

Memo

New Mexico State Highway & Transportation Department

SUBJECT: Design Directive 2-2002-Design
PMBP SP Complete Item (Payment by Ton, t)

DATE: 12-September-2002

TO: Internal Project Development Engineers-North
(Ed Escudero, Dan Garcia, Sixto Martinez, Robert Garcia, Joe Garcia)
Internal Project Development Engineers-South
(Mark Fahey, Benny Martinez, David Trujillo)

FROM: Roy P. Maestas
Internal Design Bureau Chief

FILE REFERENCE:
PSESHARE:Design Directives

You are hereby directed to establish the appropriate PMBP SP Complete item, replacing the standard items of PMBP SP, Bituminous Material and Hydrated Lime, on all designs.

Further, the Unit Bid Price ("UBP") shall be established using the following:

$$\text{PMBP SP Complete UBP} = \frac{\text{PMBP SP Costs} + \text{Bituminous Material Costs} + \text{Hydrated Lime Costs}}{\text{PMBP SP Quantity}}$$

The quantities for Bituminous Material and Hydrated Lime will be indicated on the Surfacing Schedule of the plans "For Information of the Contractor Only".

This change became necessary due to changes in the Standard Specifications. The Standard Specifications have been revised to allow Reclaimed Asphalt Pavement ("RAP") in the PMBP mix. The specifications allow for up to 25% RAP to be used effecting bidding strategies. Bidders must now consider if RAP will be used in the mix. If RAP is used, the oil content will deviate given the residual oil in the RAP. Further, using higher percentages of RAP not only impacts the oil content, but can lower the grade of oil used.

The PMBP SP Complete item allows bidders to establish a UBP for either RAP or virgin material.

A Notice to Contractors for Asphalt Binder Price Adjustment Procedures has been established for the PMBP Complete item. These procedures will allow for adjustments to the PMBP Complete item in the event that the monthly price index of the asphalt binder fluctuates significantly from the established base price index. These indexes are maintained by the Materials Bureau. Attached is the Notice to Contractors. The State Construction Bureau will determine the projects that will include the Notice to Contractors. Criteria used to make this determination will include extended contract times and/or quantity of oil established on the project.

As a reminder, the Design Directives reside in the PSESHARE drive. To map the drive, open Explore. Click on Tools and then click on Map Network Drive. Select an available drive. In the Path field, enter \\htdvms\pseshare. You now have access to the PSESHARE drive. In addition to the Design Directives folder, the PSESHARE drive contains other data such as Letting Information (i.e. project information), Bid Tabulations, etc.

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This design directive resides in the 2002 Design Directive folder in the PESHARE drive.

Attachments

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Larry Velasquez
Chris Ortega
Ken Fischer

PROJECT DEVELOPMENT-NORTH

Ruben Garcia
Anthony Garcia
Mike Martinez
Anna Gurule
Antonio Valdez
Steve Rodriguez

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Dennis Peralta
Rick Padilla
Greg Hagman
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Mike Kirby
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Jimmy Camp
Zann Jones
Sherman Peterson
Chun Kim
Paul Hasselquist
Ted Barber
Steve Quintana

P. S. & E. SECTION

Yolanda Roybal
Sally Gomez
Ron Trujillo
Eugene Padilla, Robert Bachicha
Daniel Bustamante
Jeri Romero, Christine Griego
Norbert Baca, Arthur Romero

PRELIMINARY DESIGN

Max Valerio

CONSULTANT PROJECT DEVELOPMENT SECTION

Joe Sanchez
Allan Whitesel
Tony Abbo
Louie Pacheco
Jerry Trujillo
Mike Pope
Hooshang Tavanaiepour

DRAINAGE

Raymunda Van Hoven
Farshad Omidvaran
Reza Afaghpour
Parviz Eftekhari
Scott Lowe
Jeff Lowry
Jose Silva
Andrew Nowak

TRAFFIC TECHNICAL SUPPORT

Bob Bracher
Jawadi Salahuddin
Dee Beingessner
Maria Hinojos
Kathleen Garcia

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Steve Eagan
Brian Danielson

CONSTRUCTION OVERSIGHT

Lee Onstott
Chuck Hatch
Robert Ortiz
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Richard Murray
Robert Salazar
Betty Helgeson
Keun-Wook Yi

ENVIRONMENTAL SECTION

Steve Reed

ENVIRONMENTAL GEOLOGY SECTION

Kathy Kretz

RIGHT-OF-WAY BUREAU

Lester Cisneros

SURVEY & LANDS ENGINEERING SECTION

Henry Chavez

DISTRICT ENGINEERS

1/Alvin Dominguez

2/Gary Shubert

3/Steve Harris

4/Severiano Sisneros

5/Mike Manning

6/Larry Maynard

ASSISTANT DISTRICT ENGINEERS

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2/Virginia Lorenz/Paul Zagone

3/Tom Raught, Mike Plese

4/John McElroy/Peter McDonald

5/James Gallegos/Miguel Gabaldon

6/Fernando Trujillo/Tom Kratochvil

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2/Ralph Meeks

3/Dennis Valdez

4/Ken Cordova

5/Phil Gallegos

6/Robert McCoy

DISTRICT TRAFFIC ENGINEERS

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2/Bob Kurtz

3/Kathy Trujillo

4/Heather Sandoval

5/David Martinez

6/Barry Lytle (Acting)

MATERIALS LABORATORY

John Tension

Jim Stokes

Dave Catanach

Bob Meyers

FHWA

Kathy Walker

Will Dooley

Ray Pederson

Carl Lovato

Doug MacDonald

Liz Romero

ACTIVE CONSULTANTS

George Madrid, Atkins-Benham
Hermant Patel, Aztec Engineering
Mel Chapman, The Benham Group
Albert Thomas, Bohannon-Huston, Inc.
Paul Waters, BPLW
Mike Brazie, CH2MHILL
Laura Ingelido, Chavez-Grieves
Kent Dibble, Dibble & Associates
Michael Shapiro/Luis Duffy, DMJM + Harris
Dave Maxwell, Engineer's Inc.
Mike Malloy, Gannett-Fleming West, Inc.
Steve House, HDR Engineering Inc.
Luis Duffy, Holmes and Narver
Kim Kemper, Huitt Zollars, Inc.
John Andrews, The Larkin Group
Lawrence Ortega, Lawrence Ortega
Jim Weeks, Leeds Hill-Herkenhoff, Inc.
Thomas Densford, Louis Berger Group
Kent Freier, Molzen-Corbin & Associates
(Albuquerque)
John Montoya, Molzen-Corbin & Assoc.
(Las Cruces)
Chris Baca, Parsons Brinckerhoff Quade &
Douglas
Fernando Quiroga, Quiroga-Pfeiffer
Engineering Corp.
Joseph Chato, Red Mountain Engineers, Inc.
Elvidio Diniz, Resource Technology
Robert Smith, Smith Engineering Co. (Abq)
Tom Dick, Smith Engineering Co.
(Roswell)
Jim Smith, Souder Miller & Associates
Kim Stelzer, Tampa Bay Engineering
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Pete Hinckley, URS Greiner Woodward
Clyde
William Ventry, Ventry Engineering
Scott Perkins, Wilson & Company

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NOTICE TO CONTRACTORS

ASPHALT BINDER PRICE ADJUSTMENT PROCEDURES

Section 1.0 – Procedure for projects where “PMPB Complete” is not specified and either the metric or English ton is specified as the unit of measure.

An adjustment will be made to the original Contract unit price for asphalt binder if the monthly price index of the asphalt binder fluctuates significantly from the established base price index as maintained by the Department’s State Materials Bureau at the time of actual use of the asphalt binder material.

For **increasing prices**, the monthly adjustment shall apply on those contracts whose monthly fluctuations are above a (B / C) ratio, defined below, of 1.10 to a monthly maximum (B / C) ratio of 1.40 using Equation (1).

For **decreasing prices**, the monthly adjustment shall apply on those contracts whose monthly fluctuations are below a (B / C) ratio, defined below, of 0.90 to a monthly minimum (B / C) ratio of 0.60 using Equation (2).

Only the differential percentage change beyond the noted percentages will be used to calculate the asphalt binder price adjustment per Equations (1) or (2).

$$A = D \times [(B / C) - 0.10] \quad \text{Equation (1)}$$

$$A = D \times [(B / C) + 0.10] \quad \text{Equation (2)}$$

Where:

- A - Adjusted Contract unit price per metric or English ton of Asphalt Binder.
- B - Current average monthly price index per metric or English ton of Asphalt Binder.
- C - Base Price Index: average selling price per metric or English ton of Asphalt Binder for the month of the Bid Opening.
- D - Original Contract unit bid price for the asphalt binder material.

Monthly Adjustment: At each project monthly progress payment, the asphalt binder tonnage that has been placed since the last project monthly progress payment, will be paid for at the original contract unit price that has been adjusted by either Equations (1) or (2), as appropriate and when necessary, using the posted asphalt price adjustment for that particular month. If the use of Equation (1) results in a (B / C) ratio greater than 1.40, then the (B / C) ratio will be capped and shall not be greater than a value of 1.40. If the use of Equation (2) results in a (B / C) ratio less than 0.60, then the (B / C) ratio will be capped and shall not be less than a value of 0.60.

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Section 2.0 – For projects where “PMBP Complete” is specified and either the metric or English ton is specified as the unit of measure.

An adjustment will be made to the original Contract unit price for “PMBP Complete” if the monthly price index of the asphalt binder fluctuates significantly from the established base price index as maintained by the Department’s State Materials Bureau at the time of actual use.

For **increasing prices**, the monthly adjustment shall apply on those contracts whose monthly fluctuations are above a (B / C) ratio, defined below, of 1.10 to a monthly maximum (B / C) ratio of 1.40 using Equation (3).

For **decreasing prices**, the monthly adjustment shall apply on those contracts whose monthly fluctuations are below a (B / C) ratio, defined below, of 0.90 to a monthly minimum (B / C) ratio of 0.60 using Equation (4).

Only the differential percentage change beyond the noted percentages will be used to calculate the “PMBP Complete” price adjustment per Equations (3) or (4).

$$A = D + EF / 100 \times (B / C - 1.1) \quad \text{Equation (3)}$$

$$A = D + EF / 100 \times (B / C - 0.9) \quad \text{Equation (4)}$$

Where:

- A - Adjusted Contract unit price per metric or English ton of “PMBP Complete”.
- B - Current average monthly price index per metric or English ton of Asphalt Binder.
- C - Base Price Index: average selling price per metric or English ton of Asphalt Binder for the month of the Bid Opening.
- D - Original Contract unit bid price for “PMBP Complete”.
- E - The asphalt binder material original unit price invoice upon which the bid was based. This shall be furnished to the Department in a project’s submitted contract bid documents prior to actual project scheduled letting.
- F – The average percentage of asphalt binder used in the “PMBP Complete” item based on the total weight of mixture and expressed as a percentage, for example “5.54”.

Monthly Adjustment: At each project monthly progress payment, the “PMBP Complete” tonnage that has been placed since the last project monthly progress payment, will be paid for at the original contract unit price that has been adjusted by either Equations (3) or (4), as appropriate and when necessary, using the posted asphalt price adjustment for that particular month. If the use of Equation (3) results in a (B / C) ratio greater than 1.40, then the (B / C) ratio will be capped and shall not be greater than a value of 1.40.

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If the use of Equation (4) results in a (B / C) ratio less than 0.60, then the (B / C) ratio will be capped and shall not be less than a value of 0.60.

Section 3.0 – Price Adjustment Data Collection

For the purposes of making these calculations, the Department's State Materials Bureau will maintain a database of monthly price indexes. This index will be based on the average weekly selling price for the western markets of Arizona and New Mexico as reported by the "Asphalt Weekly Monitor[®]" that is published by Poten and Partners, Inc., New York, New York. The published monthly base price index will be calculated using the following formula:

Base Price Index = Average of the reported average weekly selling prices
using the last four reported weeks prior to the last full week of a given
month as published by Poten and Partners, Inc.

A twenty-four month (24) month running summary of the published monthly price index will be sent, by Department e-mail, to each District Engineer, Assistant District Engineer, State Construction Bureau, the Albuquerque office of the Associated Contractors of New Mexico for distribution to their members, and other interested parties at the beginning of each week.