



WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 4

Received

SEP 09 2016

HNTB Corporation
Round Rock

Received

SEP 12 2016

HNTB Corporation
Round Rock

1. CONTRACTOR: Cox Commercial Construction
2. Change Order Work Limits: Sta. 17+09.69 to Sta. 72+55.77
3. Type of Change(on federal-aid non-exempt projects): Minor (Major/Minor)
4. Reasons: 3H (3 Max. - In order of importance - Primary first)

Project: 1601-045
Roadway: Bill Pickett Trail
CSJ Number: 1601-045

5. Describe the work being revised:

3H: County Convenience. Cost savings opportunity discovered during construction. This Change Order replaces the Tier II Asphalt and Type D Grade 5 Sac B Aggregate in the contract with a Hot-Applied Non-Tracking Underseal (TFT-H). This is a substitution for a traditional underseal and eliminates the need for aggregate in the application process. No additional days will be added due to this change order.

6. Work to be performed in accordance with Items: 300, 316
7. New or revised plan sheet(s) are attached and numbered: N/A
8. New Special Provisions/Specifications to the contract are attached: ☒ Yes ☐ No
9. New Special Provisions to Item N/A No. N/A, Special Specification Item N/A are attached.

Each signatory hereby warrants that each has the authority to execute this Change Order (CO).

The contractor must sign the Change Order and, by doing so, agrees to waive any and all claims for additional compensation due to any and all other expenses; additional changes for time, overhead and profit; or loss of compensation as a result of this change.

THE CONTRACTOR

Date 8/30/16

By

Typed/Printed Name

DARREN OKRUK

Typed/Printed Title

SR. V.P.

The following information must be provided

Time Ext. #: N/A Days added on this CO: 0

Amount added by this change order: (\$24,873.50)

RECOMMENDED FOR EXECUTION:

James D. K. PE. 9/9/16
Project Manager Date

County Commissioner Precinct 1 Date
☐ APPROVED ☐ REQUEST APPROVAL

N/A
Design Engineer Date

County Commissioner Precinct 2 Date
☐ APPROVED ☐ REQUEST APPROVAL

M. J. W. 9/9/2016
Program Manager Date

County Commissioner Precinct 3 Date
☐ APPROVED ☐ REQUEST APPROVAL

Design Engineer's Seal:

N/A

County Commissioner Precinct 4 Date
☐ APPROVED ☐ REQUEST APPROVAL

[Signature] 09-23-16
County Judge Date
☐ APPROVED

Project # 1601-045

CHANGE ORDER NUMBER: 4

TABLE A: Force Account Work and Materials Placed into Stock

[illegible]

TABLE B: Contract Items:

[illegible]

CHANGE ORDER REASON(S) CODE CHART

1. Design Error or Omission	1A. Incorrect PS&E 1B. Other
2. Differing Site Conditions (unforeseeable)	2A. Dispute resolution (expense caused by conditions and/or resulting delay) 2B. Unavailable material 2C. New development (conditions changing after PS&E completed) 2D. Environmental remediation 2E. Miscellaneous difference in site conditions (unforeseeable)(Item 9) 2F. Site conditions altered by an act of nature 2G. Unadjusted utility (unforeseeable) 2H. Unacquired Right-of-Way (unforeseeable) 2I. Additional safety needs (unforeseeable) 2J. Other
3. County Convenience	3A. Dispute resolution (not resulting from error in plans or differing site conditions) 3B. Public relations improvement 3C. Implementation of a Value Engineering finding 3D. Achievement of an early project completion 3E. Reduction of future maintenance 3F. Additional work desired by the County 3G. Compliance requirements of new laws and/or policies 3H. Cost savings opportunity discovered during construction 3I. Implementation of improved technology or better process 3J. Price adjustment on finished work (price reduced in exchange for acceptance) 3K. Addition of stock account or material supplied by state provision 3L. Revising safety work/measures desired by the County 3M. Other
4. Third Party Accommodation	4A. Failure of a third party to meet commitment 4B. Third party requested work 4C. Compliance requirements of new laws and/or policies (impacting third party) 4D. Other
5. Contractor Convenience	5A. Contractor exercises option to change the traffic control plan 5B. Contractor requested change in the sequence and/or method of work 5C. Payment for Partnering workshop 5D. Additional safety work/measures desired by the contractor 5E. Other
6. Untimely ROW/Utilities	6A. Right-of-Way not clear (third party responsibility for ROW) 6B. Right-of-Way not clear (County responsibility for ROW) 6C. Utilities not clear 6D. Other

Williamson County Road Bond Program

**Bill Pickett Trail
Williamson County Project No. 1601-045**

Change Order No. 04

Reason for Change

This Change Order replaces Contract items 316-6005 (Tier II Asphalt) and 316-6193 (Type D Grade 5 Sac B Aggregate) with a Hot-Applied Non-Tracking Underseal (TFT-H). This is a substitution for a traditional underseal and eliminates the need for aggregate in the application process. Item 316-6465 for the underseal is a new item added to the Contract and the negotiated unit rate is within the acceptable tolerance of the published TxDOT average unit rates.

Following is a summary of new items required for this Change Order.

ITEM	DESCRIPTION	QTY	UNIT
0316-6465	ASPH (TFT-H)	5750	GAL

This Change Order results in a net decrease of \$24,873.50 to the Contract amount, for an adjusted Contract total of \$3,682,274.62. The original Contract amount was \$3,806,133.30. As a result of this and all Change Orders to-date, \$123,858.68 has been deducted from the Contract, resulting in a 3.3% net reduction in the Contract cost. No additional days have been added due to this change order.

HNTB Corporation

James Klotz, P.E.

PROJECT: BILL PICKETT TRAIL
 ITEM NUMBER/DESC: TFT-H UNDERSEAL
 ESTIMATED QUANTITY: 5750 GAL
 Date Prepared: 7/25/2016

ITEM DESCRIPTION	QTY	UNIT COSTS				O.T Factor	TOTAL COSTS			
		UNIT	LABOR	EQUIP	MATERIAL		LABOR	EQUIP	MATERIAL	MISC.
LABOR										
MATERIAL										
EQUIPMENT										
SUBCONTRACT										
TFT-H UNDERSEAL	5750	GAL								
MOBILIZATION	1.00	EA								
TOTALS										

TOTAL LABOR \$ -
 TOTAL MATERIAL \$ -
 TOTAL SUBCONTRACT \$ 32,187.50
 TOTAL EQUIPMENT \$ -
 MARKUPS
 LABOR BURDENS @ 55% \$ -
 LABOR MARK-UP @ 25% \$ -
 MATERIAL MARK-UP @ 25% \$ -
 EQUIPMENT MARK-UP @ 15% \$ -
 SUBCONTRACT MARK-UP @ 5% \$ 5.25 / 2000 @
 PERFORMANCE BOND @ 1% \$ 5.5125 / 2100 @

TOTAL QUANTITY UNIT COST
 5750 GAL / GAL
 5.25
 .2625
 + .0551
 5.5676 =

2000
 100
 .81
 2121

5.57
 5750
 x 5750
 32,027.50 + 2121 = 34,148.50



AUSTIN MATERIALS

9020 N Capital Texas
Highway
Bldg. II, Suite 250
Office (512) 251-3713
Fax (512) 251-3709

To:	Cox Commercial	Contact:	Darren Okruhlik
Address:	1901 Ranch Road 620 N, Suite 104 Austin, TX 78734	Phone:	(512) 222-1114
		Cell:	(512) 848-4446
Project Name:	Williamson County-Bill Picket Trail	Project Number:	
Project Location:	Bill Pickett Trail	Bld Date:	3/16/2016

Item #	Item Description	Estimated Quantity	Unit	Unit Price	Total Price
Misc.-Tack	Hot Applied Underseal	5,750.00	GAL	\$5.25	\$ 30,187.50
				\$	-
				\$	-
				Total Bld Price:	\$ 30,187.50

- We hereby submit an estimate for the following scope of Work for the project listed above. All scope of work includes labor, material, and equipment based upon applicable Plans and Specifications provided. Austin Materials will carry General Liability and Workers Compensation Insurance as indicated by Project Specifications.
- Quantities indicated above are based on plan quantities provided in the revised plans and are for estimating total cost only. Quantities to be paid will be based upon actual quantity of material placed in accordance with the unit prices indicated above.
- Any alteration and/or deviation from the above specifications involving extra costs must be in writing and will be considered a Change Order.
- Pricing as indicated above includes Five (5) Mobilizations to complete the Work. Additional mobilizations beyond the mobilization indicated, shall be paid at \$2,000 per mobilization.
- Excludes: Testing; Barricades and traffic control; Flaggers; Police Officers; Arrow or Message Boards; Lane Closures; Permits & Fees; Signage; Wheel Stops; Striping and pavement markings; Temporary striping; Installation or Removal of tabs; Demolition of pavement; Adjustments to Utilities/Manholes/Valves; Protection of drainage systems; Erosion control; Installation or removal of safety slopes; Earthwork; and Concrete Work.
- Acceptance Terms: Change Order Pricing for an existing contract. Original Subcontract Terms and Conditions Apply except as noted above.
- Scheduling of Work: Following the acceptance terms above, please allow a minimum of Two (2) weeks notice to ensure enough advance notice to provide required resources for this work.

ACCEPTED: The above prices, specifications, and conditions are satisfactory and hereby accepted. Buyer: _____ Signature: _____ Date of Acceptance: _____	CONFIRMED: Austin Materials Authorized Signature: _____ Estimator: Nick Groves (512) 709-5969 nick.groves@austinmaterials.com
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2. Underseal

An underseal is essentially a one-course surface treatment (that is, a conventional Item 316 seal coat) that will soon be covered by a new pavement layer. The primary function of an underseal is to prevent the intrusion of surface water into underlying layers. The underseal also enhances the bond with the subsequent pavement layer. There may also be some benefit associated with delayed reflection cracking and preventing the movement of subsurface moisture into the surface layer.

Underseals are used on top all types of surfaces: existing hot-mix asphalt concrete (HMAC), PCC, and aggregate bases. The most common use is to apply an underseal to seal off cracks in an existing pavement prior to an HMAC overlay.

Hot-Applied Non-Tracking Underseal

The hot applied non-tracking underseal functions as a conventional underseal (seals and bonds); however, given its unique asphalt properties (the binder used can harden quickly), it does not require any aggregate to protect the asphalt membrane from pickup.

References:

<http://d2dtl5nnlpfr0r.cloudfront.net/tti.tamu.edu/documents/0-4391-S.pdf>

http://onlinemanuals.txdot.gov/txdotmanuals/pdm/pavement_surface_preparation.htm

<http://www.depts.ttu.edu/techmrtweb/Reports/Products/0-5169-P4.pdf>

<http://static.tti.tamu.edu/conferences/tsc14/presentations/materials-1/peterson.pdf>

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More to the Story

While prime coats and underseals are measured and paid as discrete items, tack coats are subsidiary items and are not typically paid for directly. Sounds easy enough, right? If you think so, I have some beachfront property in South Dakota I'd like to sell you!

- 1) At least for now (March 2016), to specify and pay for a *Hot-Applied Non-Tracking Underseal*, you need to use a plan note for Item 316 and then reference the Special Specification entitled, "Polymer-Modified Asphalt Cement Non-Tracking **Tack Coat** – Hot Applied."

The Construction Division is working on getting a special specification and bid item specifically for a Hot-Applied Non-Tracking Underseal, but until then please follow the blind note in the master general notes. A Tier II asphalt is strongly advised, as a Tier III has bleeding tendencies and a Tier I is not needed (as this will not be a surface course).

Special Provision to Item 300

Asphalts, Oils, and Emulsions



Item 300, "Asphalts, Oils, and Emulsions," of the Standard Specifications, is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 300.2.2, "Polymer-Modified Asphalt Cement," Table 3 is supplemented by the following:

Table 3
Polymer-Modified Asphalt Cement Non-Tracking Tack Coat – Hot Applied

Property	Test Procedure	Polymer-Modified Viscosity Grade	
		TFT-H	
		Min	Max
Viscosity, 275°F, cP	T 316	-	3000
Penetration, 77°F, 100 g, 5 sec.	T 49	-	25
Softening Point, °F	T 53	170	-
Dynamic shear, $G^*/\sin \delta$, 82°C, 10 rad/s, kPa	T 315	1.0	-
Flash Point, C.O.C., °F	T 48	425	-
Track Free Time ¹ , minutes	Test Strip	-	2

1. Spray a test strip of tack coat at a location on or near the project as directed. Allow the strip to cure for the maximum time specified. Drive over the test strip with equipment to simulate the effect of paving equipment. There should be no evidence tracking or picking up of the tack coat on the wheels of the equipment.

AVERAGE LOW BID UNIT PRICE - CONSTRUCTION - AUSTIN DISTRICT

316 6465	ASPH (TFT - H)	GAL		9,240.000	4.00000	1
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AVERAGE LOW BID UNIT PRICE - CONSTRUCTION - STATEWIDE

316 6465	ASPH (TFT - H)	GAL		9,240.000	4.00000	1
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