

Section 11.3

CATEGORIZING ASPHALT & OTHER BASE COURSES

11.3.1 Purpose

This procedure provides a means for categorizing the different asphalt courses, mix types, and illustrate the units of measure.

11.3.2 Authority

Sections 20.23(3)(a) and 334.048(3), Florida Statutes (F.S.)

11.3.3 References

Standard Specifications for Road and Bridge Construction (Specifications)

11.3.4 The Different Courses

Asphalt and other base courses discussed in this Section are: Superpave Asphalt Concrete, Composite Base, Optional Base (excluding asphalt base) and Reclaimed Asphalt Pavement (RAP) Base Courses.

11.3.4.1 Superpave Asphalt Concrete

Superpave mixes are categorized as fine graded.

Superpave mixes are divided into (A) Tonnage pay items and (B) Square Yard Pay Items. Each of these categories is divided into individual pay item groups.

(A) Tonnage Pay Items

Tonnage pay items include Friction Courses, Structural Courses, Turnout Construction (Asphalt), and Miscellaneous Asphalt.

Compensation for Tonnage pay items shall be by automatic printer tickets, showing weights along with the **Lot Submittal Package**, and shall be submitted with the Final Estimates Documentation for the Contract.

Refer to **CPAM 11.1** for Asphalt LOT Documentation requirements.

(1) Asphalt Concrete Friction Courses:

Friction course mixes are designated as FC-5, FC-9.5, and FC-12.5. These mixes must meet the plant and equipment requirements of **Specifications Section 320**, the general construction requirements of **Specifications Section 330**, Superpave Asphalt Concrete general requirements of **Specifications Section 334**, and Asphalt Friction Course general requirements of **Specifications Section 337**.

The pay quantity is based on the quantity placed on the project limited to a maximum of 105% of the adjusted plan quantity in accordance with **Specifications Section 337-11**.

Refer to **CPAM 11.4** for explanation and examples of asphalt adjustments.

(2) Asphalt Concrete Structural Courses:

Structural course mixes are designated as SP-9.5, SP-12.5, and SP-19.0. These mixes must meet the plant and equipment requirements of **Specifications Section 320**, and the general construction requirements of **Specifications Section 330 and 334**.

See **Specifications Section 334-3.2.1** for Mix Design Criteria and Traffic Level allowable substitutions.

The pay quantity is based on the quantity placed on the project limited to a maximum of 105% of the adjusted plan quantity in accordance with **Specifications Section 334-7**.

Refer to **CPAM 11.4** for explanation and examples of asphalt adjustments.

(3) Turnout Construction (Asphalt only)

Asphalt used on turnout construction can be any material specified by the Department, except for open-graded friction courses. Asphalt turnout construction is a tonnage pay item, and in general, the Department's Engineer will accept the material on the basis of visual inspection, with no testing required.

See **Specifications Sections 320-3** and **286** for method of measurement and basis of payment.

NOTE: There will be no Composite Pay Factor (CPF) adjustment (paid as CPF of 1) or thickness adjustment on Asphalt Turnout Construction.

(4) Miscellaneous Asphalt

Miscellaneous asphalt is used where vehicular traffic does not travel, such as median pavement, sidewalks, bicycle paths, and pavement under guardrail. The soil underneath these areas must be treated before asphalt is paved to prevent plant growth.

See **Specifications Sections 320-3** and **320-4** for method of measurement: The pay quantity is based on the quantity placed on the projects, limited to a maximum of 105% of the adjusted plan quantity for the pay item. For plan quantity calculation, a weight of 100 Lbs/SY per inch of design thickness of asphalt will be used.

See **Specifications Section 339-8** for basis of payment.

Refer to **CPAM 11.4** for an example of how to pay for miscellaneous asphalt for up to 105%.

(B) Square Yard Pay Items:

The only asphalt square yard pay item is Superpave Base (optional base asphalt). See **Specifications Section 285-3 Selection of Base Option** for optional base groups and structural numbers.

(1) Superpave Base Courses:

Base course mixes are designated as B-12.5. However, the Contractor may use type SP-12.5 mixture (traffic level B, C, D, or E) instead of type B-12.5, per **Specifications 234-1**.

Superpave Base is paid for on an area basis and in square yards. The area is the plan quantity subject to provisions of **Specifications Section 9-3**.

- (a) The pay area shall not exceed 105% of the designed surface area.
- (b) There will be a Bituminous Adjustment where the plans include a typical cross-section which requires the construction of asphalt base option only, and only if the requirements of **Specifications Section 9-2.1.2** are met.
- (c) If plan quantity error exceeds the limitations established in **Specifications Section 9-3**, then record documentation for the change only. See **CPAM 11.4** for more information on Square Yard Asphalt Pay Items and examples.

11.3.4.2 Composite Base

Composite Base is a combination of granular material and asphalt. The Subbase (granular) is cored prior to placing asphalt. All areas over 1/2" or under 1/4" of specified granular thickness must be corrected prior to placing asphalt. The asphalt is placed according to **Specifications Section 234-8** and must be controlled within $\pm 5\%$ of the specified spread rate. The average spread rate of the asphalt shall be converted to inches by reversing the formula specified in **Specifications Section 234-8.1** and added to the average thickness of the Subbase. The thickness adjustment is applied for the composite base pay item limited to a maximum 105% of the surface area, as specified in **Specifications Section 285-8**. (See example in **CPAM 11-4** "Adjustments" under "Appendix C: Composite Base Thickness Adjustment"). For Bituminous Adjustments on Composite Base, refer to **CPAM 11.4**. For the requirements of the mixture and CPF, refer to **Specifications Section 234** for Basis of Payment and **Specifications Section 334**.

11.3.4.3 Optional Base (Excluding Asphalt Base)

Optional base, such as Graded Aggregate, Limerock, Cemented Coquina, Shell Base, Shell-Rock, and Recycled Concrete Aggregate (RCA) is paid for on an area basis in square yards. The area is plan quantity subject to provisions of **Specifications Section 9-3**. See **Specifications Section 285**.

- (A) Optional base receives a thickness adjustment, and the pay area shall not exceed 105% of the finished surface area.
- (B) There will be no Bituminous Adjustments on the asphalt base where the plans include a typical cross-section indicating the option of using either Limerock or Asphalt as Base.
- (C) If plan quantity changes or errors exceed the limitations established in **Specifications Section 9-3**, then document the change only on the appropriate Department form.

NOTE 1: Documentation on Plan Summary Boxes and calculations could be shown on the Summary Box or submitted with the plans and referenced in the Summary Box.

NOTE 2: On Lump Sum & Design Build Projects the pay quantity is limited to 100% of the adjusted quantity per **Special Provisions, Section 9-2** and Design Build **Specifications, Section 9-2** for all Asphalt items. For all other adjustments, see **CPAM 6.2**. There will be no thickness Adjustments for Optional Base (excluding Asphalt Base).

11.3.4.4 Reclaimed Asphalt Pavement (RAP) Base

RAP is used only on non-limited access paved shoulders, shared use paths, or other non-traffic bearing applications. See **Specifications 283**. For Payment see **Specifications 285**.