New Jersey Department of Transportation

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Baseline Document Change Announcement

ANNOUNCEMENT: BDC22S-09

DATE: January 17, 2023

SUBJECT: Fuel and Asphalt Price Adjustments

Revision to the 2019 Standard Specifications for Road and Bridge

Construction, Section 160

Section 160 of the 2019 Standard Specifications for Road and Bridge Construction has been revised in order to address increasing volatility of fuel and asphalt prices, allowing calculations to be performed on either a monthly or bi-monthly basis as needed. The item MICRO-MILLING and various concrete items have been added to the table of items eligible for fuel price adjustment.

The following revisions have been incorporated into the 2019 Standard Specifications via the 2019 Standard Inputs, SI2019:

SECTION 160 – PRICE ADJUSTMENTS

160.01 DESCRIPTION

This Section describes the requirements for price adjustments for fuel and asphalt usage.

160.02 MATERIALS

(Intentionally Blank)

160.03 PROCEDURE

160.03.01 Fuel Price Adjustment

The Department will make price adjustments for fuel usage for Items listed in <u>Table 160.03.01-1</u>. Each month may be divided into two periods. Period one includes the first day of the month through the fourteenth day of the month. Period two includes the fifteenth day of the month through the last day of the month. Work starting within period one and continuing past midnight of the fourteenth day into the fifteenth day of the month will be included in period one for any price adjustments. Work continuing past midnight of the last day of the month into the first day of the next month will be included in period two.

The Department will calculate fuel price adjustments based on the pay quantities of listed Items using the fuel usage factors listed in <u>Table 160.03.01-1</u>.

Price adjustments may result in an increased payment to the Contractor for increases in the price index and may result in a reduction in payment for decreases in the price index.

If the as-built quantity of an Item listed in <u>Table 160.03.01-1</u> differs from the sum of the quantities in the Estimates and the as-built quantity cannot be readily distributed among the time periods that the Item listed in <u>Table 160.03.01-1</u> was constructed, then the Department will determine fuel price adjustment by distributing the difference in the same proportion as the Item's Estimate quantity is to the total of the Item's time period estimates.

Table 160.03.01-1 Fuel Price Adjustments Items Fuel Usage Factor		
EXCAVATION, UNCLASSIFIED	0.50 Gallons per Cubic Yard	
EXCAVATION, CIVELISISH ILD EXCAVATION, REGULATED MATERIAL	0.50 Gallons per Cubic Yard	
EXCAVATION, ACID PRODUCING SOIL	0.50 Gallons per Cubic Yard	
REMOVAL OF PAVEMENT	0.25 Gallons per Square Yard	
MICRO-MILLING	0.25 Gallons per Square Yard	
HMA MILLING, 3" OR LESS	0.25 Gallons per Square Yard	
HMA MILLING, MORE THAN 3" TO 6"	0.25 Gallons per Square Yard	
CONCRETE MILLING	0.25 Gallons per Square Yard	
HMA PROFILE MILLING	0.25 Gallons per Square Yard	
BREAKING PAVEMENT	0.25 Gallons per Square Yard	
RUBBLIZATION	0.25 Gallons per Square Yard	
SUBBASE	1.00 Gallon per Cubic Yard	
I SOIL AGGREGATE	1.00 Gallon per Cubic Yard	
SOIL AGGREGATE BASE COURSE, " THICK	1.00 Gallon per Cubic Yard	
SOIL AGGREGATE BASE COURSE, VARIABLE THICKNESS	1.00 Gallon per Cubic Yard	
DENSE-GRADED AGGREGATE BASE COURSE, " THICK	1.00 Gallon per Cubic Yard	
DENSE-GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS	1.00 Gallon per Cubic Yard	
CONCRETE BASE COURSE, " THICK	0.25 Gallons per Square Yard	
CONCRETE BASE COURSE, REINFORCED " THICK	0.25 Gallons per Square Yard	
ASPHALT-STABILIZED DRAINAGE COURSE	2.50 Gallons per Ton	
OPEN-GRADED FRICTION COURSE	2.50 Gallons per Ton	
HOT MIX ASPHALT SURFACE COURSE	2.50 Gallons per Ton	
HOT MIX ASPHALT INTERMEDIATE COURSE	2.50 Gallons per Ton	
HOT MIX ASPHALT BASE COURSE	2.50 Gallons per Ton	
MODIFIED OPEN-GRADED FRICTION COURSE	2.50 Gallons per Ton	
ULTRA-THIN FRICTION COURSE	2.50 Gallons per Ton	
STONE MATRIX ASPHALT SURFACE COURSE	2.50 Gallons per Ton	
HIGH PERFORMANCE THIN OVERLAY	2.50 Gallons per Ton	
BINDER RICH INTERMEDIATE COURSE	2.50 Gallons per Ton	
BRIDGE DECK WATERPROOFING SURFACE COURSE	2.50 Gallons per Ton	
NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	2.50 Gallons per Ton	
COLOR-COATED NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	2.50 Gallons per Ton	
CONCRETE SURFACE COURSE, " THICK	0.25 Gallons per Square Yard	
CONCRETE SIDEWALK, 4" THICK	0.25 Gallons per Square Yard	
CONCRETE SIDEWALK, 5" THICK	0.25 Gallons per Square Yard	
CONCRETE SIDEWALK, 6" THICK	0.25 Gallons per Square Yard	
CONCRETE SIDEWALK, 8" THICK	0.25 Gallons per Square Yard	
CONCRETE SIDEWALK, REINFORCED, 6" THICK	0.25 Gallons per Square Yard	
CONCRETE SIDEWALK, REINFORCED, 8" THICK	0.25 Gallons per Square Yard	

tems	Fuel Usage Factor
DIAMOND GRINDING OF CONCRETE SURFACE COURSE	0.25 Gallons per Square Yard
DIAMOND GRINDING EXISTING CONCRETE PAVEMENT	0.25 Gallons per Square Yard
LURRY SEAL AGGREGATE, TYPE II	2.5 Gallons pero Ton
LURRY SEAL EMULSION	0.10 Gallons per Gallon
CONCRETE BRIDGE APPROACH	0.50 Gallons per Cubic Yard
CONCRETE CULVERT	1.00 Gallon per Cubic Yard
ONCRETE FOOTING	1.00 Gallon per Cubic Yard
CONCRETE WING WALL	1.00 Gallon per Cubic Yard
ONCRETE PIER COLUMN PROTECTION, HPC	1.00 Gallon per Cubic Yard
CONCRETE PIER COLUMNS AND CAP	1.00 Gallon per Cubic Yard
CONCRETE ABUTMENT WALL	1.00 Gallon per Cubic Yard
CONCRETE PIER SHAFT	1.00 Gallon per Cubic Yard
CONCRETE PEDESTRIAN BRIDGE	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE DECK	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE DECK, HPC	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE SIDEWALK	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE SIDEWALK HPC	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE PARAPET	1.00 Gallon per Cubic Yard
CONCRETE BRIDGE PARAPET HPC	1.00 Gallon per Cubic Yard
5" BY 32" CONCRETE BARRIER CURB, BRIDGE	0.12 Gallon per Linear Foot
4" BY 32" CONCRETE BARRIER CURB, BRIDGE	0.17 Gallon per Linear Foot
1" BY 34" CONCRETE BARRIER CURB, BRIDGE	0.15 Gallon per Linear Foot
4" BY 42" CONCRETE BARRIER CURB, BRIDGE	0.21 Gallon per Linear Foo
CAST-IN-PLACE CONCRETE PILES, DRIVEN " DIAMETER	1.00 Gallon per Cubic Yard
ETAINING WALL, LOCATION NO	0.10 Gallon per Square Foot
CONCRETE MEDIAN BARRIER, HPC	0.16 Gallon per Linear Foot
5" BY 41" CONCRETE BARRIER CURB	0.28 Gallon per Linear Foot
4" BY 32" CONCRETE BARRIER CURB	0.17 Gallon per Linear Foot
5" BY 54" CONCRETE BARRIER CURB	0.15 Gallon per Linear Foot
8" BY 79" CONCRETE BARRIER CURB	0.40 Gallon per Linear Foot
4" BY 39" CONCRETE BARRIER CURB	0.18 Gallon per Linear Foot
8 5/8" BY 65" CONCRETE BARRIER CURB	0.20 Gallon per Linear Foot
2" BY 41" CONCRETE BARRIER CURB	0.24 Gallon per Linear Foot
4" BY 41" CONCRETE BARRIER CURB	0.19 Gallon per Linear Foot
4" BY 45" CONCRETE BARRIER CURB	0.19 Gallon per Linear Foot
5" BY 35" CONCRETE BARRIER CURB, DOWELLED	0.09 Gallon per Linear Foot
5" BY VARIABLE HEIGHT CONCRETE BARRIER CURB	0.28 Gallon per Linear Foot
4" BY VARIABLE HEIGHT CONCRETE BARRIER CURB	0.15 Gallon per Linear Foot
5" BY VARIABLE HEIGHT CONCRETE BARRIER CURB, DOWELLED	0.24 Gallon per Linear Foot
4" BY VARIABLE HEIGHT CONCRETE BARRIER CURB, DOWELLED	0.15 Gallon per Linear Foot
9" BY 32" CONCRET BARRIER CURB, DOWELLED	0.10 Gallon per Linear Foot
4" BY 32" CONCRETE BARRIER CURB, DOWELLED	0.13 Gallon per Linear Foot
4 1/2" BY 53" CONCRETE BARRIER CURB, DOWELLED	0.18 Gallon per Linear Foot
4 1/2" BY VARIABLE HEIGHT CONCRETE BARRIER CURB, DOWELLED	0.15 Gallon per Linear Foot

Table 160.03.01-1 Fuel Price Adjustments		
Items	Fuel Usage Factor	
GROUND MOUNTED BARRIER CURB	0.15 Gallon per Linear Foot	
15" BY 51" F SHAPE CONCRETE BARRIER CURB	0.34 Gallon per Linear Foot	
24 1/2" BY 51" F SHAPE CONCRETE BARRIER CURB	0.23 Gallon per Linear Foot	
24 1/2" BY" F SHAPE CONCRETE BARRIER CURB, DOWELLED	0.23 Gallon per Linear Foot	
15" BY VARIABLE HEIGHT F SHAPE CONCRETE BARRIER CURB, DOWELLED	0.34 Gallon per Linear Foot	
15" BY" F SHAPE CONCRETE BARRIER CURB, DOWELLED	0.34 Gallon per Linear Foot	
VARIABLE WIDTH BY VARIABLE HEIGHT F SHAPE CONCRETE BARRIER CURB	0.34 Gallon per Linear Foot	
9" BY 16" CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot	
9" BY 18" CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot	
9" BY 20" CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot	
9" BY 22" CONCRETE VERTICAL CURB	0.05 Gallon per Linear Foot	
9" BY 14" CONCRETE VERTICAL CURB	0.03 Gallon per Linear Foot	
9" BY 4" CONCRETE VERTICAL CURB, DOWELLED	0.01 Gallon per Linear Foot	
9" BY 6" CONCRETE VERTICAL CURB, DOWELLED	0.01 Gallon per Linear Foot	
9" BY 8" CONCRETE VERTICAL CURB, DOWELLED	0.02 Gallon per Linear Foot	
9" BY 10" CONCRETE VERTICAL CURB, DOWELLED	0.02 Gallon per Linear Foot	
12" BY 13" CONCRETE SLOPING CURB	0.04 Gallon per Linear Foot	
12" BY 3" CONCRETE SLOPING CURB, DOWELLED	0.01 Gallon per Linear Foot	
" BY" CONCRETE SLOPING CURB, DOWELLED	0.01 Gallon per Linear Foot	
9" BY VARIABLE HEIGHT CONCRETE VERTICAL CURB	0.04 Gallon per Linear Foot	
9" BY VARIABLE HEIGHT CONCRETE VERTICAL CURB, DOWELLED	0.02 Gallon per Linear Foot	

If an item listed in <u>Table 160.03.01-1</u> has a payment unit which differs from that listed in <u>Table 160.03.01-1</u>, the Department will apply an appropriate conversion factor to determine the number of gallons of fuel used.

The Department will calculate fuel price adjustment using the following formula:

$$F = (MF - BF) \times G$$

Where:

F = Fuel Price Adjustment

MF = Fuel Price Index for work performed in the time period immediately before the estimate cutoff date.

BF = Basic Fuel Price Index

G = Gallons of Fuel for Price Adjustment

The Department will post the Fuel Price Index every month on the Department's website: https://www.state.nj.us/transportation/business/aashtoware/PriceIndex.shtm.

The Basic Fuel Price Index is the Index which is listed for the month prior to the receipt of bids. If the month prior to the receipt of bids has two Indexes, the Index in effect for the first day of that month will govern for the Basic Fuel Price Index. If the Fuel Price Index increases by 50 percent or more over the Basic Fuel Price Index, do not perform any work involving Items listed in <u>Table 160.03.01-1</u> without written approval from the RE.

160.03.02 Asphalt Price Adjustment

The Department will make price adjustments for asphalt binder usage. The Department will calculate asphalt price adjustments based on the quantities of Items containing asphalt binder constructed.

Each month may be divided into two periods. Period one includes the first day of the month through the fourteenth day of the month. Period two includes the fifteenth day of the month through the last day of the month. Work starting on the fourteenth day of the month and continuing past midnight into the fifteenth day of the month will be included in period one for any price adjustments. Work continuing through midnight of the last day of the month into the first day of the next month will be included in period two.

The Asphalt Price Adjustment will be separated between ashpalt binder grades PG 64S-22 and PG 64E-22. The price used for both the Basic and Monthly Price Indexes will be determined based on the performance grade of asphalt binder in the approved mix design for the asphalt mixture.

Price adjustments may result in an increased payment to the Contractor for increases in the price index and may result in a reduction in payment for decreases in the price index.

The Department will calculate the asphalt price adjustment by the following formula:

$$A = (MA - BA) \times T$$

Where:

A = Asphalt Price Adjustment

MA = Asphalt Price Index for work performed in the time period immediately before the estimate cutoff date.

BA = Basic Asphalt Price Index

T = Tons of New Asphalt Binder¹

1. The Department will determine the weight of asphalt binder for price adjustment by multiplying the percentage of new asphalt binder in the approved job mix formula by the weight of the item containing asphalt binder. If a Hot Mix Asphalt Item has a payment unit other than ton, the Department will apply an appropriate conversion factor to determine the number of tons of asphalt binder used.

For Tack Coat, Prime Coat, MICRO SURFACING EMULSION, SLURRY SEAL EMULSION, and FOG SEAL SURFACE TREATMENT, the Department will calculate the weight of asphalt as follows:

$$T = G \times C \times 0.00428$$

C = Petroleum content of the product

Use 100% for Tack Coat 64-22 and Tack Coat 64E-22

Use 60% for Polymer Modified Tack Coat, and all other emulsified asphalts

G = Gallons furnished

The constant 0.00428 is derived from the conversion factor of tons per gallon using 8.345 lbs/gallon for water and a factor of 1.025 for the specific gravity of asphalt binder.

The Department will not calculate an asphalt price adjustment for FOG SEAL STRIP.

The monthly asphalt price index, as determined by the Department, will be the average of quotations from suppliers serving the area in which the Project is located, and will be determined by the Department. The Department will post the asphalt price index every month on the Department's website: https://www.state.nj.us/transportation/business/aashtoware/PriceIndex.shtm.

The Basic Asphalt Price Index will be the Index which is listed for the month prior to the receipt of bids. If the month prior to the receipt of bids has two Indexes, the Index in effect for the first day of the month will govern for the Basic Asphalt Price Index.

The Monthly Asphalt Price Index will be that for the month that the work is constructed in. If work is constructed over the course of two or more months for a particular pay estimate, then multiple Monthly Indexes will be used corresponding to the date that the work was performed.

If the Asphalt Price Index increases 50 percent or more over the basic asphalt price index, do not perform work on Items containing asphalt binder without written approval from the RE.

160.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

ItemPay UnitFUEL PRICE ADJUSTMENTDOLLARASPHALT PRICE ADJUSTMENTDOLLAR

The Items FUEL PRICE ADJUSTEMENT and ASPHALT PRICE ADJUSTMENT must be included in the Proposal to qualify for payment.

Implementation Code R (ROUTINE)

Schneider

Changes must be implemented in all applicable Department projects scheduled for Final Design Submission at least one month after the date of the BDC announcement. This will allow designers to make necessary plan, specifications, and estimate/proposal changes without requiring the need for addenda or postponement of advertisement or receipt of bids.

Recommended By:

Paul F. Schneider

Director

Capital Program Support

Approved By:

Parth Oza, P.E.

Acting Assistant Commissioner Capital Program Management

and Deputy State Transportation Engineer

PS: NE: MS