

CHANGE ORDER MEMORANDUM

CEM-4903 (REV 06/2016)

DATE _____

TO			FILE	
FROM			CONTRACT NO. _____	
			CO-RTE-PM _____	
			FED NO. _____	
CHANGE ORDER NO.	SUPPLEMENT NO.	CATEGORY CODE	CONTINGENCY BALANCE (Including this change)	
			\$ _____	
CHANGE ORDER AMOUNT			HEADQUARTERS APPROVAL REQUIRED?	
\$ _____			<input type="checkbox"/> INCREASE <input type="checkbox"/> DECREASE	
SUPPLEMENTAL FUNDS PROVIDED			IS THIS REQUEST IN ACCORDANCE WITH ENVIRONMENTAL DOCUMENTS?	
\$ _____			<input type="checkbox"/> YES <input type="checkbox"/> NO	
ORIGINAL CONTRACT TIME:	TIME ADJUSTMENT THIS CHANGE:	PREVIOUSLY APPROVED TIME ADJUSTMENTS:	PERCENTAGE TIME ADJUSTED (Including this change)	TOTAL # OF UNRECONCILED DEFERRED TIME (Including this change)
_____ DAY(S)	_____ DAY(S)	_____ DAY(S)	_____ %	_____

THIS CHANGE ORDER PROVIDES FOR (Use additional pages as needed):

Allowing hot mix asphalt (HMA) pavement that does not comply 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, be accepted with a deduction.

Reason for Change

Caltrans is implementing an incentive and disincentive specification for hot mix asphalt pavement smoothness. The pavement smoothness contract requirements will be based on recognition of the preexisting pavement smoothness. This new specification will allow contractors to take a payment disincentive (deduction) for 0.1-mile segments that do not meet the specified full pay mean roughness index (MRI) requirement. The new specification will also pay an incentive for pavements that are smoother than the specified MRI requirement. Some contractors have requested that this new pavement smoothness incentive/disincentive specification be implemented on-going projects which is not allowed because it changes the basis on which the project was bid.

Caltrans will allow change orders on existing projects that have pavement smoothness 0.1-mile segments that exceed the contract MRI requirement based on a contractor requested payment deduction for pavement smoothness be accepted to avoid and reduce corrective grinding. This change order allowing deductions takes into consideration the constructability issues that drove the specification change but does not allow a payment incentive. The change order allows for a payment deduction instead of grinding for 0.1-mile segments pavement segments that do not meet the specified target MRI plus MRI disincentive range. The payment smoothness deductions are based on either the Target 60 MRI or Target 75 MRI depending on the thickness of the hot mix asphalt overlay.

The criteria for allowing a deduction is based on new Caltrans Guidelines for the Design of Asphalt Concrete Pavement. For existing pavement the new guidelines base pavement smoothness design on the pavement MRI_{EXIST} which is the MRI value of the existing surface prior to being overlaid. For existing pavement the design guidance sets MRI for an overlay less than 0.30 ft at MRI 135 in/mile for meeting a Target MRI of 75 in/mile, for an existing pavement MRI above 135 in/mile the target MRI requirement is based on a percent improvement. The design guidance sets the limit for existing pavement MRI for an overlay greater than or equal to 0.30 ft at MRI 165 in/mile for meeting a Target MRI of 60 in/mile, for an existing pavement MRI above 165 in/mile the target MRI requirement is based on a percent improvement. For existing pavements that require prepaving grinding or structural repairs (remove or replace asphalt or leveling courses) the pavement inertial profile taken after prepaving work is used as the baseline for the existing pavement.

For an overlay specified to meet a 75 MRI this change order allows a deduction to be taken for not meeting the pavement smoothness requirement, the pavement smoothness deduction for change orders is based on Target MRI 75 plus 15 MRI with a maximum deduction of \$1,350 per 0.1-mile. Therefore, for an existing pavement with MRI_{EXIST} less than 135 in/mile the no correction (deduction range) is between 75.1-90 MRI. Mandatory corrections are required for MRI values greater than 90 MRI. For an existing pavement segment that exceeds 135 in/mile MRI the new Target MRI will be based on a percent improvement formula and the deduction range established based on the new Target MRI plus 15 MRI. Mandatory corrections are required for MRI values greater than MRI_{TARGET} + 15 MRI.

For an overlay specified to meet a 60 MRI this change order allows a deduction to be taken for not meeting the pavement smoothness requirement, the pavement smoothness deduction for change orders is based on Target MRI 60 plus 20 MRI with a maximum deduction of \$2,850 per 0.1-mile. Therefore, for an existing pavement with MRI_{EXIST} less than 165 in/mile the no correction (deduction range) is between 60.1-80 MRI. Mandatory pavement smoothness corrections are required for MRI values greater than 80 MRI. For an existing pavement segment that exceeds 165 in/mile MRI the new Target MRI will be based on a percent improvement formula and the deduction range established based on the new Target MRI plus 20 MRI. Mandatory pavement smoothness corrections are required for MRI values greater than MRI_{TARGET} + 20 MRI.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

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Concurrence

FHWA concurrence, dated February 15, 2019.

Method of Payment

Adjustment at Agreed Lump Sum

The agreed lump sum \$ <lump sum price> is based on an analysis of pavement smoothness MRI_{EXIST} versus MRI_{FINAL} filed in the project records.

Time Adjustment

This change order will not affect the controlling activity; therefore, no time adjustment is warranted.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

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CONCURRED BY:	ESTIMATE OF COST																		
CONSTRUCTION ENGINEER/BRIDGE ENGINEER DATE	<table style="width:100%; border-collapse: collapse;"> <tr> <th style="width:35%;"></th> <th style="width:30%; text-align: center; padding: 2px;">THIS REQUEST</th> <th style="width:35%; text-align: center; padding: 2px;">TOTAL TO DATE</th> </tr> <tr> <td style="padding: 2px;">ITEMS</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="padding: 2px;">FORCE ACCOUNT</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="padding: 2px;">AGREED PRICE</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="padding: 2px;">ADJUSTMENT</td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="padding: 2px;">TOTAL</td> <td style="text-align: center; padding: 2px;">\$0.00</td> <td style="text-align: center; padding: 2px;">\$0.00</td> </tr> </table>		THIS REQUEST	TOTAL TO DATE	ITEMS			FORCE ACCOUNT			AGREED PRICE			ADJUSTMENT			TOTAL	\$0.00	\$0.00
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TOTAL	\$0.00	\$0.00																	
FHWA REP. DATE	FEDERAL PARTICIPATION																		
ENVIRONMENTAL DATE	<input type="checkbox"/> PARTICIPATING <input type="checkbox"/> PARTICIPATING IN PART <input type="checkbox"/> NONE <input type="checkbox"/> NON-PARTICIPATING (Maintenance) <input type="checkbox"/> NON-PARTICIPATING																		
MAINTENANCE DATE	FEDERAL SEGREGATION (If more than one funding source or P.I.P. type)																		
OTHER (SPECIFY) DATE	<input type="checkbox"/> CHANGE ORDER FUNDED PER CONTRACT <input type="checkbox"/> CHANGE ORDER FUNDED AS FOLLOWS																		
HQ OR DISTRICT PRIOR APPROVAL BY DATE	<table style="width:100%; border-collapse: collapse;"> <tr> <th style="width:60%; text-align: center; padding: 2px;">FEDERAL FUNDING SOURCE</th> <th style="width:40%; text-align: center; padding: 2px;">PERCENT</th> </tr> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>	FEDERAL FUNDING SOURCE	PERCENT																
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RESIDENT ENGINEER SIGNATURE DATE																			