6200302 – Grounding and Lightning Protection.

Update term splice vault to splice box for consistency with other sections and the standard plans. Change splice vault to splice box.

Section 641

This change was proposed by Olivia Townsend from the State Construction Office to clarify the depth of foundation removal and provide consistency with the modified language in Section 649, 700, and 715.

PRESTRESSED CONCRETE POLES (REV 11-10-21)

ARTICLE 641-5 is deleted and the following substituted:

641-5 Pole Removal.

When ~~shallow pole removal~~ **removal of the pole and partial foundation removal** is specified in the Plans, the remaining pole, foundation and any protrusions, such as pole keys, dead men, guying apparatus, conduit, anchor bolts, or reinforcing steel, must be removed to a minimum depth of 4 feet below existing grade.

When ~~deep pole removal~~ **removal of the pole and complete foundation removal** is specified in the Plans completely remove each pole including the foundation and all accessories and attachments, such as pole keys, dead men, guying apparatus, conduit, anchor bolts, and reinforcing steel.

Disconnect span wires carefully at the pole, and salvage all usable hardware and attachment devices as determined by the Engineer. Remove all devices supported by the span wire (including wiring) prior to the removal of the span wire.



SS6410500 Prestressed Concrete Poles.

Language needs to be changed to clarify the depth of foundation removal and provide consistency with modified language in 649,700, and 715. 715-18.0: Replaced "shallow pole removal" with "pole and partial foundation removal". Replaced "deep pole removal" with "pole and complete foundation removal."

Section 646

This change was proposed by Rick Jenkins from the Roadway Design Office to update material formatting, delete redundant language, and remove Class I concrete as an option to reference Class II.

- **646-2 Materials.**
- Meet the following requirements:
 - Portland Cement Concrete* Section 346
 - Anchor Bolts and Shims Section 962
 - Poles and Posts Section 965
 - Transformer Base** Section 965
- → *Class II
- → **Use products listed on the Department's Approved Products List (APL)
- **646-2.1 Poles and Posts:** Use nominal 4-inch diameter Schedule 40 aluminum poles and posts meeting the requirements of The Aluminum Association Alloy 6061-T6 and ASTM B429. Poles used with transformer bases must be threaded with No. 8 NPT threads. Sufficient threads are required to fully seat the pole into the hub of the pedestal base.
- **646-2.2 Transformer Base:** Use transformer bases listed on the Department's Approved



SS6460000 – Aluminum Poles, Pedestals, and Posts.

Changes were needed to be consistent with other sections. Redundant aluminum poles and posts information was located in the Section and the Standard Plans. SMO removed Class I concrete as an option, so all references were updated to Class II. Updated material formatting and added section 646-3. Deleted redundant aluminum poles and posts size information. Transformer base APL submission requirements were moved from to Section 965. Deleted reference to Class I concrete and added Class II to Materials.

Section 649

This change was proposed by Olivia Townsend from the State Construction Office to clarify the depth of foundation removal and provide consistency with the following proposed specification changes to Section 641, 700, and 715.

649-10 Method of Measurement.

The Contract unit price each for poles, mast arms, and monotube assemblies, furnished and installed, will include all materials specified in the Contract Documents, including the foundation, cover plates, caps, clamps, blank sign panel, luminaire bracket, all labor, equipment, miscellaneous materials and hardware necessary for a complete and acceptable installation.

The Contract unit price for removal of poles, mast arms, and monotube assemblies will include the removal of all attachments (arms, vehicle signals, light fixtures, pedestrian signals, pedestrian detectors and other incidentals).

When removal of the pole and partial foundation ~~shallow-pole~~ removal is called for, remove the pole, foundation, and all accessories or attachments (including pole keys, dead men, guying apparatus, conduit, anchor bolts and reinforcing steel) to a minimum depth of four feet below existing grade.

When removal of the pole and complete foundation ~~deep-pole~~ removal is called for ~~in the Plans~~, completely remove the pole including the foundation and all accessories or attachments as listed above.



SS6491000 – Galvanized Steel Poles, Mast Arms, and Monotube Assemblies.

Language needs to be changed to clarify the depth of foundation removal and provide consistency with modified language in 641,700, and 715. 715-18.0: Replaced "shallow pole removal" with "pole and partial foundation removal". Replaced "deep pole removal" with "pole and complete foundation removal."

Section 654

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to move all the materials from Division II to Division III. The proposed specification change is associated with changes to Section 995.

654-3 Installation Requirements.

Restore any areas impacted by the installation of the crosswalk enhancement assembly to original condition unless otherwise shown in the Plans. Install crosswalk enhancement assembly in accordance with the Americans with Disabilities Act Standards for Transportation Facilities.

Install post mounted RRFB assemblies in accordance with Standard Plans, Index 654-001. Use sign panel attachment hardware in accordance with Standard Plans, Index 700-010.

Optional mast arm and pole installation may be used if shown in the Plans. Follow the manufacturer's specifications on the number of RRFB units that are connected to the timer's output driver. Use attachment hardware in accordance with Section 995. The outside edges of the RRFB indications, including any housings, shall not project beyond the outside edges of the associated warning sign.

If installed with highlighted signs or flashing yellow beacons, in-roadway light assemblies shall operate in unison and with an identical flash rate as the signs or beacons.



SS6540000 – Midblock Crosswalk Enhancement Assemblies.

Move the materials from Division II to Division III.

Per the traffic engineering manual, in-roadway light assemblies need to operate in unison with the highlighted signs or beacons.

Move in-roadway light assembly and RRFB language from 654-2 to new article 995-6. Keep PHB in 654-2.

Added to 654-3, "If installed with highlighted signs or flashing yellow beacons, in-roadway light assemblies shall operate in unison and with an identical flash rate as the signs or beacons."

Section 659

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to move the materials language from Division II to Division III. The proposed specification change is associated with the changes to Section 995.

659-2 Materials.

659-2.1 General: Use mounting assemblies that meet the requirements of Section 995 and are listed on the Department's Approved Product List (APL). Meet the requirements of Section 603.

Fastening hardware such as bolts, nuts, washers, set screws, studs, u-bolts, cable and cable swags, must be provided by the mounting assembly manufacturer, must be SAE Type 316 or 304 stainless steel. Hardware (studs, bolts and u-bolts) must be a minimum of 5/16 inch diameter unless otherwise specified in this Section. SAE Grade 8 bolts and nuts are also acceptable. Metallic mounting assemblies must meet ASTM B117 for corrosion resistance.
Connections that provide an entrance to the interior of a traffic device must be



SS6590000- Mast Arm, Span Wire, and Pole Mounting Assemblies.

Move the materials from Division II to Division III. Move materials language to new article 995-7.

Section 663

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to move the materials language from Division II to Division III. The proposed specification change is associated with the changes made to Section 995.

663-2 Materials.

Use signal priority and preemption system equipment that meet the requirements of Section 995 and are listed on the Department's Approved Product List (APL). Ensure that all materials furnished, assembled, fabricated or installed are new products.

Signal priority and preemption system equipment may utilize optical, GPS, and radio frequency based technologies.

663-2.1 Functional Requirements: Ensure that in-vehicle equipment operates without requiring any action from the vehicle operator or occupants once power is applied.



SS6630000 – Signal Priority and Preemption Systems.

Move the materials from Division II to Division III. Move materials language to new article 995-8.

Section 665

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to move the materials language from Division II and Division III. The proposed specification change is associated with changes to Section 995.

665-1 Description.

Install a pedestrian detection system. ~~Use pedestrian detection systems and components listed on the Department's Approved Product List (APL).~~ Pedestrian detection systems are classified into three categories: Standard Pedestrian Pushbutton Detectors, Accessible (Audible/Tactile) Pedestrian Pushbutton Detectors, and Passive Detectors. The components of the pedestrian detection system include pushbuttons, pedestrian actuation signs, electronics, wiring, and mounting hardware.

665-2 Materials.

~~665-2.1 Standard Pedestrian Pushbutton Detector: Pushbuttons must be raised from or flush with their housings and be a minimum of 2 inches in the smallest dimension. The pushbutton must require no more than 5 pounds of force to activate. The detector must be weather-tight and tamper resistant. Use pedestrian detection systems and components that meet the requirements of Section 995 and are listed on the Department's Approved Product List (APL).~~



SS6650000 - Pedestrian Detection System.

Move the materials from Division II to Division III. Move materials language to new article 995-9.

Section 670

This change was proposed by Melissa Hollis from the Program Management Office to clarify that separate payment will not be made for completing the installation of components.

TRAFFIC CONTROLLER ASSEMBLIES (REV 11-14-21)

ARTICLE 670-4 is deleted and the following substituted:

670-4 Method of Measurement.

The Contract unit price per assembly for traffic controller assembly or intersection control beacon controller assembly will include all labor, equipment, and miscellaneous materials necessary for a complete and accepted installation.

No separate payment will be made under this item for wiring, programming, signal operating plan, or other modifications needed to complete the installation of new signal cables or auxiliary equipment.



SS6700400 - Traffic Controller Assemblies.

The traffic controller assembly "modify" pay item has been used inconsistently, often when not needed to complete the installation of various equipment/components paid as "furnish & install".

Clarifies that separate payment will not be made for completing the installation of components.

Section 676

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to provide additional ITS cabinet sizes as they are being deployed on projects.

676-2.5 Intelligent Transportation System Cabinets: The cabinet shell must conform to NEMA 3R requirements, be constructed of unpainted sheet aluminum alloy 5052-H32 with a minimum thickness of 0.125 inches and have a smooth, uniform natural aluminum finish without rivet holes, visible scratches or gouges on the outer surface. Other finishes are acceptable if approved.

The minimum dimensions for cabinets are listed below.

Table 676-1
Minimum Cabinet Dimensions in Inches

Cabinet Type	Height	Width	Depth
340	66" - 68"	44" - 46"	26" - 28"
336	36" - 39"	24" - 26"	20" - 22"
336S	46" - 48"	24" - 26"	22" - 24"
334	66" - 68"	24" - 26"	30" - 32"
332D	66" - 68"	48" - 50"	30" - 32"
P44	55" - 59"	26"-29" 44" - 46"	44"-46" 26" - 29"



SS6760205 - Traffic Cabinets.

Additional ITS cabinet sizes are being deployed on projects.

Removed "Minimum" from Table 676-1.

Added Cabinet Types 340 and 332D to Table 676-1.

Corrected the dimensions for Cabinet Type P44 in Table 676-1.

Section 677

The changes are proposed by Jose Armenteros from the State Materials Office to reference the changes in Section 346 that eliminates Class I concrete from the list of Concrete classes.

677-2.2 Shelter Floor and Foundation: The floor is to be constructed of concrete or concrete composite material.

The foundation is a monolithic slab with appropriate footings and the final top of slab elevation is set a minimum of 2 feet above final grade, or as shown in the Plans. Concrete is to be Class ~~I~~II for extremely aggressive environments and in accordance with Section 346. Perform concrete structures work in accordance with Section 400.

The equipment shelter must not bend or break during moving, towing, or hoisting.

The equipment room's interior floor covering is to be industrial-grade vinyl flooring fastened to the shelter floor with waterproof adhesive. Provide an air gap between the equipment shelter floor and the foundation slab, or alternatively, construct the foundation slab with a vapor barrier to prevent moisture penetration. Insulate the floor to provide a minimum insulating factor of R-11.

Concrete is to be Class ~~I~~II in accordance with Section 346. Perform concrete structures work in accordance with Section 400. Obtain precast products from a plant that is currently on the Department's Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105. Submit to the Engineer all permit documents for approval prior to starting the work.



SS6770202 – Equipment Shelter.

The proposed Section 346 will eliminate Class I concrete from the list of concrete classes. Accordingly, there is need to replace Class I Concrete with Class II concrete in Sub articles 677-2.2 and 677-3.1 Section 677 Specifications.

Replaced Class I with Class II in Sub-articles 677-2.2 and 677-3.1 Section 677 Specifications.

Section 682

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to remove APL requirement for video wall controllers.

VIDEO EQUIPMENT (REV 11-10-21)

SUBARTICLE 682-2.2.1 is deleted and the following substituted:

682-2.2.1 Video Display Control System: Furnish a video display control system that meets the requirements of Section 996 ~~and listed on the APL.~~

Provide the video display control system with a minimum configuration of 4 composite video inputs, 4 component (red, green, and blue (RGB)) video inputs, and 4 DVI inputs as well as network connections, decoders, and associated hardware and software required to display 32 inputs simultaneously at a minimum resolution of 720 pixels x 480 pixels and a frame rate of 30 fps, or as shown in the Plans.

Provide the video display control system with a minimum configuration of 4 composite video outputs, 2 component (RGB video outputs), and 4 DVI outputs, or as shown in the Plans. If the projection device requires an analog signal, then breakout cables may be used to convert the DVI output connector to a HD15 analog RGB connector.



SS6820202- Video Equipment.

The TERL does not need to review and certify video wall controllers.
Remove APL requirement for video wall controllers.

Section 700

The changes are proposed by Derwood Sheppard to clarify language and allow use of set screws for mounting strips to attachment bands.

HIGHWAY SIGNING. (REV 11-10-21)

SUBARTICLE 700-2.1.6 is deleted and the following substituted:

700-2.1.6 Retroreflective Strips for Signs: Use only on signs where the retroreflective ~~sign~~ strip is called for in the Plans. Install retroreflective strips in accordance with the manufacturer's instructions. If a panel is required to install the retroreflective sheeting, use a ~~0.040~~ 0.040-inch minimum aluminum ~~panels~~ plate or another material approved by the sheeting manufacturer. Use stainless steel attachment hardware for the installation. ~~The~~ Install retroreflective ~~sign~~ strips ~~must be fastened~~ in a manner that does not require drilling ~~of holes through in~~ the column (post). ~~A set screw no larger than 1/4 inch may be used with band attachments.~~ The retroreflective ~~sign~~ strips ~~panel and sheeting~~ must be 2 inches in width and a ~~height of 5 feet in height~~ for all signs, except for ~~when signs are~~ mounted at a ~~height of~~ 4 feet, then ~~use a~~ retroreflective ~~sign~~ strip ~~will be~~ 2 feet in height. ~~If a panel is required for installation, the panel for the retroreflective sheeting must be the same dimensions as the retroreflective sheeting.~~ For the back of ~~Rail Road~~ Railroad Crossbuck signs, the retroreflective ~~sign~~ strip will be 2 inches wide for the full length of the blade. Match the color of the retroreflective sheeting to the background color of the sign except for YIELD signs and DO NOT ENTER signs, where the color must be red.



SS7000201 – Highway Signing.

Minor clarifications were made to the text. Maintenance has difficulty reattaching or repair the retroreflective strips. An allowance to use small set screws was added to improve constructability and repairs.

Section 700

The changes are proposed by Olivia Townsend to clarify language for the depth of removal foundations for highway signing.

700-2.3 Method of Measurement: For single post and multi post sign assemblies, an assembly consists of all the signs mounted on a single structure. The Contract unit price per assembly for ground mounted signs (single post and multi-post), furnished and installed, will include furnishing the sign panels, support structure, foundation, hardware, and labor necessary for a complete and accepted installation.

The retroreflective sign strip will be paid for separately, and the Contract unit price per each will include furnishing the retroreflective sign strip, hardware and labor necessary for a complete and accepted installation.

For overhead signs, sign panels will be paid separately from support structures. The Contract unit price per each for sign panel, furnished and installed, will include furnishing the sign panels, hardware, and labor necessary for a complete and accepted installation. The Contract unit price for each overhead static sign structure, furnished and installed, will include furnishing the support structure, foundation, hardware, and labor necessary for a complete and accepted installation.

For the removal of overhead static sign structures, the quantity to be paid for will be the number of overhead static sign structures, including the foundation, to be removed.

When partial foundation removal is called for, remove the support structure, and foundation to a minimum depth of four feet below existing grade.

When complete foundation removal is called for, completely remove the support structure including the foundation.

Relocation of signs will consist of removing the existing sign assembly and



SS7000203 – Highway Signing.

Added language to clarify payment for the removal of overhead static sign structures to include the foundation. Further clarification added to specify shallow and deep foundation removal.

Section 700

The change is proposed by Derek Vollmer to add language specifying sign ventilation needs to be operational per manufacturer recommendation.

HIGHWAY SIGNING. (REV 11-10-21)

SUBARTICLE 700-4.13 is deleted and the following substituted:

700-4.13 Installation Requirements: Provide a walk-in DMS for locations over interstate travel lanes. Do not install the sign prior to the availability of electric power. Verify that any ventilation system incorporated within the sign is operational ~~within per 72 hours after sign installation~~ the manufacturer's recommendations.

Ensure that the location of the lifting eyebolts, left in place or removed, is sealed to prevent water entry after installation.

Load the initial message libraries on both the sign control software and the sign controller. The Engineer will furnish the messages to be placed in these libraries.



SS7000413 – Highway Signing.

Sign ventilation language needed to be modified due to DMS vendors differing how quickly it needs to be powered after installation.

Section 705

The changes are proposed by Derwood Sheppard to move non-APL requirements from 993, add references to Standard Plans and Section 700 (sheeting), and renumber articles for new text.

SECTION 705 OBJECT MARKERS AND DELINEATORS

705-1 Description.
Furnish and install object markers to mark obstructions within or adjacent to the roadway of the types and at the locations called for in the Standard Plans or in the Plans.
Furnish and install delineators along the side of the roadway to indicate the alignment of the roadway as indicated in the Standard Plans or in the Plans.

705-2 Material.
705-2.1 General: Meet the following requirements:
[Object Markers and Flexible Post Delineators*](#), Section 993
[Barrier Delineators*](#), Section 993
[Retroreflective and Nonreflective Sign Sheetings*](#), Section 994/700
705-2.2 Product Acceptance on the Projects: Ensure that delineators and delineator posts use [Use products listed on the Department's Approved Product List \(APL\)](#).
705-2.2 Flanged U-C Channel Posts: Meet the mechanical requirements of ASTM A499, Grade 60. Galvanize after fabrication in accordance with ASTM A123, to produce a smooth uniform finish free from defects affecting strength, durability, and appearance. Punch or drill 3/8-inch diameter holes on 1-inch centers through the center of the post, starting approximately 1 inch from the top and extending the full length of the post. Punching or drilling operations shall be completed prior to galvanization. The weight per foot of a manufacturer's U-channel size shall not vary more than plus or minus 3.5% of its specified weight per foot. Machine-straighten the U-channel to a tolerance of 0.4% of the length.
705-2.3 Round Aluminum Posts: Meet the requirements of Standard Plans, Index 700-010.
705-2.4 Retroreflective Sheetings: Use Types IV, V or XI sheeting. The retroreflective area shall be in accordance with the MUTCD.
705-2.5 Aluminum Panel: For Object Markers and Nonflexible Delineators, adhere retroreflective sheeting to 6061 T6 aluminum meeting ASTM B209. Use 0.040-inch sheet aluminum for Type 2 markers and nonflexible delineators. Use 0.095-inch sheet aluminum for Type 1, Type 3, and Type 4 markers. Prepare aluminum in accordance with recommendations of the sheeting manufacturer.



SS7050000 - Object Markers and Delineators.

Division II and Division III language was updated to better separate project requirements (Engineer & Contractor) from APL requirements (Manufacturer). This was a joint effort between Program Management and Roadway Standards groups. Proposed 9930000 is the Division III associated specification.

Section 710

The changes are proposed by Karen Byram to change the black retroreflectivity value.
This proposal is associated with SS9710000 in Division III.

PAINTED PAVEMENT MARKINGS. (REV 11-29-21)

SUBARTICLE 710-4.3 is deleted and the following substituted:

710-4.3 Retroreflectivity: Apply white and yellow standard paint that will attain an initial retroreflectance of not less than 300 mcd/lx·m² and not less than 250 mcd/lx·m², respectively. Apply white and yellow durable paint that will attain an initial retroreflectance of not less than 450 mcd/lx·m² and not less than 300 mcd/lx·m², respectively. **Black pavement markings must have a retroreflectance of less than 20 mcd/lx·m².**

Measure, record and certify on a Department approved form and submit to the Engineer, the retroreflectivity of white and yellow pavement markings in accordance with FM 5-541.



SS7100403 - Painted Pavement Markings.

The Retroreflectivity value for black has been changed from 5 to 20 mcd/lx·m² (millicandelas per square meter per lux) based on asphalt and concrete retroreflectivity baseline values.

*This proposal is associated with SS9710000 in Division III.

Section 711

The changes are proposed by Karen Byram to modify retroreflectivity value, clarify thermoplastic language, and add black contrast language. This proposal is associated with SS9710000 in Division III.

711-2 Materials.
Use only materials listed on the Department's Approved Product List (APL) meeting the following requirements.

Hot-Applied Standard and Refurbishment Thermoplastic	971-1 and 971-5
Preformed Thermoplastic	971-1 and 971-6
Hot-Applied High Friction Thermoplastic	971-1 and 971-10
Glass Spheres	971-1 and 971-2

The Engineer will take random samples of all material in accordance with the Department's Sampling, Testing and Reporting Guide schedule.

711-4.3 Retroreflectivity:
711-4.3.1 General: Measure, record and certify on Department approved form and submit to the Engineer, the retroreflectivity of white and yellow pavement markings in accordance with FM 5-541.
711-4.3.2 Longitudinal Lines: Apply white and yellow hot-applied standard and refurbishment thermoplastic pavement markings that will attain an initial retroreflectivity of not less than 450 mcd/lx·m² and not less than 350 mcd/lx·m² for white and yellow, respectively for all longitudinal lines.
711-4.3.3 Markings Other Than Longitudinal Lines: Apply all hot-applied standard and refurbishment thermoplastic markings that chevrons, diagonal lines, stop lines, messages, symbols, and arrows will attain an initial retroreflectivity of not less than 300 mcd/lx·m² and 250 mcd/lx·m² for white and yellow, respectively.
711-4.3.4 Preformed and Hot Applied High Friction Markings: Apply all white preformed thermoplastic, crosswalks, railroad dynamic envelopes and bicycle markings and hot-applied high friction thermoplastic markings that shall will attain an initial retroreflectivity of not less than 275-200 mcd/lx·m². Black pavement markings must have a retroreflectance of less than 520 mcd/lx·m².
 Measure, record and certify on Department approved form and submit to the Engineer, the retroreflectivity of white and yellow pavement markings in accordance with FM 5-541.

7110000
All Jobs



SS7110000 - Thermoplastic Pavement Markings.

*This proposal is associated with SS9710000 in Division III.

The Retroreflectivity value for black has been changed from 5 to 20 mcd/lx·m² (millcandelas per square meter per lux) based on asphalt and concrete retroreflectivity baseline values. The Skid Resistance test has been changed from BPN to DFT to better reflect the pavement values and ease of testing. Friction requirements have been applied to all preform materials and the retroreflectivity value has been lowered from 300 to 200 mcd/lx·m² to accommodate the increased friction and the DFT 40 method. The name of High Friction Thermoplastic may be confused with preform thermoplastic that has friction elements, so the name is to be changed to include Hot Applied. Contract markings were requested by the Districts for crosswalks and stop bars.

Section 713

The change is proposed by Karen Byram modify the retroreflectivity value for black pavement markings.
This proposal is associated with SS9710000 in Division III.

PERMANENT TAPE PAVEMENT MARKINGS. (REV 11-16-21)

SUBARTICLE 713-4.3 is deleted and the following substituted:

713-4.3 Retroreflectivity: Apply white and yellow pavement markings that will attain an initial retroreflectivity of not less than 450 mcd/lx·m² for white markings and not less than 350 mcd/lx·m² for yellow markings. Black pavement markings must have a retroreflectance of less than ~~5~~20 mcd/lx·m².

Measure, record and certify on Department approved form and submit to the Engineer, the retroreflectivity of white and yellow pavement markings in accordance with FM 5-541.



SS7130403 - Permanent Tape Pavement Markings.

*This proposal is associated with SS9710000 in Division III.

The Retroreflectivity value for black has been changed from 5 to 20 mcd/lx·m² (millicandelas per square meter per lux) based on asphalt and concrete retroreflectivity baseline values.

Section 715

The changes are proposed by Richard Stepp in the Roadway Design Office to replace the term "ballast" with "LED driver" or "driver" to accurately reflect LED lighting terminology.

715-1 Description.

Install a highway lighting system in accordance with the details shown in the Plans. Use pole assemblies as shown in the Standard Plans when standard aluminum pole assemblies or standard high mast light assemblies are required by the Contract Documents. Include in the system the light poles, bases, luminaires, ~~ballast~~ LED drivers, cable, conduit, protective devices, and control devices; all as specified or required for the complete facility.

Obtain conventional light pole and high mast light pole assemblies from a fabrication facility that is listed on the Department's Production Facility Listing. Producers seeking inclusion on the list shall meet the requirements of Section 105.

Provide metal lighting poles, excluding high mast lighting, with internal vibration damping devices in accordance with Standard Plans, Index 715-002 in all installations on bridges, walls, and median concrete barriers.

ARTICLE 715-5 is deleted and the following substituted:

715-5 Shop Drawings and Working Drawings.

Submit shop drawings and working drawings with descriptive specifications and engineering data for the service main, control panel enclosure, control panel main disconnect, lighting contactor, electrical panel, transformer, in-line fuse holders, surge protective devices, non-standard light poles (including brackets), luminaires, ~~ballast~~ LED drivers, photo-electric cell, conduit and cable or any other item requested by the Engineer as specified in Section 5.

SUBARTICLE 715-6.2 is deleted and the following substituted:

715-6.2 Luminaires: Use the make and model of the luminaire(s) shown in the Plans. Luminaires other than those shown in the Plans may be substituted if the Contractor proves photometric and electrical equivalence and receives approval of the lighting EOR.



SS7150100 - Highway Lighting System.

For LED lighting technology, an electrical "driver" is used instead of a "ballast". Next, FDM 231 will require the make and model of LED luminaires to be placed in the Plans. Contractors must use this luminaire unless they receive EOR approval to substitute an equivalent model.

Section 715

The changes are proposed by Olivia Townsend to add language specifying depth of foundation removal in the Standard Specification.

• 715-18 Method of Measurement.

- The quantities to be paid for will be as follows, completed and accepted.¶
- → 1. Conduit: Payment will be made in accordance with Section 630.¶
- → 2. Luminaire and Truss Arm: The Contract unit price will include the truss arm, luminaire with lamp, and all necessary mounting hardware as indicated in the Plans and Standard Plans.¶
- → 3. Service Point: Payment will be made in accordance with Section 639.¶
- → 4. Load Center: The Contract unit price will include the enclosure, panel boards, breakers, lightning arrestor, contactors, photo electric switch, grounding, and the concrete pad as shown in the Plans and Standard Plans.¶
- → 5. Luminaire: The Contract unit price will include the luminaire with lamp and necessary mounting hardware as indicated in the Plans and Standard Plans.¶
- → 6. Pull Box: Payment will be made in accordance with Section 635.¶
- → 7. High Mast Lighting Pole Complete: The Contract unit price will include the pole, luminaires with lamps, lowering system, breakers and anchor bolts with lock nuts and washers, and foundation as indicated in the Plans and Standard Plans.¶
- → ~~When partial foundation removal is called for, remove the pole and foundation to a minimum depth of four feet below existing grade.¶~~
- → ~~When complete foundation removal is called for, completely remove the pole and foundation.¶~~



SS7151800 – Highway Lighting System.

Added language to specify depth of foundation removal.

Section 923

The changes are proposed by Vimal Patel to replace the ASTM D512 with SM 4500 CL B and SM 4110 B in Tables 923-1 and 923-2 in the Standard Specification.

923-3 Chemical Requirements.

923-3.1 Testing: All chemical analysis shall be performed in accordance with the test methods listed in Tables 923-1 and 923-2 or equivalent Standard Methods for the Examination of Water and Wastewater (SM). Inorganic Anions (Chlorides and Sulfates) *may* shall be determined simultaneously using SM 4110B Ion Chromatography or separately using SM 4500 Cl- B and SM 4500 SO₄²⁻ E, *in lieu of ASTM D512 and ASTM D516 may be used as an alternative method for sulfates.* The test method used shall be included in the concrete producer report.

923-3.2 Recycled and Reclaimed Water: Recycled and reclaimed water shall be tested before use and shall not exceed the limits in Table 923-1:

Table 923-1		
Chemical Test	Test Method	Maximum (%)
Total Solids	SM 2540 B	5.00
Total Chlorides as Cl ⁻	ASTM D512 SM 4500 Cl- B or SM 4110 B	0.05
Total Sulfates as SO ₄ ²⁻	ASTM D516	0.30

923-3.3 Open Bodies of Water and Well Water: Open bodies of water and well water shall be tested before use and shall not exceed the limits of Table 923-2:

Table 923-2		
Chemical Test	Test Method	Maximum (%)
Alkalinity Calculated in terms of Calcium Carbonate	SM 2320 B	0.05
Total Organic Solids	SM 2540 E	0.05
Total Inorganic Solids	SM 2540 E	0.08
Total Chlorides as Cl ⁻	ASTM D512 SM 4500 Cl- B or SM 4110 B	0.05



SS9230301 - Water for Concrete.

Replaced the ASTM D512 test method with SM 4500 CL B and SM 4110 B in Tables 923-1 and 923-2.

Section 931

The changes are proposed by Tim McCullough to move materials requirements to a table and add quality and emission requirements when paint is applied in the field.

931-2.3 Dowel Bars: Dowel bars ~~must meet the requirements of Table 931-1, shall be plain steel bars conforming to the requirements of ASTM A615 for any grade of steel shown. They shall be of the length, size and spacing as shown in the Plans. When coated dowel bars are specified, coat with epoxy meeting the requirements of ASTM A775 by a producer with Epoxy Coating Certification from the Concrete Reinforcing Steel Institute, or one coat of zinc-rich primer meeting the requirements of SSPC Paint 20.~~

The Contractor shall submit to the Engineer a certified test report from the manufacturer of the dowel bars confirming that the requirements of this Section are met. The certified test report shall conform to the requirements of Section 6 and include metallurgical mill analysis, grade, length and size. Each certification shall cover only one LOT for dowel bars.

SUBARTICLE 931-3.1 is deleted and the following substituted:

931-3 Metal Dowel Bar Assemblies for Joints in Concrete Pavement.

931-3.1 Approved Product List (APL): The dowel bar ~~and basket assembly used must meet the requirements of Table 931-1 and shall be a product included on the Department's APL.~~

Manufacturers or distributors seeking approval of their material in accordance with this specification shall demonstrate the performance of their products in accordance with the requirements in 931-3.2 thru 931-3.6.

Component	Base Metal	Coating
Dowel Bar	ASTM A615	ASTM A775 or SSPC Paint 20
Wire Basket Assembly	ASTM A1064	ASTM A775 or SSPC Paint 20 or Primer with ≥ 40% Solids (by weight)



SS9310203 - Metal Accessory Materials For Concrete Pavement And Concrete Structures.

Material requirements for dowel bars have been moved to a table. Material requirements for dowel basket assemblies have been moved to a table. Quality and emission requirements have been added when any field applied paint is used. Structures Design may approve the baskets. The Product Evaluation Office will monitor all approved dowel basket assemblies.

Section 932

The changes are proposed by Juan Castellanos from the State Construction Office to include the polymer slurries for drilled shafts as an APL product.

932-5 Polymer Slurries for Drilled Shafts.

932-5.1 General Requirements: Synthetic polymer slurry are products that can be used to facilitate the construction of drilled shafts. The type of synthetic polymers used in drilling slurry are long chain-like hydrocarbon molecules which interact with each other, with the soil, and with the water to effectively increase the viscosity of the fluid Commercial polymer products may come in powder, granular or liquid forms and shall be fully mixed with potable water prior to introducing it to the drilled shaft excavation.

932-5.2 Product Acceptance: All materials shall be one of the products listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of products for inclusion on the APL shall submit an application in accordance with Section 6 and include the following documentation. A separate application must be submitted for each product type to be evaluated, showing that the product meets the applicable requirements.



SS9320500 – Nonmetallic Accessory Materials for Concrete Pavement and Concrete Structures.

To include the polymer as an APL product. Add a new article 932-5 to Section 932.

Section 960

This change was proposed by Ben Goldsberry from the Structures Design Office to allow PT systems to be accepted through the show drawing submittal process instead of through a pre-approved list. The proposed specification change is associated with the changes made to Section 5, 452, and 462.

960-1 Description.

This Section covers all post-tensioning (PT) systems and components remaining in a completed structure, including temporary erection PT left in-place and permanent PT for design capacity.

The submittal for Manufacturers seeking approval of PT systems for inclusion on the Structures Design Office (SDO) list of Approved Post-Tensioning Systems must use materials and components meeting the requirements of this Section and Section 462. Submit a complete PT System Application Package shop drawings to the Engineer for review and acceptance in accordance with Section 5. The PT system shop drawings must include including component drawings, system drawings, and test reports from a certified laboratory (or laboratories), as defined in 960-3.1, to the SDO for review, acceptance and inclusion on the list of Approved Post-Tensioning Systems. The acceptance of a PT system for use on the project is based on the exact major components, as defined in 960-2, that were used in system testing and that are shown on the approved PT system shop drawings.

Any marked variations from original test values or any evidence of inadequate field performance of a PT system, will result in the PT System being removed from the list of Approved Post-Tensioning Systems.



SS9600100 - Post Tensioning Systems.

PT systems will be accepted through the shop drawing submittal process instead of through a pre-approved list. Revisions to accept PT systems through the shop drawing submittal process instead of through a pre-approved list.

Section 965

This change was proposed by Tim McCullough from the State Materials Office to update the language that will meet project needs and provide the ability for a quick review of project requirements.

965-2 Fabrication.

Provide fabricated components in accordance with AASHTO LRFD Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, the Design Plans, and this section. Verify the strength of each Lot by tensile test. Alternate testing will not be accepted. [Provide certifications as specified in 965-4, upon request.](#) Protect against damage and marring during transit and delivery.



Product	Test Method	Alloy/Temper	Reported Properties
Pole, Arm, Extrusions	ASTM B221	6061-T6 6063-T6	Alloy, Temper, Thickness, Tensile Strength
Pedestal, Posts	ASTM B429	6061-T6	
Bars, Plates, Stiffeners,	ASTM B221	6063-T6	
Backing Ring, Shimms,	ASTM B209	6061-T6	
Shapes			
	ASTM B221	6351-T6	
Railing	ASTM B241 ASTM B210 ASTM B429	6061-T6	
J-Arm Tube	ASTM B429 ASTM B221	6061-T6	
J-Arm Connection Plate	ASTM B209	6061-T6	
Sheet	ASTM B209	6061-T6 5154-H38 5052-H38	
Structural Shapes	ASTM B308	6061-T6	
Single Column Ground	ASTM B26		
Sign	ASTM B108	A356-T6	
Sand Castings			

SS9650000 - General Provisions for Aluminum Items (Including Welding).

The current Specifications did not meet the external publications, the design standard plans, or the ASTMs. The Specification was out of date and needed to be revised to become a current document that will meet project needs and provide the ability for a quick review of project requirements.

Changed the numbering (sub-section) related the warranty paint requirements from 965-5 to 965-3, due to a reduction in the overall specification. Updated the welding code requirements throughout the document to meet current Code requirements. Introduced material requirements related to fabrication and performance of specific components that reference 965 in other parts of the Specification. Added the requirement for the contractor/producer to report the tensile strength on their certificate of compliance (per ASTM, it must be requested). Changed the request for acceptance to change from a mill certification to a certification of compliance (per ASTM requirements). Requested that certifications be collected for castings only. All other components are made in an approved production shop, have inspectors present or are APL approved products. The Engineer may still request certifications.

Section 971

The changes are proposed by Karen Byram to change preform materials, revise retroreflectivity value, change skid testing, and remove skid resistance from Permanent Tape.

971-6.5.4.1 Retroreflectivity: Crosswalks and bicycle markings shall have a retroreflectivity of not less than 200 mcd/lx·m². Crosswalks and bicycle markings shall have a retroreflectivity of not less than 275 mcd/lx·m². Black pavement markings shall have a retroreflectivity of not less than 20 mcd/lx·m². The retroreflectance period shall not be less than 150 months.

971-3.3.3 Retroreflectivity: The white and yellow pavement markings shall attain an initial retroreflectance of not less than 300 mcd/lx·m² and 250 mcd/lx·m², respectively. Black pavement markings shall have a retroreflectance of less than 20 mcd/lx·m². The retroreflectance of the white and yellow pavement markings at the end of the six-month period shall not be less than 150 mcd/lx·m².

pavement markings shall maintain a retroreflectivity of not less than 200 mcd/lx·m² as tested per FM 5-622 - Part B.

971-6.6.5 Application Procedure: Section 711.

971-6.7.6 Packing and Labeling: Suitable biodegradable or thermoplastic materials shall be used.

971-1.4 Approved Product List (APL): All pavement marking materials shall be one of the products listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6 and the infrared identification curve (2.5 to 15 μm) for the vehicle component. The Department will test hot-applied standard thermoplastic and profiled thermoplastic pavement marking materials in accordance with FM 5-541, Part B. The Department will test preformed thermoplastic and hot-applied high friction thermoplastic pavement marking materials in accordance with FM 5-622, Part A. For standard paint, durable paint, preformed thermoplastic, two reactive component

permanent tape, manufacturers shall provide National (EP) field test data meeting FDOT Specification and the thickness of each coat at which the When listed, this will be the minimum criteria

971-1.5 Samples: Field samples will be obtained in accordance with the Department's Sampling, Testing and Reporting Guide Schedule.

971-1.6 Color: Materials other than white and yellow shall meet the color requirements as identified in 23- CFR ,665 Table 5 Appendix to Part 655, Subpart F. White-colored materials will only be required to meet the initial daytime chromaticity requirements.

Yellow materials for pavement markings shall meet the following performance requirements. The initial daytime chromaticity for yellow materials shall fall within the box created by the following coordinates:



SS9710000 - Pavement Marking Materials.

The Skid Resistance test has been changed from BPN to DFT to better reflect the pavement values and ease of testing. The Retroreflectivity value for black has been changed from 5 to 20 mcd/lx·m² (millicandelas per square meter per lux) based on asphalt and concrete retroreflectivity baseline values. Friction requirements have been applied to all preform materials and the retroreflectivity value has been lowered from 300 to 200 mcd/lx·m² to accommodate the increased friction and the DFT 40 method. It has been determined that permanent tape is not used for bicycle markings or pedestrian crosswalks, so friction testing is not needed. The name of High Friction Thermoplastic may be confused with preform thermoplastic that has friction elements, so the name needs to be change to include Hot Applied.

Section 974

The changes are proposed by Karen Byram to modify the detectable warnings requirement for NTPEP to allow independent laboratory reports, add testing criteria for snowplow, remove Non-Vehicular references from Patterned Pavement, and change friction testing to DFT.

Table 974-3.2 Performance Requirements for Products in Vehicular Traffic Areas:			Table 974-1																					
<p>974-3.2.1 Department Testing: Submit product samples and panels for Department analysis upon request from the Department and in accordance with this Specification. Products are subject to verification testing in accordance with this Section and infrared identification curve (2.5 to 15 μm) for the vehicle component.</p> <p>974-3.2.2 Friction Resistance: In-service pavement markings shall maintain a DFT40 value of 40 or greater, or FN-40R value of 35 or greater for a three-year period as tested per FM 5-622-Part B.</p>			<p>Requirements</p> <p>Displays the significant features of the product.</p> <p>Uniquely identifies the product and includes product specifications, storage instructions, and recommended installation materials and equipment as applicable.</p> <p>For each component of the product system.</p> <p>SDS meeting OSHA requirements for product and manufacturer recommended installation materials as applicable. Non-Hazardous, per RCRA Subtitle C Table 1 of 40 CFR 261.24 "Toxicity Characteristic" and not exude filtes which are hazardous, toxic, or detrimental to persons or property.</p> <p>Testing must be conducted using the project Work Plan for NTPEP Laboratory Testing of Detectable Warning Systems, using the cold exposure category.</p>																					
<p>Table 974-3.4</p> <table border="1"> <thead> <tr> <th>Property</th> <th>Documentation</th> <th>Test Method and Value</th> <th rowspan="2">Independent Laboratory Test Report</th> <th rowspan="2">Color/Contrast testing as identified in Table 974-2.</th> </tr> </thead> <tbody> <tr> <td>Wear</td> <td>Field Service Test Photos</td> <td>Visual. Wearing shall not expose more than 15% of the underlying surface area as measured within the traveled way for 3 years.</td> <td></td> <td></td> </tr> <tr> <td>Initial Friction Resistance [FM 5-622 Part A]</td> <td>Department Testing Reports</td> <td>Dynamic Friction Tester (DFT40) ≥ 50</td> <td></td> <td></td> </tr> <tr> <td>Friction</td> <td>Independent Testing Facility</td> <td>FM 5-592, Test using one of the following: a. Locked Wheel Friction Tester—minimum FN40R value of 35 or greater at all testing intervals for 3 years; or b. Dynamic Friction Tester—minimum DFT40 value of 40 or greater at all testing intervals for</td> <td></td> <td></td> </tr> </tbody> </table>					Property	Documentation	Test Method and Value	Independent Laboratory Test Report	Color/Contrast testing as identified in Table 974-2.	Wear	Field Service Test Photos	Visual. Wearing shall not expose more than 15% of the underlying surface area as measured within the traveled way for 3 years.			Initial Friction Resistance [FM 5-622 Part A]	Department Testing Reports	Dynamic Friction Tester (DFT40) ≥ 50			Friction	Independent Testing Facility	FM 5-592, Test using one of the following: a. Locked Wheel Friction Tester—minimum FN40R value of 35 or greater at all testing intervals for 3 years; or b. Dynamic Friction Tester—minimum DFT40 value of 40 or greater at all testing intervals for		
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SS9740000 – Surface Applications.

For Detectable Warnings: NTPEP Work plan is under revision. Changes are being made to reflect the changes that will occur in the NTPEP Work plan. The snowplow test reflects that ability to perform when struck by on object.

Section 985

The changes are proposed by Melissa Hollis from the Product Evaluation Office to modify text to be consistent with the PATH/APL requirements.

<u>Documentation</u>	<u>Requirements</u>
<u>Installation Instructions</u>	<u>Include surface preparations, installation, overlap or sewing instructions, and repair procedures.</u>
<u>NTPEP Audit Report, for Structural Geosynthetic Materials Only</u>	<u>manufacturer's facility included on NTPEP's list of compliant producers.</u>
<u>NTPEP Test Results</u>	<u>Product meets requirements of this Section</u>
<u>Product Label Photo</u>	<u>Displays the Product Name</u>
<u>Product Photo</u>	<u>Displays the significant features of the product as required in this section. Displays location of Manufacturer name and model number.</u>
<u>Technical Data Sheet</u>	<u>Uniquely identifies the product and includes product specifications, reporting requirements, and storage instructions</u>



SS9850000 – Geosynthetic Materials.

Consistent formatting of PATH/APL requirements.

1. Moved common APL requirements to 985-1, applicable to entire Section.
2. Rearranged tables based on the application/product type.

Section 990

The changes are proposed by Karen Byram to remove friction testing and change the black retroreflectivity value.

TEMPORARY TRAFFIC CONTROL DEVICE MATERIALS. (REV 12-1-21)

ARTICLE 990-4 is deleted and the following substituted:

990-4 Removable Tape.

990-4.1 General: Removable tape shall be one of the products listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6. Evaluation of Removable Tape will utilize data from an independent laboratory or data from the National Transportation Product Evaluation Program (NTPEP).

990-4.2 Composition: Removable tape shall be one of the products listed on the APL. The pavement stripes and markings shall consist of high quality plastic materials, pigments, and glass spheres or other retroreflective materials uniformly distributed throughout their cross-sectional area, with a reflective layer of spheres or other retroreflective material embedded in the top surface. No foil type materials shall be allowed.

990-4.3 Skid Resistance: The surface of the stripes and markings shall provide a minimum skid resistance value of 35 BPN (British Pendulum Number) when tested according to ASTM E303. Bike lane symbols and pedestrian crosswalks shall provide a minimum skid resistance value of 55 BPN. **Retroreflectivity:** The white and yellow pavement markings shall attain an initial retroreflectance of not less than 300 mcd/lx·m² and 250 mcd/lx·m², respectively. Black pavement markings shall have a retroreflectance of less than 20 mcd/lx·m². The retroreflectance of the white and yellow pavement markings at the end of the six-month period shall not be less than 150 mcd/lx·m².



SS9900400 - Temporary Traffic Control Device Materials.

The Retroreflectivity value for black has been changed from 5 to 20 mcd/lx·m² (millcandelas per square meter per lux) based on asphalt and concrete retroreflectivity baseline values. It has been determined that temporary tape does not need friction testing.

Section 991

The changes are proposed by Gevin McDaniel to change the grace period for NTPEP testing and clarify the table for submittal requirements.

Table 991-1	
Documentation	Requirement
Installation Instructions	Include mounting surface preparations, and touch-up and repair procedures. Separate installation instructions are required for different substrates. Identify adhesive types and mechanical anchor types for attachment of base to substrate.
National Testing Product Evaluation Program (NTPEP) audit report	See Section 991-1.5
Product Photo	Displays the significant features of the product.
Product Label Photo	Displays the Product Name. Displays additional label requirements, if needed.
Product Photo	Displays the significant features of the product. Displays location of Manufacturer name and model number.
Technical Data Sheet, marker and adhesive	Uniquely identifies the product and includes product specifications, storage instructions, and recommended installation materials and equipment as applicable.
Safety Data Sheet, Adhesive	SDS meeting OSHA requirements for product and manufacturer recommended installation materials as applicable.
National Testing Product Evaluation Program (NTPEP) product testing report	See Section 991-1.5
Installation Instructions	Include mounting surface preparations, and touch-up and repair procedures. Separate installation instructions are required for different substrates.



SS9910000 - Channelizing Device Materials.

The grace period for NTPEP testing is being extended due to the delays in testing at the approved facilities. The table for submittal requirements has been updated and clarified.

Section 992

This change was proposed by Richard Stepp from the Roadway Design Office to clarify the luminaire cable ground wire color, provide a more practical and effective fuse holder connection and slug material.

992-2.5 Luminaire Cable: Pole and bracket cable shall be multi-conductor Type XHHW-2 XLP TC with three No. 10 AWG, where the ground wire has green-colored insulation.

992-2.6 In Line Fuse Holders: In line fuse holders shall provide a breakaway connection and be UL recognized per Guide IZLT2 and rated for 600V. The wire connections in the fuse holders shall be of the copper or equivalent type setscrew type. Fused connections shall utilize an ATQ or FNQ 10 amp time delay fuse rated for 500V. Fuses shall be UL listed to Standard 248-14. The rating for the fuse holders shall be water resistant or submersible rated.



SS9920205 – Highway Lighting Materials.

1. Electrical engineers called for clarification of Luminaire Cable ground wire color (green).
2. Manufacturers called for more practical/effective fuse holder connection and slug material.

992-2.5: Added requirement for ground wire to have green color to match other cables.

992-2.6: Changed requirement for fuse holder connector material to include a "copper equivalent"

992-2.8.1: Changed requirement for fuse holder blank from "solid copper" to "manufacturer's suggested" material.

Section 993

The changes are proposed by Derwood Sheppard to add the APL requirements table and renumber the entire Section after moving non-APL information to Section 705. Associated with 5220200 and 7050000.

SECTION 993 OBJECT MARKERS AND DELINEATORS

993-1 Description.

This section specifies the material requirements for flexible post delineators and barrier delineators.

993-2 Approved Product List.

All flexible post and barrier delineators shall be one of the products listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of products for inclusion on the APL shall submit an application in accordance with Section 6 and include the following documentation. A separate application must be submitted for each product to be evaluated, showing that the product meets the applicable requirements.

Table 993-1 Submittal Compliance Requirements	
Documentation	Requirements
Installation Instructions	Surface preparation and installation procedures
Label	Displays the name of the manufacturer, Name of product, APL number.
National Testing Product Evaluation Program (NTEP) Test Report	For flexible post delineators: NTEP Evaluation of Temporary Traffic Control Devices- Flexible Delineators, for the proposed mounting category
Product Photo	Displays the significant features of the product and product packaging.
Technical Data Sheet	<ul style="list-style-type: none"> a. Uniquely identifies the product. b. Product specifications. c. Installation materials and equipment. d. Surface preparation

993-1 Object Markers.

993-1-1 General: Object markers shall meet the general requirements outlined in the



SS9930000 - Object Markers and Delineators.

This specification is being renamed to "Delineators". The APL requirements table was added, and the entire Section was renumbered after moving non-APL information to Section 705.

Section 995

This change was proposed by Derek Vollmer from the Traffic Engineer and Operations Office to provide clarification to the language by adding a new Article for Midblock Crosswalk Enhancement Assemblies. The proposed specification change is associated with changes to Section 663, 654, 659, and 665.

995-1 Description.

This Section governs the requirements for all permanent traffic control signals and devices. All equipment shall be permanently marked with manufacturer name or trademark, part number, and date of manufacture or serial number.

995-6 Midblock Crosswalk Enhancement Assemblies.

995-6.1 General: Midblock crosswalk enhancement assemblies shall be listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6.

Midblock crosswalk enhancement assemblies are classified as the following types: In-Roadway Light Assemblies and Rectangular Rapid Flashing Beacon Assemblies (RRFB).



SS9950100 - Traffic Control Signal and Device Materials.

The Pelco SP-1127-FL was evaluated and approved without the support tube and top and bottom support arms. To provide flexibility, propose making the support tube and the support arms optional. For 659-2.4, the Contractor will still be required to provide the support tube and arms as part of the assembly.

Modify 995-1 to address labeling.

Add new article 995-6 Midblock Crosswalk Assemblies.

Add new article 995-7 Mast Arm, Span Wire, and Pole Mounting Assemblies. Modified 995-7.4 by stating, "Unless the assembly uses a free-swinging mounting method, mast arm mounting assemblies must include the ..."

Add new article 995-8 Signal Priority and Preemption Systems.

Add new article 995-9 Pedestrian Detection System.

Section 996

This change was proposed by Derek Vollmer from the Traffic Engineering and Operations Office to remove the video display system as it does not need to be compatible with the Department's SunGuide software system.

996-2.1 General: All video-CCTV camera equipment shall be listed on the Department's Approved Product List (APL). Manufacturers seeking evaluation of their product shall submit an application in accordance with Section 6.

All equipment shall be permanently marked with manufacturer name or trademark, part number, and date of manufacture or serial number. All parts shall be constructed of corrosion-resistant materials, such as plastic, stainless steel, anodized aluminum, brass, or gold-plated metal. All fasteners exposed to the elements shall be Type 304 or 316 passivated stainless steel.

996-2.3.2 Display Control Software: The display control software shall allow multiple operators to control all features and functions of the video display control system. These features and functions include, but are not limited to, selection of video sources for display; adjusting the size, location, and layout of video and other graphic information the system displays; and system configuration and setup. The control software shall be able to operate a video wall composed of multiple display components as though it were a single, high-resolution display.

The display control software is compatible with the Department's SunGuide® software system.

The display control software shall include a non-proprietary Software Development Kit (SDK) including, but not limited to, an Application Programming Interface (API) that describes interfaces and protocols which can be used to integrate system features and functions with third-party applications.



SS9960201 - Intelligent Transportation System Device Materials.

The video display system will not need to be listed on the Department's APL. The display control software does not need to be compatible with the Department's SunGuide software system.

996-2.3.2: Remove "The display control software is compatible with the Department's SunGuide software system."

Section 001 through Section 556

The changes are proposed by Vern Danforth from the Production Support Office to update the language in accordance with the changes to the FDM and PSO memo 21-20 requiring signing and sealing of BIM files associated with earth work. Various sections, removed references to “ground line” or “cross sections” in the plans, as well as terminology like “template” to consistently use “existing surface” or “finished graded surface.”

5-1.2 Department’s Plans: Plans consist of general drawings showing such details as are necessary to give a comprehensive idea of the construction contemplated. In general, roadway plans will show alignment, profile grades, typical ~~cross-sections~~ and general ~~cross-sections~~ plan view details. Cross sectional views maybe provided or created from provided surface models. In general, structure plans will show in detail all dimensions of the work contemplated. When the structure plans do not show the dimensions in detail, they will show general features and such details as are necessary to give a comprehensive idea of the structure.

~~Grades/Elevations shown are finished grades,~~ and B.M. Datum ~~shown are~~ is North American Vertical Datum 1988 (NAVD-1988), National Geodetic Vertical Datum of 1929 (NGVD-1929), or other datum as noted in the Plans.

The existing surface is a combination of the following:

1. The natural ground or the original ground line,
2. The bottom of the existing pavement,
3. The bottom of existing features removed by clearing and grubbing,
4. The bottom of the existing base, if the base is to be removed,

The finished graded surface includes the completed grades of side slopes, unpaved shoulders, and the bottom of the base for flexible or rigid pavement.



Section 001 through Section 556 – FDM Thermology

To shift away from cross sections in the Plans to having signed and sealed models for earthwork, in accordance with changes to the FDM and PSO Memo 21-02 requiring signing and sealing of BIM files associated with earthwork.

Updated various sections to remove references to "ground line" or "cross sections" in the plans, as well as terminology like "template" and to consistently use "existing surface" or "finished graded surface."

Track the Status Revisions

Standard Specifications for Road & Bridge Construction

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The Standard Specifications for Road and Bridge Construction contain requirements setting out or relating to the method or manner of performing work or to the quantities and qualities of materials and labor for all FDOT contracts. You will find links to the standard specifications documents for current and recent past FDOT projects in the Standard Specifications Library.

Standard Specifications Library	Links to all current implemented Standard Specifications and revisions.
Industry Review	A list of proposed Specification revisions for review and comment.
Track the Status of Revisions	Check the status of proposed revisions currently in review.
Specification Guidance	Link to the Specification Package Preparation Procedure and other helpful information.
Specs on the Web	Link to the web application used to prepare Specifications Packages.

[Standard Specifications for Road and Bridge Construction \(fdot.gov\)](http://fdot.gov)



Track the Status Revisions

January 2022 Workbook History

**History of Proposed Revisions
January 2022 Workbook**

The following information is updated as it becomes available.

Note: These files are in Adobe Acrobat (PDF) format. File size ranges from 10 kb to 896 kb.

[Update Summary](#)

[FHWA Memos](#)

Comments: Comments received from individuals during Industry Review.

Response: Originator's response to these comments.

FHWA: The Final Draft of the proposed revision as transmitted to FHWA for approval.

History of Revisions: The Final Version ready for implementation on the letting date indicated on the document.

File	Comments	Response	FHWA	Implemented
LAP1200000	No Comments	No Response	FHWA	Implemented
LAP3340000	Comments	Response	FHWA	Implemented
LAP3440000	Comments	Response	FHWA	Implemented
0010300	No Comments	No Response	FHWA	Implemented
0020400	No Comments	No Response	FHWA	Implemented
SP0020400	No Comments	No Response	FHWA	Implemented
SP0020400-FDOT	No Comments	No Response	FHWA	Implemented

[January 2022 Workbook History \(fdot.gov\)](https://fdot.gov)



FDOT Contact Management System

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FDOT Contact Management System

The Contact Management System is a "self service" application where individuals can register to receive e-mail updates regarding select publications or training offered by the Florida Department of Transportation.

To create a new account or to modify an existing subscription, please visit:

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[Electronic Updates \(fdot.gov\)](https://www.floridadot.com/eupdates)

