

**CHANGE ORDER**

CEM-4900 (REV 2/2014)

Change Requested by:  Engineer  Contractor

CHANGE ORDER No.	SUPPLEMENT No.	CONTRACT No.	Co-Rte-PM	FEDERAL No(s).
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TO \_\_\_\_\_, contractor

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. The last percentage shown is the net accumulated increase or decrease from the original quantity in the Bid Item List.

At the contractor's option, accept payment deductions for HMA pavement smoothness that is noncompliant with the pavement smoothness mean roughness index (MRI) requirement in Section 39-2.02A(4)(i)(iii) Pavement Smoothness, of the 2015 Standard Specifications, or Section 39-1.01D(9)(c) Pavement Smoothness of the 2010 Standard Specifications, the contractor agrees to accept payment deductions as shown in the tables below for each HMA noncompliant 0.1-mile section within the MRI acceptable range listed in the table. Mandatory pavement smoothness corrections are required to meet the MRI acceptable ranges listed in the tables below before payment deductions may be applied.

For pavement smoothness 0.1-mile segments that do not meet the specified 75 MRI requirement, payment deductions will be taken as shown in the table:

**HMA Pay Deduction for MRI Requirement 75 in/mi**

HMA thickness	MRI <sub>EXIST</sub>	MRI Acceptable Range (in/mi)	Payment Deduction per 0.1 mi segment
< 0.30 foot	< 135 in/mi	75.1 to 90.0	(MRI <sub>FINAL</sub> - 75.0) x \$90.00
< 0.30 foot	≥ 135 in/mi	MRI <sub>TARGET</sub> to (MRI <sub>TARGET</sub> + 15.0)	(MRI <sub>FINAL</sub> - MRI <sub>TARGET</sub> ) x \$90.00

Where:

$$MRI_{TARGET} = (0.3 \times MRI_{EXIST}) + 35 \text{ in/mi}$$

MRI<sub>EXIST</sub> is defined as better of (1) the existing pavement MRI or (2) the MRI taken after prepaving grinding or structural repairs, such as remove and replace asphalt pavement or HMA leveling course, was performed.

MRI<sub>FINAL</sub> is defined as the MRI after paving is completed or after pavement smoothness corrections have been made.

MRI<sub>EXIST</sub> cannot be determined use 75.1 to 90.0 range for payment deduction calculation

For pavement smoothness 0.1-mile segments that do not meet the specified 60 MRI requirement, payment deductions will be taken as shown in the table:

**HMA Pay Deduction for MRI Requirement 60 in/mi**

HMA thickness	MRI <sub>EXIST</sub>	MRI Acceptable Range (in/mi)	Payment Deduction per 0.1 mi segment
≥ 0.30 foot	< 165 in/mi	60.1 to 80.0	(MRI <sub>FINAL</sub> - 60.0) x \$142.50
≥ 0.30 foot	≥ 165 in/mi	MRI <sub>TARGET</sub> to (MRI <sub>TARGET</sub> + 20.0)	(MRI <sub>FINAL</sub> - MRI <sub>TARGET</sub> ) x \$142.50

Where:

$$MRI_{TARGET} = (0.09 \times MRI_{EXIST}) + 45.5 \text{ in/mi}$$

MRI<sub>EXIST</sub> is defined as better of (1) the existing pavement MRI or (2) the MRI taken after prepaving grinding or structural repairs, such as remove and replace asphalt pavement or HMA leveling course, was performed.

MRI<sub>FINAL</sub> is defined as the MRI after paving is completed or after pavement smoothness corrections have been made.

MRI<sub>EXIST</sub> cannot be determined use 60.1 to 80.0 range for payment deduction calculation

