ORIGINATION FORM

THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR

X Modify Specification _____285____.
Section/File number

☐ New Section _____.
Section number

Subject: Optional Base Course
Origination date: October 4, 2007

Originator: Tom Malerk
Office/Phone: State Materials Office – (352) – 955 - 6600
Email address/ Userid: tom.malerk@dot.state.fl.us
rt820tm

Problem statement: This modification is necessary to remove discrepancies between Specification 285- 6.1 & Specifications 200-7.3

Information source: Ben Watson, David Chason, or Willie Henderson

Background data: For more information contact Ben Watson (352) 955 – 2935.

Recommended Usage Note: All jobs

Estimated fiscal impact, if implemented: None

Implementation of these changes, if and when approved, will begin with the July 2008 letting.

Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
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STEPHANIE KOPELOUSOS
SECRETARY

M E M O R A N D U M

DATE: October 23, 2007

TO: Specification Review Distribution List

FROM: Duane F. Brautigam, P.E., State Specifications Engineer

SUBJECT: Proposed Specifications Change: 2850000-Optional Base Course

In accordance with Specification Development Procedures, we are sending you a copy of a proposed new specification change for Optional Base Course.

This change was proposed by Tom Malerk of the State Materials Office to delete specific requirements pertaining to base thickness.

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 SP965DB or duane.brautigam@dot.state.fl.us. Comments received after November 20, 2007 may not be considered. Your input is encouraged.

DFB/dm

Attachment

COMMENTS:

Submitted by: Phone #:

OPTIONAL BASE COURSE.
(REV 10-09-07)

SECTION 285 (Pages 219 and 220) is deleted and the following substituted:

SECTION 285
OPTIONAL BASE COURSE

285-1 Description.

Construct a base course composed of one of the optional materials shown on the typical cross-sections.

285-2 Materials.

Meet the material requirements as specified in the Section covering the particular type of base to be constructed.

Graded Aggregate	Section 204
Asphalt	Section 234
Limerock	Section 911
Shell Base	Section 913
Shell-Rock	Section 913A
Cemented Coquina	Section 915

285-3 Selection of Base Option.

The plans will include typical cross-sections indicating the various types of base construction (material and thickness) allowable.

Select one base option as allowed for each typical cross-section shown in the plans. Only one base option is permitted for each typical cross-section.

Notify the Engineer in writing of the base option selected for each typical cross-section at least 45 calendar days prior to beginning placement of base material.

285-4 Construction Requirements.

Construct the base in accordance with the Section covering the particular type of base to be constructed.

Limerock	Section 200
Shell Base	Section 200
Shell Rock	Section 200
Cemented Coquina	Section 200
Graded Aggregate	Section 204
Asphalt	Section 234

285-5 Variation in Earthwork Quantities.

The plans will identify the optional materials used by the Department for determining the earthwork quantities (Roadway Excavation, Borrow Excavation, Subsoil Excavation, Subsoil Earthwork, or Embankment). The Department will not revise the quantities, for those items having final pay based on plan quantity, to reflect any volumetric change caused by the Contractor’s selection of a different optional material.

285-6 Thickness Requirements.

285-6.1 Measurements: *For non-asphalt bases, meet the requirements of 200-7.3.1.2.*
For subbases, meet the thickness requirements of 290-4.
The Engineer will determine the thickness of asphalt base courses in accordance with 234-8.1.
~~When the Department is ready to check the finished base or granular subbase component of a composite base for thickness, provide traffic control, coring/boring equipment, and an operator for the coring/boring equipment. Provide traffic control in accordance with the standard maintenance of traffic requirements of the Contract. The Department will make no additional payment for traffic control or coring/boring. The Engineer will select the coring/boring locations and make the acceptance measurements.~~

~~Be present during the entire coring/boring operations for acceptance purposes.~~

~~Except for asphalt base courses, the Engineer will measure the thickness of the base or subbase through holes, at least 3 inches in diameter, bored at random points on the cross-section and along the roadway. The Engineer will locate each hole to represent a section of main roadway no longer than 200 feet, regardless of the number of lanes. The Engineer will determine the thickness of the base or subbase on shoulders and widening separate from the main roadway and will locate each hole to represent a section no longer than 500 feet on alternate sides of shoulder or widening.~~

~~For subbases, meet the thickness requirements of 290-4.~~

~~The Engineer will determine the thickness of asphalt base courses in accordance with 234-8.1.~~

285-6.2 Correction of Deficient Areas: For non-asphalt bases, correct all areas of the completed base having a deficiency in thickness in excess of 1/2 inch by scarifying and adding additional base material. As an exception, if authorized by the Engineer, such areas may be left in place without correction and with no payment.

For asphalt bases, correct all areas of deficient thickness in accordance with 234-8.1.3.

285-7 Calculation of Average Thickness of Base.

For bases that are not mixed in place, the Engineer will determine the average thickness from the measurements specified in 285-6.1, calculated as follows;

(a) When the measured thickness is more than 1/2 inch greater than the design thickness shown on the typical cross-section in the plans, it will be considered as the design thickness plus 1/2 inch.

(b) Average thickness will be calculated per typical cross-section for the entire job as a unit.

(c) Any areas of base left in place with no payment will not be included in the calculations.

(d) Where it is not possible through borings to distinguish the base materials from the underlying materials, the thickness of the base used in the measurement will be the design thickness.

(e) For Superpave asphalt base course, the average spread rate of each course shall be constructed in compliance with 234-8.1.3.

285-8 Method of Measurement.

The quantity to be paid for will be the plan quantity area in square yards, omitting any areas where under-thickness is in excess of the allowable tolerance as specified in 285-6. The

pay area will be the surface area, determined as provided above, adjusted in accordance with the following formula:

$$Pay\ Area = Surface\ Area\ (\frac{Calculated\ Average\ Thickness\ per\ 285\text{-}7}{Plan\ Thickness})$$

The pay area shall not exceed 105% of the surface area.

There will be no adjustment of the pay area on the basis of thickness for base courses constructed utilizing mixed-in-place operations.

For Superpave asphalt base course, the quantity to be paid for will be the plan quantity.

285-9 Basis of Payment.

Price and payment will be full compensation for all work specified in this Section, including tack coat between base layers, prime coat, cover material for prime coat, bituminous material used in bituminous plant mix, and cement used in soil-cement.

Where the plans include a typical cross-section which requires the construction of an asphalt base only, price adjustments for bituminous material provided for in 9-2.1.1 will apply to that typical cross-section. For typical cross-sections which permit the use of asphalt or other materials for construction of an optional base, price adjustments for bituminous material provided for in 9-2.1.1 will not apply.

Payment will be made under:

Item No. 285- 7- Optional Base - per square yard.