ORIGINATION FORM Proposed Revisions to the Specifications

(Please provide all information - incomplete forms will be returned)

Date:	Office:
Originator:	Specification Section:
Telephone:	Article/Subarticle:

email:

****Will the proposed revision require changes to:**

Publication	Yes	No	Office Staff Contacted and date contacted
Standard Plans Index			
Traffic Engineering Manual			
FDOT Design Manual			
Construction Project Administration Manual			
Basis of Estimate/Pay Items			
Structures Design Guidelines			
Approved Product List			
Materials Manual			

**This section must be completed prior to processing proposed revisions.

Will this revision necessitate any of the following:

Design Bulletin	Construction Bulletin	Estimates Bulletin		Materials Bulletin
Are all references to	external publications current?	Yes	No	

If not, what references need to be updated? (Please include changes in the redline document.)

Why does the existing language need to be changed?

Summary of the changes:

Are these changes applicable to all Department jobs? If not, what are the restrictions? Yes

No

Contact the State Specifications Office for assistance in completing this form.

Daniel Strickland 850-414-4130 <u>Daniel.Strickland@dot.state.fl.us</u> Rebecca Frimmel 850-414-4155 <u>Rebecca.Frimmel@dot.state.fl.us</u> Valencia Cunningham 850-414-4101 <u>Valencia.Cunningham@dot.state.fl.us</u> Darla Hunsicker 850-414-4114 <u>Darla.Hunsicker@dot.state.fl.us</u>



605 Suwannee Street Tallahassee, FL 32399-0450 KEVIN J. THIBAULT, P.E SECRETARY

MEMORANDUM

DATE: November 25, 2020

TO: Specification Review Distribution List

FROM: Daniel Strickland, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: 1450600 Geosynthetic Reinforcement.

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Dino Jameson from the State Materials Office to include updating the density log book on the Department's database.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or online at

<u>http://fdotewp1.dot.state.fl.us/programmanagement/development/industryreview.aspx</u>. Comments received after **December 28, 2020**, may not be considered. Your input is encouraged.

DS/vc

Attachment

RON DESANTIS GOVERNOR

GEOSYNTHETIC REINFORCEMENT (REV 11-06-20)

ARTICLE 145-6 is deleted and the following substituted:

145-6 Acceptance Program.

145-6.1 General Requirements: Meet the requirements of 120-10 except delete the requirements of 120-10.1.4.1, 120-10.1.6, and 120-10.2 and 120-10.3.

145-6.2 Maximum Density Determination: Determine the maximum QC density in accordance with FM 1-T180, Method D. When compacting A-3 or A-2-4 materials to meet the alternate acceptance criteria in 145-6.3.1.1, Determine the maximum density in accordance with AASHTO FM 1-T099, Method C. Perform gradation tests on the sample collected in accordance with AASHTO T27 and FM 1-T011.

145-6.3 Density Testing Requirements: Ensure compliance with the requirements of nuclear density testing in accordance with FM 1-T238. Determine the in-place moisture content for each density test. Use FM 5-507 (Determination of Moisture Content by Means of a Calcium Carbide Gas Pressure Moisture Tester), or FM 5-535 (Laboratory Determination of Moisture Content by Granular Soils by Use of a Microwave Oven) for moisture determination.

145-6.3.1 Acceptance Criteria: For select backfill, obtain a density in each LOT of at least 95% of the maximum density as determined by <u>AASHTOFM 1-</u>T180.

145-6.3.1.1 Optional Acceptance Criteria for A-3 and A-2-4 Materials: Obtain a minimum density of 100% of the maximum dry density as determined by AASHTO-FM 1-T099. The combined width from both reinforced fill volume and retained fill material may be considered the same LOT if both volumes comprise the same material and both are compacted with the same procedure, lift thickness, equipment and compacting effort.

145-6.4 Frequency: Conduct sampling and testing at a minimum frequency listed in the table below. The Engineer will perform verification sampling and tests at a minimum frequency listed in the table below.

Table 145-2				
Test Name	Quality Control (QC)	Verification		
Maximum Density	One per soil type	One per soil type		
Density	One per LOT	One per four LOTs		
Soil Classification, Gradation, LL & PI	One per Maximum Density	One per Maximum Density		
Organic Content	One per soil type	One per soil type		

In addition, test for pH at a minimum frequency of one test per soil type at point of placement according to 145-3. The Engineer will collect enough material to split and create two separate samples and retain one for resolution at point of placement until LOTs represented by the samples are accepted.

145-6.5 Test Selection and Reporting: Determine test locations including stations and offsets, using the random number generator approved by the Engineer. Do not use note-pads or work-sheets to record data for later transfer into the density log bookEarthwork Records System

(ERS) section of the Department's database. Notify the Engineer upon successful completion of QC testing on each LOT.

SUBARTICLE 145-7.1 is deleted and the following substituted:

145-7.1 Maximum Density Determination: The Engineer will collect enough material to split and create two separate samples and retain one for resolution until LOTs represented by the samples are accepted. The Engineer will meet the requirements of 120-10.4.1 except replace AASHTOFM <u>1-T099</u>, <u>Method C</u> with FM 1-T180, <u>Method D</u>. If the Contractor selects the optional acceptance criteria, the Engineer will verify the QC results of <u>AASHTOFM 1-T099</u>; <u>Method C</u> in accordance with 120-10.4.1.