#### INSTRUCTIONS for PG ASPHALT BINDER MATERIAL COST ADJUSTMENT and the COST ADJSUTMENT SPREADSHEET (Rev. 04-06-22)

### **Purpose**

The purpose of Standard Specification 109.05.3 is to reduce the risk taken by contractors during the bidding process, which in theory will result in less risk the Department takes for inflated bid prices due the contractor's uncertainty about the future cost of PG binder for HMA. This document is intended as a guide for implementation of the specification and as instruction for calculating adjusted payments due in accordance with the specification.

#### **Implementation**

At the time a bid proposal is submitted, the bidder will elect whether to opt in or out of the use of PG asphalt binder material cost adjustments. This election will be noted on the proposal page of the bidder's submittal. The PE/S must obtain a copy of the proposal from the District and check the proposal page to determine if the specification is to be implemented on any given contract.

If the bidder has opted out of enacting the PG asphalt binder material cost adjustments, then the specification and the pay item are not to be used on the contract. The contractor cannot change his option after submittal of his bid regardless of the quantity of HMA material in the contract. There is no need to write a Change Order to delete the specification and pay item if the contractor has opted out; simply ignore the specification and do not pay any quantity on the item.

If the contractor has opted to enact the PG asphalt binder material cost adjustments, then any contract with at least one HMA pay item with an original or revised quantity greater than or equal to 2,000 Tons will require pay adjustments to be calculated for the PG binder used in all HMA mixture pay items on the contract. For a contract without any original HMA pay item quantity equal to or greater than 2,000 ton, it is important to note that the specification does not take effect until and if the quantity of at least one HMA item meets or exceeds the 2,000 ton requirement. Only those quantities of HMA placed after at least one HMA pay item meets the requirements are eligible for adjusted payment.

Payment adjustments will only be applied to contract pay items for HMA mixtures paid in accordance with 304, 401, 402, 410, 414, 610 and 718.

### **Calculation of Adjustments**

When a contractor has opted to use the specification and the contract meets the quantity requirements, it will be necessary to perform an analysis on a monthly basis in accordance with the specification to determine whether additional payment is due to the contractor

or a credit is due the Department for fluctuations in the actual material cost of asphalt PG binders.

PG binder price fluctuations are measured by the ratio of a monthly binder index (BI) to an established letting binder index (LI) for the contract. The BI is determined by the Division of Materials and Tests and is published on a monthly basis on the <u>Department's website</u>. The letting index (LI) is the BI for the month prior to the month of the contract letting and will serve as the baseline of comparison for the BI throughout the duration of the contract.

If the BI for a given month is less than plus or minus 10.1% of the LI, no monthly adjustment is required. If the BI is at least 10.1% greater than the LI, then the contractor is due additional payment for all HMA pay items in the contract. If the BI is at least 10.1% less than the LI, then the Department is due a credit for all HMA pay items on the contract.

A spreadsheet is maintained on the Department's website and is available to calculate the required monthly pay adjustments as necessary.

For contracts which meet the payment adjustment criteria, after the end of each month, the PE/S will determine the quantities of all qualifying HMA mixture pay items associated with each DMF/JMF and enter the data into the spreadsheet. The spreadsheet will calculate the required adjustment for the month related to the data input. The adjustment calculation should be performed and the result incorporated into a progress payment estimate within 30 days of the end of the month for which an adjustment is determined.

## **Spreadsheet Data Input Instructions**

Locate the spreadsheet on the <u>Department's website</u> and save a copy to the desktop or a folder on the computer. Close the internet spreadsheet and open the saved copy, then enter the required data for the month and save the completed spreadsheet as part of the contract files (see Spreadsheet Data File Management below). This process will be repeated for each month as necessary.

The data fields that require user input are highlighted on the spreadsheet. The other boxes in the spreadsheet are locked and are used to display information or results which are calculated automatically.

- 1. Contract No. Enter the contract number in the format "Prefix-XXXXX"
- 2. Letting Date Enter the date of the letting in the format MM/DD/YYYY.
- 3. Month & Year of Calculation Enter the month and year that the adjustment is being calculated for in the format MM/YYYY.
- 4. LI Enter the binder index for the month before the letting. This information is available from the Office of Materials Management and on the Department's website. The LI is the BI for the month prior to the month of the contract letting. Once the LI value is determined, it will remain the same throughout the contract duration.
- 5. **BI** Enter the binder index for the month under consideration for the adjustment determination. This information is available from the Office of Materials Management and on the Department's website.
- 6. After the LI and BI are entered, two calculations will be performed:
  - a. The (BI LI)/100 will be calculated to the nearest 0.001,

- b. The absolute value of (BI LI)/100 will be compared to 0.101. If the result is less than 0.101, then no adjustment will be made for the month and the result of \$0.00 will be shown in Payment Adjustment, PG Asphalt Binder. If the result is equal to or greater than 0.101, then a pay adjustment will be calculated for each pay item on the spreadsheet and the total adjustment for the month will be shown in Payment Adjustment, PG Asphalt Binder.
- 7. **MPA Data** Enter the information in the highlighted boxes for each qualifying HMA pay item. The data in this section must be broken down by pay item and DMF/JMF. If a contractor uses multiple DMF/JMFs for a single pay item, there needs to be separate entries for each pay item/DMF/JMF combination. For example, if a contractor places HMA Base, HMA Intermediate, and HMA Surface during the month under consideration which is all paid for in an "HMA for Approaches" pay item, there would be at least three entries for that pay item because each mixture requires a different DMF/JMF.

Once the user has determined all of the applicable pay item/DMF/JMF combinations, the appropriate data for each combination is entered. This data includes **"HMA Pay Item No."**, **"Pay Item Description"**, **"Q"** (quantity of mixture placed for the month by DMF/JMF), **"DMF or JMF"**, and **"Pb"** (percentage of virgin PG binder used in the mixture from the DMF or JMF). Once this data is input, the spreadsheet automatically calculates the payment adjustment amount in dollars for each line and also calculates the total adjustment for all mixtures for the month.

- 8. **Item No.** Below the "MPA Data" table, input the contract pay item number for Payment Adjustment, PG Asphalt Binder from the Schedule of Pay Items.
- 9. FCR Page No. The spreadsheet is set up to allow the user print a hard copy of each month's adjustment for the Final Construction Record. The user should input the appropriate page number for the month in sequence throughout the duration of the contract. As distributed, the spreadsheet has no provision to automatically number the pages, so the data must be input.

An example spreadsheet showing entered data and results is also available on the Department's website.

# Spreadsheet Data File Management

It is recommended that the spreadsheet for each month be saved using a unique filename, i.e. – "XXXXX\_July\_2009.xls", where "XXXXX" is the 5 digit contract number. The spreadsheet should then be attached to the Correspondence Log in SiteManager in the "Other" document category as an "Other" type document.

The spreadsheet has some limitations. There are only fifteen lines available for data input in the "MPA Data" table. If a contractor places more than fifteen pay item/DMF/JMF combinations during the month under consideration, more than one spreadsheet will be required for that month.

Questions about the PG Binder Index and spreadsheet should be directed to the Construction Field Engineer for the District.