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**DEPARTMENT OF TRANSPORTATION  
STATE OF GEORGIA**

**SPECIAL PROVISION**

**Section 402—Hot Mix Recycled Asphaltic Concrete**

*Delete Subsection 402.5 and substitute the following:*

**402.5 Payment**

The work performed and the materials furnished as described in this Specification will be paid for at the Contract Unit Price per ton (megagram). Payment is full compensation for providing materials, hauling and necessary crushing, processing, placing, rolling and finishing the recycled mixture, and providing labor, tools, equipment, and incidentals necessary to complete the work, including hauling and stockpiling RAP or RAS material.

Payment will be made under:

Item No. 402	Recycled asphaltic concrete ___ mm Superpave, group-blend, including bituminous materials	Per ton (megagram)
Item No. 402	Recycled asphaltic concrete ___ mm Superpave, group-blend, including bituminous materials and hydrated lime	Per ton (megagram)
Item No. 402	Recycled asphaltic concrete ___ mm Superpave, group-blend, including polymer-modified bituminous materials and hydrated lime	Per ton (megagram)
Item No. 402	Recycled asphaltic concrete ___ mm Superpave, Type __, group-blend, including bituminous materials and hydrated lime	Per ton (megagram)
Item No. 402	Recycled asphaltic concrete _____ mm mix, group-blend, including bituminous materials and hydrated lime	Per ton (megagram)
Item No. 402	_____ in (mm) recycled asphaltic concrete <u>type</u> Superpave, group-blend, including bituminous materials	Per square yard (meter)
Item No. 402	_____ in (mm) recycled asphaltic concrete <u>type</u> Superpave, group-blend, including bituminous materials and hydrated lime	Per square yard (meter)
Item No. 402	_____ in (mm) recycled asphaltic concrete <u>type</u> Superpave, group-blend, including polymer-modified bituminous materials and hydrated lime	Per square yard (meter)
Item No. 402	_____ in (mm) recycled asphaltic concrete _____ mm mix, group-blend, including bituminous materials and hydrated lime	Per square yard (meter)
Item No. 402	Recycled asphaltic concrete patching including bituminous materials	Per ton (megagram)
Item No.	Recycled asphaltic concrete patching including bituminous	Per ton (megagram)

402	materials and hydrated lime	
Item No. 402	Recycled asphaltic concrete leveling including bituminous materials	Per ton (megagram)
Item No. 402	Recycled asphaltic concrete leveling including bituminous materials and hydrated lime	Per ton (megagram)

Asphalt Cement Price Adjustment payment or deductions will be made under:

Item No. 402	Asphalt Cement Price Adjustment	\$ (+/-)
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#### 402.5.01 Adjustments

##### A. Determine Lot Acceptance

The control sieves used in the mixture acceptance schedule for the various types of mix are indicated below:

Control Sieves Used in the Mixture Acceptance Schedule	
Asphaltic concrete 25 mm Superpave	1/2 in., No. 8 (12.5 mm, 2.36 mm) sieves and asphalt cement
Asphaltic concrete 19 mm Superpave	3/8 in., No. 8 (9.5 mm, 2.36 mm) sieves and asphalt cement
Asphaltic concrete 12.5 mm Superpave	3/8 in., No. 8 (9.5 mm, 2.36 mm) sieves and asphalt cement
Asphaltic concrete 9.5 mm Superpave	No. 4, No. 8 (4.75 mm, 2.36 mm) sieves and asphalt cement
Asphaltic concrete 4.75 mm Mix	No. 8 (2.36 mm) sieve and asphalt cement

The Department will perform the following tasks:

1. Determine the mean of the deviations from the job mix formula per test results per lot.
2. Determine this mean by averaging the actual numeric value of the individual deviations from the job mix formula; disregard whether the deviations are positive or negative amounts.

##### B. Calculate Pavement Mean Air Voids

The Department will determine the percent of maximum air voids for each lot by dividing the pavement mean air voids by the maximum pavement mean air voids acceptable.

##### C. Asphaltic Concrete for Temporary Detours

Hot mix asphaltic concrete placed on temporary detours that will not remain in place as part of the permanent pavement does not require hydrated lime. Hot mix used for this purpose is paid for at an adjusted Contract Price.

Where the Contract Price of the asphaltic concrete for permanent pavement is let by the ton (megagram), the Contract Price for the asphaltic concrete placed on temporary detours is adjusted by subtracting \$0.75/ton (\$0.85/mg) of mix used.

Where the Contract price of the mix in the permanent pavement is based on the square yard (meter), obtain the adjusted price for the same mix used on the temporary detour by subtracting \$0.04/yd<sup>2</sup> (\$0.05/ m<sup>2</sup>) per 1-in (25-mm) plan depth.

Further price adjustments required in [Subsection 400.3.06, "Quality Acceptance."](#) are based on the appropriate adjusted Contract Price for mix used in the temporary detour work.

##### D. Determine Lot Payment

If the Engineer determines that the material is not acceptable to leave in place, remove and replace the materials at the Contractor's expense.

## E. Asphalt Cement Price Adjustment

1. **Formula:** The Asphalt Cement Price Adjustment will be computed on a *monthly* basis in accordance with the following:

PA = Price Adjustment.

APM= the “Monthly Asphalt Cement Price” for the month the hot mix asphalt is placed.

APL = the “Monthly Asphalt Cement Price” for the month which the project was let.

TMT = Total Monthly Tonnage of asphalt cement computed by the Engineer based on the Hot Mix Asphaltic Concrete of the various types per ton (megagram) certified for payment.

- a. If the asphalt cement price for the month is *greater* than the asphalt cement price for the month in which the project was let:

$$PA = [((APM-APL)/APL) - 0.05] \times TMT \times APL$$

- b. If the asphalt cement price for the month is *less* than the asphalt cement price for the month in which the project was let:

$$PA = [((APM-APL)/APL) + 0.05] \times TMT \times APL$$

2. **Price Adjustment Triggers:** No price adjustment shall be made on any hot mix asphalt placed on projects with less than 366 calendar days from the Contract Letting Date to the specified completion date. If the Original Contract contains 366 calendar days or more the Price Adjustment Trigger shall be made for any hot mix asphalt placed from the Contract Letting Date to the specified completion date. A price adjustment shall not be made until the APM is greater than 5% above or below the APL.

3. **“Monthly Asphalt Cement Price”:** The Department will determine and publish a “Monthly Asphalt Cement Price” based on the following formulas:

$$\text{Monthly Asphalt Cement Price} = (50\% \times \text{NBAP}) + (50\% \times \text{LBAP});$$

Where;

NBAP = “National Base Asphalt Price”, (in dollars/ton) is calculated based on arithmetic average of the previous four weeks “Posted Prices Asphalt Cement” for the “East Coast Market – GA/FL” as listed in the “ASPHALT WEEKLY MONITOR®” published by “Poten and Partners” or at [www.poten.com](http://www.poten.com).

LBAP = “Local Base Asphalt Price”, (in dollars/ton) is based on the arithmetic average posted price of PG asphalt cement as specified in Section 820, from the Department’s monthly survey obtained from approved asphalt cement suppliers of bituminous materials to the Department projects F.O.B. the suppliers terminal. However, the highest price and the lowest price are excluded from the calculation of average price, LBAP.

4. **“Asphalt Cement Quantity Calculation”:** The calculation of asphalt cement quantity for each mix type will be based on the asphalt cement content (*AC %*) of the approved Job Mix Formula (JMF) as specified in Subsection 400.1.03.C. The following calculation formula will be used to determine asphalt cement quantity:

$$\text{Asphalt Cement Quantity} = \text{Hot Mix Asphaltic Concrete monthly total in tons (megagrams) per mix type certified for the payment} \times \text{AC } (\%)$$

The Total Monthly Tonnage (TMT) of asphalt cement computed by the Engineer will be calculated as follows:

TMT = Sum of all asphalt cement quantities, including polymer modified asphalt binder and non-modified asphalt cement, based on the Hot Mix Asphaltic Concrete of the various mix types per ton (megagram) certified for payment.

Asphalt Cement Price for the Month (APM) will be adjusted monthly. Price adjustments (PA) will be made monthly and all calculations for Price Adjustments shall be performed by the Engineer as specified in SOP-39 "Determination of Asphalt Cement Index and Asphalt Cement Price Adjustment".

5. **"Other Restrictions":**

- a. No asphalt cement price adjustment will be made for cut-back, and emulsified asphalt when used for bituminous tack coat.
- b. There is a cap of 125% above the APL for any price adjustment.
- c. Unless specifically provided for by Supplemental Agreement or Contract Amendment, no further asphalt cement price adjustment will be made after ***the original Contract Time has expired.*** Irrespective of any other provision in the contract, for purposes of this specification, "Contract Time" does not include any time extensions or Supplemental Agreements which affect the completion of the Contract. The Asphalt Cement Price Adjustment for any hot mix asphalt placed after the original Contract Time expires will be computed based on the Monthly Asphalt Cement Price at the time the Contract Time has expired, or the Monthly Asphalt Cement Price at the time the Contract was let, *whichever is less.*