

ORIGINATION FORM

Date: **May 20, 2014**

Originator: **Juan F. Castellanos**

Contact Information: **Ph 850-414 4276**

Specification Title: **Retaining Wall Systems**

Specification Section, Article, or Subarticle Number: **548-9.6 and 548-9.7.6**

Why does the existing language need to be changed? **To make these paragraphs consistent with the corrosion requirements of 548-2.6**

Summary of the changes: **Revise last paragraph clarifying the required testing for walls using metallic and for walls using geosynthetic reinforcement. In section 548-9.6. add the pH to make sure it is clear pH is included as part of the corrosiveness testing.**

Are these changes applicable to all Department jobs? **Yes**

If not, what are the restrictions?

Will these changes result in an increase or decrease in project costs? **No**

If yes, what is the estimated change in costs?

With who have you discussed these changes? **Dave Horhota, Ben Watson, Rudy Powell**

What other offices will be impacted by these changes? **Materials**

Are changes needed to the PPM, Design Standards, SDG, CPAM or other manual? **No**

Are all references to external publications current? **Yes**

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

Is a Design Bulletin, Construction Memo, or Estimates Bulletin needed? **No**

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

Daniel Scheer 850-414-4130 daniel.scheer@dot.state.fl.us

Frances Thomas 850-414-4101 frances.thomas@dot.state.fl.us

Debbie Toole 850-414-4114 deborah.toole@dot.state.fl.us

Andy Harper 850-414-4127 clifton.harper@dot.state.fl.us

Ray Haverty 850-414-4129 ray.haverty@dot.state.fl.us

If the resolution test result satisfies the required criteria, material of that soil type will be verified and accepted. If the resolution test results do not meet the required criteria, reject the material and reconstruct with acceptable material.



Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ANANTH PRASAD, P.E.
SECRETARY

MEMORANDUM

DATE: May 29, 2014
TO: Specification Review Distribution List
FROM: Daniel Scheer, P.E., State Specifications Engineer
SUBJECT: Proposed Specification: **5480906 Retaining Wall Systems.**

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

This change was proposed by Juan Castellanos to clarify the required testing for walls using metallic and for walls using geosynthetic reinforcement, and to make sure it is clear pH is included as part of the corrosiveness testing.

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 to my attention via e-mail at SP965DS, or daniel.scheer@dot.state.fl.us. Comments received after **June 26, 2014**, may not be considered. Your input is encouraged.

DS/cah
Attachment

RETAINING WALL SYSTEMS.

(REV 5-290-14)

SUBARTICLE 548-9.6 is deleted and the following substituted:

548-9.6 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.

Test Name	Quality Control (QC)	Verification
Maximum Density	One per soil type	One per soil type
Density	One per LOT	One per four LOTs for each type of QC test.
Gradation	One per Maximum Density	One per Maximum Density
LL&PI	One per Maximum Density	One per Maximum Density
Soil Classification	One per Maximum Density	One per Maximum Density
Organic Content	One per soil type	One per soil type
<i>pH</i>	<i>One per soil type</i>	<i>One per soil type</i>
Direct Shear	Three per soil type when required by 548-9.5	One per soil type

In addition, for permanent walls utilizing metallic soil reinforcement, test for corrosiveness at a minimum frequency of one test per soil type at point of placement according to the electro-chemical *and pH testing methods specified* table in 548-2.6. ~~For permanent walls utilizing geosynthetic soil reinforcement, test for pH at a minimum frequency of one test per soil type at point of placement.~~ 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. The Engineer will perform verification tests for corrosiveness at a minimum frequency of one test per soil type.

SUBARTICLE 548-9.7.6 is deleted and the following substituted:

548-9.7.6 Corrosiveness: The Engineer will verify the QC results if the verification result satisfies the electro-chemical *and pH* test criteria set forth in 548-2.6. Otherwise, the Engineer will test the sample retained in 548-9.7.1. The SMO or an AASHTO accredited laboratory designated by the SMO will perform resolution testing. The material will be sampled and tested in accordance with FM 5-550, FM 5-551, FM 5-552 and FM 5-553.

If the resolution test result satisfies the required criteria, material of that soil type will be verified and accepted. If the resolution test results do not meet the required criteria, reject the material and reconstruct with acceptable material.