

**S T A T E**

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**T E N N E S S E E**

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January 1, 2021

**SPECIAL PROVISION**

**REGARDING**

**PAYMENT ADJUSTMENT FOR BITUMINOUS MATERIAL**

This Special Provision covers the method of payment adjustment for bituminous materials.

**100% Virgin Bituminous Material**

A payment adjustment will be made to compensate for increases and decreases of 5% or more in the contractor's bituminous material cost. The normal bid items in the contract covering the bituminous material shall not be changed. Payment adjustments (+/-) shall be paid under "Payment Adjustment for Bituminous Material" and calculated as described herein:

A "Basic Bituminous Material Index" will be established by the Tennessee Department of Transportation prior to the time the bids are opened. This "Basic Bituminous Material Index" is the average of the current quotations on P.G. 64-22 from suppliers furnishing asphalt cement to contractors in the State of Tennessee. These quotations are the cost per ton f.o.b. supplier's terminal.

The "Basic Bituminous Material Index" for this project is \$\_\_\_\_\_ per ton.

The "Monthly Bituminous Material Index" is also established on the first day of each month by the same method. A payment adjustment shall be made provided the "Monthly Bituminous Material Index" varies 5% or more (+/-) from the "Basic Bituminous Material Index".

Where the price index varies 5% or more, the payment adjustment will be made as follows:

$$PA = [Ic - Ib] \times T$$

Where:

- PA = Price Adjustment for Adjustment Month
- Ib = Basic Bituminous Material Index
- Ic = Monthly Bituminous Material Index
- T = Tons bituminous material for Adjustment Month

Payment adjustment will be applied to all asphalt cement, asphalt emulsion, or bituminous material used for paving on this project.

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for bituminous material will continue to be

made only when the "Monthly Bituminous Material Index" is **less** than the "Basic Bituminous Material Index" and varies 5% or more.

Payment adjustment, for bituminous material used after the expiration of the allocated working time and where the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", will **not** be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, payment adjustments for bituminous material shall be calculated for each month where the allocated working time has expired, the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", and the indices vary 5% or more. The calculation of the bituminous payment adjustment shall be made using the "Monthly Bituminous Material Index" or the "Bituminous Material Index for Contract Completion Date" in accordance with the following formulas:

The "Bituminous Material Index for Contract Completion Date" is the Monthly Bituminous Material Index in effect on the allocated Contract Completion Date or on the completion date as extended by Change Order.

The "Monthly Bituminous Material Index" is **less** than the "Bituminous Material Index for Contract Completion Date".

$$PA = [Ic - Ib] \times T$$

The "Monthly Bituminous Material Index" is **greater** than the "Bituminous Material Index for Contract Completion Date".

$$PA = [Icd - Ib] \times T$$

Where:

- PA = Price Adjustment for Adjustment Month
- Ib = Basic Bituminous Material Index
- Ic = Monthly Bituminous Material Index
- Icd = Bituminous Material Index for Contract Completion Date (or as extended by Change Order)
- T = Tons

**FOR REFERENCE ONLY**

SiteManager calculates the price adjustment based on the actual amount of asphalt cement (residue) in the emulsion using the following percentages:

- tack coats and shoulder sealants (e.g. SS-1, SS-1h, CSS-1, Css-1h) 63% residue
- prime coats (e.g. AE-P) 54% residue
- scrub seals and microsurfacing (e.g. CQS-1HP) 65% residue
- chip seals (e.g. CRS-2, CRS-2P) 69% residue
- hot in-place recycle (ARA-3P) 63% residue

**Mixes Containing Recycled Bituminous Material**

The quantity of virgin asphalt cement in tons subject to payment adjustment in recycled mixes shall be the product of the total tons of each mix multiplied by the difference between (1) the percent of asphalt cement specified for bidding purposes and (2) the percent of asphalt cement obtained from the recycled asphaltic material (RAP) used in each mix. No payment adjustment under this special provision for increases and decreases in the contractor's cost for virgin asphalt cement in recycled mixes will be allowed for asphalt cement content in excess of the percent specified for bidding purposes, as all payment adjustments for asphalt cement in the mix design of recycled mixes in excess of the percent of asphalt cement specified for bidding purposes will be made in accordance with the Standard Specifications.

No payment adjustment for bituminous material containing RAP shall be made unless the "Monthly Bituminous Material Index" varies 5% or more from the "Basic Bituminous Material Index" indicated in this Special Provision.

Where the price index varies 5% or more, the payment adjustment will be made as follows:

$$PA = \frac{[Ic - Ib] \times [BA - RA]}{100} \times Tm$$

- PA = Price Adjustment for Adjustment Month
- Ib = Basic Bituminous Material Index
- Ic = Monthly Bituminous Material Index
- BA = Percent asphalt specified for bidding purposes
- RA = Percent asphalt obtained from recycled asphaltic material used in each mix
- Tm = Tons asphalt mix for adjustment month

Upon the expiration of the allocated working time, as set forth in the original contract or as extended by Change Order, payment adjustments for bituminous material containing RAP will continue to be made only when the "Monthly Bituminous Material Index" is **less** than the "Basic Bituminous Material Index" and varies 5% or more.

Payment adjustment, for bituminous material containing RAP provided after the expiration of the allocated working time and where the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", shall **not** be made until after the contract records have been approved by Final Records (FR)/Materials & Tests (MT) and a Final Estimate is ready to be processed. Upon contract record approval by FR/MT, payment adjustments for bituminous material containing RAP shall be calculated for each month where the allocated working time has expired, the "Monthly Bituminous Material Index" **exceeds** the "Basic Bituminous Material Index", and the indices vary 5% or more. The calculation of the bituminous payment adjustment shall be made using the "Monthly Bituminous Material Index" or the "Bituminous Material Index for Contract Completion Date" in accordance with the following formulas:

The "Bituminous Material Index for Contract Completion Date" is the Monthly Bituminous Material Index in effect on the allocated Contract Completion Date or on the completion date as extended by Change Order.

The “Monthly Bituminous Material Index” is **less** than the “Bituminous Material Index for Contract Completion Date”.

$$PA = [Ic - Ib] \times \frac{[BA - RA]}{100} \times Tm$$

The “Monthly Bituminous Material Index” is **greater** than the “Bituminous Material Index for Contract Completion Date”.

$$PA = [Icd - Ib] \times \frac{[BA - RA]}{100} \times Tm$$

Where:

PA =	Price Adjustment for Adjustment Month
Ib =	Basic Bituminous Material Index
Ic =	Monthly Bituminous Material Index
Icd =	Bituminous Material Index for Contract Completion Date (or as extended by Change Order)
BA =	Percent asphalt specified for bidding purposes
RA =	Percent asphalt obtained from recycled asphaltic material used in each mix
Tm =	Tons asphalt mix for adjustment month