

Origination Form

Specifications

Submittal Information			
Name:	James Greene	Standard Specification Section:	332
Email:	james.greene@dot.state.fl.us	Special Provision:	
Date:	2026-06-18T19:18:12Z	Associated Specs:	333, 403, and 974

Summary:

The new Spec 332 describes the value added surface application requirements for Specs 333 and 403.

Justification:

The Warranty article in Specs 333 and 403 were removed and is now described in Spec 332.

Do the changes affect other types of specifications?

Developmental Specifications

List Specifications Affected:

DEV 333 and DEV 403

Other Affected Documents/Offices	Contacted	Yes/No
Other Standard Plans		No
Florida Design Manual		No
Structures Manual		No
Basis of Estimates Manual		No
Approved Product List	Karen Byram	Yes
Construction Office		No
Maintenance Office		No

Materials Manual		No
Traffic Engineering Manual		No

Are changes in line with promoting and making progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?

High Friction Surface Treatments (HFST) and Epoxy Concrete Overlay (ECO) have significantly enhanced surface friction and bridge durability. These successful transitions from Developmental Specifications to Standard Specifications demonstrate the effectiveness of adopting new materials and modern construction methods. The new Spec 332 describes the value added surface application requirements for HFST and ECO systems.

What financial impact does the change have; project costs, pay item structure, or consultant fees?

Pay items will need to be moved and clarified from Developmental Specification to Standard Specification.

What impact does the change have on production or construction schedules?

N/A

How does this change improve efficiency or quality?

Spec 332 describes the value added surface application requirements for Specs 333 and 403.

Which FDOT offices does the change impact?

State Construction Office, State Design Office, State Materials Office

What is the impact to districts with this change?

N/A

Does the change shift risk and to who?

N/A

Provide summary and resolution of any outstanding comments from the districts or industry.

Comments and Responses are available on the Track the Status of Revisions hyperlink located on the Specifications landing page: <https://www.fdot.gov/specifications/default.shtm>

What is the communication plan?

Through the established specification revision process (e.g., Internal and Industry Review)

What is the schedule for implementation?

The Standard Specifications eBook and Workbook are effective July 1st every year.

**VALUE ADDED SURFACE APPLICATIONS
(REV 6-18-26)**

The following new Section is added:

332-1 Description.

Construct value added surface applications only consisting of High Friction Surface Treatment (HFST) and Epoxy Concrete Overlay (ECO) for bridge deck, subject to three year warranty period after final acceptance of the Contract in accordance with 5-11.

Perform all the associated work specified in this Section including continued responsibility for performing all remedial work associated with HFST distresses exceeding threshold values determined in accordance with this Section and as to which notice was provided to the Contractor.

The work specified in this Section will not be paid for directly, but will be considered as incidental to other Contract items.

332-2 Materials and Construction Requirements.

Meet the following requirements:

High Friction Surface TreatmentSection 333

Epoxy Concrete Overlay(Bridge Deck Only).....Section 403

Surface Applications Section 974-5 and 974-6

332-3 Statewide Disputes Review Board.

The Statewide Disputes Review Board in effect for this Contract will resolve any and all disputes that may arise involving administration and enforcement of this Specification. The Responsible Party and the Department acknowledge that use of the Statewide Disputes Review Board is required, and the determinations of the Statewide Disputes Review Board for disputes arising out of this Specification will be binding on both the Responsible Party and the Department, with no right of appeal by either party.

Meet the requirements of 8-3.

332-4 Evaluation and Remedial Work.

332-4.1 General: The in-situ inspection by the Engineer, will be used as the basis for determining the extent and the magnitude of the distresses occurring on the project. In the event the level of distress exceeds any of the threshold values defined below, remedial work as described in 332-5.5 by the Contractor will be required.

The Department will monitor the distresses and may require remedial action at any time. For evaluation purposes, the project will be subdivided into LOTs of 0.1 mile per lane. When the segment is less than 0.1 mile, the segment will be called a partial LOT. For purposes of threshold values and remedial work, partial lots and lots will be treated as lots. The Department may conduct an in-situ inspection of the value added surface applications following the final acceptance of the project, and at intermediate times throughout the warranty period with findings provided when considered by the Department to be the obligation of the Contractor.

The final inspection, if determined by the Engineer to be necessary, will be conducted before the end of the warranty period with results provided to the Contractor for those conditions exceeding contract threshold values requiring remedial action that the Department

believes to be an obligation of the Contractor. The Department will be responsible for all costs associated with the surveys.

If the inspection findings, intermediate or final, are to be disputed by the Contractor, written notification must be submitted to the Engineer within 30 calendar days of the date of receipt of the information from the Department.

During the warranty period, the Contractor may monitor the project using nondestructive methods and may participate with the Department in the in-situ inspection upon request. The Contractor shall not conduct any coring, milling or other destructive methods without prior approval by the Engineer.

332-4.2 High Friction Surface Treatment:

Threshold values and associated remedial work for value added HFST are specified in Table 332-1.

<u>Table 332-1</u> <u>Surface Applications (HFST) Values and Remedial Work</u>		
<u>Type of Distress</u>	<u>Threshold Values for HFST Application Area</u>	<u>Remedial Work</u>
<u>Surface Cracking¹</u>	<u>≥ 10% of any given 100 square yard of HFST application area</u>	<u>Remove and replace the distressed HFST areas to the full distressed depth and to a minimum surface area of 150% of each distressed area, subject to performance at final survey²</u>
<u>Raveling and/or Delamination³</u>	<u>≥ 10% of any given 100 square yard of HFST application area</u>	<u>Grind and replace the distressed area(s) with HFST to the full distressed depth and to a minimum surface area of 150% of each distressed area, subject to performance at final survey⁴</u>
<u>Soft Spots /Bleeding⁵</u>	<u>≥ 10% of any given 100 square yard of HFST application area</u>	<u>Grind and replace the distressed area(s) with HFST to the full distressed depth and to a minimum surface area of 150% of each distressed area, subject to performance at final survey⁴</u>

1. Severity of Cracking Class I or greater in accordance with Flexible Pavement Condition Survey Handbook.
 2. Remedial Work for surface cracking: The Contractor must perform all corrective work to the satisfaction of the Engineer.
 3. Raveling and/or Delamination: Loss of cover aggregate or lack of HFST mix on the surface.
 4. At the time of final survey, repaired areas must be performing to the satisfaction of the Engineer.
 5. Soft Spots is caused by uncured or polymer binder and bleeding is due to excess binder. The soft spots can be detected and verified by using a small scraper knife to shovel off the material.

Threshold values and associated remedial work for value added ECO are specified in Table 332-2.

Table 332-2
Surface Applications (ECO) Values and Remedial Work

<u>Type of Distress</u>	<u>Threshold Values for Epoxy Concrete Overlay Application Area</u>	<u>Remedial Work</u>
<u>Surface Cracking¹</u>	<u>≥ 10% of any given 100 square yard of Epoxy Overlay application area</u>	<u>Remove, seal and repair the distressed Epoxy Overlay areas to the full distressed depth and to a minimum surface area of 150% of each distressed area, subject to performance at final survey²</u>
<u>Raveling and/or Delamination³</u>	<u>≥ 10% of any given 100 square yard of Epoxy Overlay application area</u>	<u>Remove, repair and replace the distressed area(s) with Epoxy Overlay to the full distressed depth and to a minimum surface area of 150% of each distressed area, subject to performance at final survey⁴</u>
<u>Soft Spots /Bleeding⁵</u>	<u>≥ 10% of any given 100 square yard of HFST application area</u>	<u>Remove and replace the distressed area(s) with ECO to the full distressed depth and to a minimum surface area of 150% of each distressed area, subject to performance at final survey⁴</u>

1. Cracking width is ≥0.004 inches in accordance with Section 400.

2. Remedial Work for surface cracking: The Contractor must perform all corrective work to the satisfaction of the Engineer.

3. Raveling and/or Delamination: Loss of cover aggregate or lack of Epoxy Overlay mix on the surface.

4. At the time of final survey, repaired areas must be performing to the satisfaction of the Engineer.

5. Soft Spots is caused by uncured or polymer binder and bleeding is due to excess binder. The soft spots can be detected and verified by using a small scraper knife to shovel off the material.

332-5 Remedial Work: The Contractor will perform all necessary remedial work described within this Section at no cost to the Department. Should an impasse develop in any regard as to the need for remedial work or the extent required, the Statewide Disputes Review Board will render a final decision by majority vote.

Remedial work will not be required if any one of the following conditions is found to apply:

a. Determination that the deficiency was due to the failure of the existing underlying layers that were not part of the Contract work.

b. Determination that the deficiency was the responsibility of a third party or its actions, unless the third party was performing work included in the Contract.

If a measured distress value indicates remedial action is required per Table 332-1 or Table 332-2, the Contractor must begin remedial work within 45 calendar days of notification by the Department or a ruling of the Statewide Disputes Review Board. The Disputes Review Board will determine the allowable duration for the completion of the remedial work, but not to exceed six months.

In the event remedial action is necessary and forensic information is required to determine the source of the distress, the Department may core and/or trench the pavement or

bridge deck. The Contractor will not be responsible for damages to the pavement as a result of any forensic activities conducted by the Department.

Where such areas of remedial action are required due to raveling, or bleeding are separated by less than 1,000 feet, the remedial work will be required for the entire area contiguous to the distressed areas, including intermediate areas otherwise requiring no remedial action.

The Contractor has the first option to perform all remedial work that is determined by the Department to be their responsibility. If, in the opinion of the Engineer, the problem poses an immediate danger to the traveling public and the Contractor cannot provide temporary mitigation for the defect within 4 hours of written notification and restore the pavement to its original design condition within 72 hours of written notification, the Engineer has the authority to have the remedial work performed by other forces. Temporary mitigation includes the use of traffic control systems such as barricades, drums, or other approved devices to secure the area including lane closures if necessary, and constructing temporary repairs making it safe for the roadway user until the defect can be restored to its original design condition. The Contractor is responsible for all incurred costs of the work performed by other forces should the problem (remedial work) be determined to be the responsibility of the Contractor. Remedial work performed by other forces does not alter any of the requirements, responsibilities or obligations of the Contractor.

The Contractor must complete all remedial work to the satisfaction of the Engineer. Any disputes regarding the adequacy of the remedial work will be resolved by the Statewide Disputes Review Board. Approval of remedial work does not relieve the Contractor from continuing responsibility under the provisions of this Specification.

Notify the Engineer in writing prior to beginning any remedial work. Meet the requirements of the Specifications when performing any remedial work. Perform all signing and traffic control in accordance with the current edition of the Department's Standard Plans. Provide maintenance of traffic during remedial work at no additional cost to the Department. Lane closure restrictions listed in the original Contract will apply to remedial work. Written requests to obtain permission for lane closures for either forensic investigation or remedial work must be made to the Engineer 48 hours in advance of any lane closures. Do not perform any lane closures until written permission is given by the Engineer.

If remedial work necessitates a corrective action to overlying asphalt layers, pavement markings, signal loops, adjacent lanes, roadway shoulders, or other affected Contract work, perform these corrective actions using similar products at no additional cost to the Department.

332-6 Failure to Perform.

Fail to timely submit any dispute to the Statewide Disputes Review Board, fail to satisfactorily perform any remedial work, or fail to compensate the Department for any remedial work performed by the Department and determined to be the Contractor's responsibility in accordance with this Specification, the Department will suspend, revoke or deny the Contractor's certificate of qualification under the terms of Section 337.16(d)(2), Florida Statutes, for a minimum of six months or until the remedial work has been satisfactorily performed (or full and complete payment for remedial work performed by others made to the Department), whichever is longer. Should the Contractor choose to challenge the Department's notification of intent for suspension, revocation or denial of qualification and the Department's action is upheld, the Contractor will have its qualification suspended for an additional minimum of six months.

The remedial work is not an obligation of the Contractor's bond required by Section 337.18, Florida Statutes.