

# ORINATION 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?**

**Yes**

**No**

**If not, what are the restrictions?**

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

Daniel Strickland 850-414-4130 [Daniel.Strickland@dot.state.fl.us](mailto:Daniel.Strickland@dot.state.fl.us) Rebecca Frimmel 850-414-4155 [Rebecca.Frimmel@dot.state.fl.us](mailto:Rebecca.Frimmel@dot.state.fl.us)

Valencia Cunningham 850-414-4101 [Valencia.Cunningham@dot.state.fl.us](mailto:Valencia.Cunningham@dot.state.fl.us) Darla Hunsicker 850-414-4114 [Darla.Hunsicker@dot.state.fl.us](mailto:Darla.Hunsicker@dot.state.fl.us)



**RON DESANTIS**  
**GOVERNOR**

**KEVIN J. THIBAUT, P.E**  
**SECRETARY**

## **M E M O R A N D U M**

**DATE:** November 12, 2020  
**TO:** Specification Review Distribution List  
**FROM:** Daniel Strickland, P.E., State Specifications Engineer  
**SUBJECT:** Proposed Specification: **2000502 Rock Base.**

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 modify the density logbook to the Departments 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 <http://fdotewp1.dot.state.fl.us/programmanagement/development/industryreview.aspx> . Comments received after **December 10, 2020**, may not be considered. Your input is encouraged.

DS/rf

Attachment

**ROCK BASE**  
**(REV 11-3-20)**

SUBARTICLE 200-5.2 is deleted and the following substituted:

**200-5.2 Number of Courses:** When the specified compacted thickness of the base is greater than 6 inches, construct the base in multiple courses of equal thickness. Individual courses shall not be less than 3 inches. The thickness of the first course may be increased to bear the weight of the construction equipment without disturbing the subgrade.

If, through field tests, the Contractor can demonstrate that the compaction equipment can achieve density for the full depth of a thicker lift, and if approved by the Engineer, the base may be constructed in successive courses of not more than 8 inches compacted thickness.

The Engineer will base approval on results of a test section constructed using the Contractor's specified compaction effort. Notify the Engineer prior to beginning construction of a test section. Construct a test section of the length of one LOT. Perform five QC density tests at random locations within the test section. At each test site, test the bottom 6 inches in addition to the entire course thickness. All QC tests and a Department Verification test must meet the density required by 200-7.2.1. Identify the test section with the compaction effort and thickness in the [Logbook Earthwork Records System \(ERS\) portion of the Department's database](#). Remove the materials above the bottom 6 inches, at no expense to the Department. The minimum density required on the thicker lift will be the average of the five results obtained on the thick lift in the passing test section. Maintain the exposed surface as close to "undisturbed" as possible; no further compaction will be permitted during the test preparation. If unable to achieve the required density, remove and replace or repair the test section to comply with the specifications at no additional expense to the Department. The Contractor may elect to place material in 6 inches compacted thickness at any time.

Once approved, a change in the source of base material will require the construction of a new test section. Do not change the compaction effort once the test section is approved. The Engineer will periodically verify the density of the bottom 6 inches during thick lift operations.

The Engineer may terminate the use of thick lift construction and instruct the Contractor to revert to the 6 inches maximum lift thickness if the Contractor fails to achieve satisfactory results or meet applicable specifications.

SUBARTICLE 200-7.2.1 is deleted and the following substituted:

**200-7.2 Acceptance Criteria:**

**200-7.2.1 Density:** Within the entire limits of the width and depth of the base, obtain a minimum density in any LOT of 98% of modified Proctor maximum density as determined by FM 1-T180, [Method D](#) or the Pit Proctor when using the Pit Proctor option. For shoulder only areas and shared use paths, obtain a minimum density of 95% of the modified Proctor maximum density as determined by FM 1-T180, [Method D](#) or the Pit Proctor when using the Pit Proctor option.

SUBARTICLE 200-7.2.3 is deleted and the following substituted:

**200-7.2.3 Pit Proctor:** In lieu of Modified Proctor Maximum Density testing at the roadway, notify the Engineer in writing that the Contractor option to use the Pit Proctor supplied by the Department will be used. The Modified Proctor maximum density frequency requirements of 200-7.2.2 shall not apply. The Department will determine the Pit Proctor from statistical analysis of the base rock Modified Proctor maximum density at Department approved mines. For posting of Mines and Pit Proctors for each calendar quarter refer to the Pit Proctor Quarterly report located at the following URL: <https://www.fdot.gov/materials/laboratory/geotechnical/aggregates/pitproctor/index.shtm> ~~State Materials Office internet website at https://www.fdot.gov/materials/~~. Use the current posted Pit Proctor value in lieu of the Modified Proctor maximum density required by 200-7.2.1. Use the current posted Pit Proctor value for density acceptance during the quarter corresponding to the posting. Notify the Engineer in writing if returning to the provisions of 200-7.2 and 200-7.2.2 but do not re-elect to use the Pit Proctor until the start of the next calendar quarter.

SUBARTICLE 200-7.3.1.3 is deleted and the following substituted:

**200-7.3.1.3 Surface & Thickness Reduced Testing Frequency:** When no Resolution testing is required for 12 consecutive verified LOTs, or if required, the QC test data was upheld, reduce the QC surface and/or thickness checks to one half the minimum requirements as stated in 200-7.2.2 (e.g., reduce frequency from ten per LOT to ten per two LOTs) by identifying the substantiating tests and notifying the Engineer in writing prior to starting reduced frequency of testing. If the Verification test fails, and QC test data is not upheld by Resolution testing the QC testing will revert to the original frequency of 200-7.2.2. The results of the Independent Verification testing will not affect the frequency of the QC testing. Do not apply reduced testing frequency in construction of shoulder-only areas, shared use paths, and sidewalks.

SUBARTICLE 200-7.3.2.1 is deleted and the following substituted:

**200-7.3.2 Department Verification Tests:**

**200-7.3.2.1 Maximum Density:** The Engineer will randomly select one of the remaining two split samples and test in accordance with FM 1-T180, ~~Method D~~.

SUBARTICLE 200-7.4.1 is deleted and the following substituted:

**200-7.4 Verification Comparison Criteria and Resolution Procedures:**

**200-7.4.1 Modified Proctor Maximum Density:** The Engineer will compare the Verification test results of 200-7.3.2.1 to the corresponding QC test results. If the test result is within 4.5 lb/ft<sup>3</sup> 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, ~~Method D~~.

The Engineer will compare the Resolution Test results with the QC test results. If the Resolution Test result is within 4.5 lb/ft<sup>3</sup> of the corresponding QC test result, the Engineer will use the QC test results for material acceptance purposes for each corresponding set of LOTs. If the Resolution test result is not within 4.5 lb/ft<sup>3</sup> of the corresponding QC test, the Engineer will collect the remaining Verification split sample for testing. Verification Test results will be used for material acceptance purposes for the LOTs in question.

SUBARTICLE 200-7.4.2 is deleted and the following substituted:

**200-7.4.2 Pit Proctor:** When using the Pit Proctor option, the Engineer will select a random location to sample and test at the minimum frequency in the table below, to obtain an Independent Verification (IV) maximum density as determined by FM 1-T180, ~~Method D~~. The Engineer will collect enough material to split and hold a sample for Resolution testing.

Test Name	Mainline Pavement Lanes, Turn Lanes, Ramps, Parking Lots, Concrete Box Culverts and Retaining Wall Systems	Shoulder-Only, Shared Use Path and Sidewalk Construction
IV Modified Proctor Maximum Density	One per 16 consecutive LOTs	One per 4 consecutive LOTs

The Engineer will compare the IV results with the Pit Proctor. If the IV result is lower than or equal to the Pit Proctor plus 4.5 pcf, keep the option to use the Pit Proctor. If the IV result is more than 4.5 pcf higher than the Pit Proctor the Engineer will test the Resolution sample and compare the Resolution result with the Pit Proctor. If the Resolution result is lower than or equal to the Pit Proctor plus 4.5 pcf, keep the option to use the Pit Proctor. Otherwise return to the provisions of 200-7.2.2, 200-7.3.1.1, 200-7.3.2.1, and 200-7.4.1.