

**RECEIVED**  
**MAR 10 2014**  
 BY: PSI

**WILLIAMSON COUNTY, TEXAS**  
 CHANGE ORDER NUMBER: 18

**Received**  
**MAR - 4 2014**  
 HNTB Corporation  
 Round Rock

- CONTRACTOR: FTWoods Construction Services, Inc.
- Change Order Work Limits: Sta. 168+33.64 to Sta. 243+64.89
- Type of Change (on federal-aid non-exempt projects): Minor (Major/Minor)
- Reasons: 3M (3 Max. - In order of importance - Primary first)

Project:	<u>10WC821</u>
Roadway:	<u>2nd Street Taylor, TX</u>
CSJ:	<u>                    </u>

5. Describe the work being revised:

**3M: County Convenience. Other.** As required by Item 341, this Change Order adds Contract items to adjust the amount of compensation to be paid to the Contractor in proportion to the quality of the asphalt pavement produced and placed on the project. Specific job control tests were run on the asphalt to monitor the quality of the mix. Using the results of these tests in conjunction with TxDOT formulas as outlined in the specifications, the Contractor was either awarded a bonus or assessed a penalty.

- Work to be performed in accordance with Items: See Attached
- New or revised plan sheet(s) are attached and numbered: N/A
- New Special Provisions to the contract are attached:  Yes  No
- 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).

<p><i>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.</i></p> <p>THE CONTRACTOR _____ Date <u>02/24/14</u></p> <p>By <u>[Signature]</u></p> <p>Typed/Printed Name <u>F. Todd Woods</u></p> <p>Typed/Printed Title <u>President</u></p>	<p><b>The following information must be provided</b></p> <p>Time Ext. #: <u>N/A</u> Days added on this CO: <u>0</u></p> <p>Amount added by this change order: <u>\$31,071.06</u></p>
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**RECOMMENDED FOR EXECUTION:**

[Signature] P.E. 3/4/14  
 Project Manager Date

N/A  
 Design Engineer Date

[Signature]  
 Program Manager Date

Design Engineer's Seal:

N/A

County Commissioner Precinct 1 Date  
 APPROVED  REQUEST APPROVAL

County Commissioner Precinct 2 Date  
 APPROVED  REQUEST APPROVAL

County Commissioner Precinct 3 Date  
 APPROVED  REQUEST APPROVAL

County Commissioner Precinct 4 Date  
 APPROVED  REQUEST APPROVAL

APPROVED County Judge Date



## CHANGE ORDER REASON(S) CODE CHART

<p>1. Design Error or Omission</p>	<p>1A. Incorrect PS&amp;E 1B. Other</p>
<p>2. Differing Site Conditions (unforeseeable)</p>	<p>2A. Dispute resolution (expense caused by conditions and/or resulting delay) 2B. Unavailable material 2C. New development (conditions changing after PS&amp;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</p>
<p>3. County Convenience</p>	<p>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</p>
<p>4. Third Party Accommodation</p>	<p>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</p>
<p>5. Contractor Convenience</p>	<p>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</p>
<p>6. Untimely ROW/Utilities</p>	<p>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</p>

**Williamson County Road Bond Program**

**2<sup>nd</sup> Street Improvements  
Williamson County Project No. 10WC821**

**Change Order No. 18**

**Reason for Change**

As required by Contract Item 341 Dense-Graded Hot-Mix Asphalt (QC/QA), this Change Order adds new Contract Items to adjust the compensation paid to the Contractor based on the quality of the hot mix asphalt pavement produced and placed. Specific job control tests were run on the asphalt (see attached back-up documentation) to monitor the quality of the mix. Using the results of these tests in conjunction with TxDOT formulas as outlined in the specification, the Contractor was either awarded a bonus or assessed a penalty.

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

ITEM	DESCRIPTION	QTY	UNIT
341-WC01	D-GR HMA(QCQA) TY-B PG 64-22 BONUS/ PENALTY	6,466.50	DOL
341-WC02	D-GR HMA(QCQA) TY-C PG 64-22 BONUS/ PENALTY	11,351.72	DOL
341-WC03	D-GR HMA(QCQA) TY-C SAC-B PG 70-22 BONUS/PENALTY	13,272.84	DOL

This Change Order results in a net increase of \$31,091.06 to the Contract amount, for an adjusted Contract total of \$9,762,676.67. The original Contract amount was \$8,973,072.80. As a result of this and all Change Orders to-date, \$789,603.87 has been added to the Contract, resulting in an 8.8% net increase in the Contract cost. No additional days will be added to or deducted from the Contract as a result of this Change Order.

**HNTB Corporation**

James Klotz, P.E.

February 18, 2014



RE: 10WC821 2<sup>nd</sup> Street Roadway Project – QCQA HMAC Tonnage Variances

To Whom It May Concern:

Type B, Lot 1 on August 27, 2012: The QC/ QA pay adjustment sheet shows a priced of \$56.50/ton. The actual bid price for Type B HMAC is \$63.50.

Type B, Lot 2 on August 28, 2012: The QC/ QA pay adjustment sheet shows a priced of \$56.50/ton. The actual bid price for Type B HMAC is \$63.50.

Type C, Lot 2 on December 12, 2012: The QC/ QA pay adjustment sheet shows a total of 1214.34 tons for the day. The summation of the tickets received indicated that 1234.38 tons were delivered to the project for the day. Due to the failure of Sublot 1, bonus/penalty will apply to the Sublot 2 quantity of 734.38 tons only.

Type C Surface, Lot 2 on January 24, 2013: The QC/ QA pay adjustment sheet 1333.35 tons were delivered to the project for the day. 24.35 tons were subtracted from 1333.35 ton due to it being placed as the 4” base course on Travis Street, resulting in an adjusted total surface amount of 1309.00 tons for the day.

Best regards,

Ryan Rivera  
Construction Observer

**Second Street Roadway  
Project: 10WC821**

**HMAC Production and Placement  
Bonus/ Penalty**

**Payment Summary**

<b>Item #</b>	<b>Total Bonus / Penalty</b>
<b>ITEM 341-WC01: D-GR HMA(QCQA) TY-B PG64-22 BONUS/PENALTY</b>	<b>\$6,466.50</b>
<b>ITEM 341-WC02: D-GR HMA(QCQA) TY-C PG64-22 CONUS/PENALTY</b>	<b>\$11,351.72</b>
<b>ITEM 341-WC03: D-GR HMA(QCQA) TY-C SAC-B PG70-22 BONUS/PENALTY</b>	<b>\$13,272.84</b>
<b>Total</b>	<b>\$31,091.06</b>

**Second Street Roadway  
Project: 10WC821  
Item: 341-WC01 D-GR HMA(QCQA) TY-B PG 64-22 BONUS/PENALTY**

**Production Placement Bonus/Penalty Summary**

<b>Lot #</b>	<b>Date</b>	<b>Tons</b>	<b>Production Bonus</b>	<b>Placement Bonus</b>	<b>Production Penalty</b>	<b>Placement Penalty</b>	<b>Total Bonus/Penalty</b>
1	08/27/2012	1750.21	\$1,333.66	\$1,889.35			\$3,223.01
2	08/28/2012	1502.31	\$2,098.73	\$1,144.76			\$3,243.49
SQ	08/29/2012	602.51	N/A	N/A			\$0.00
SQ	09/06/2012	439.09	N/A	N/A			\$0.00
SQ	09/11/2012	652.42	N/A	N/A			\$0.00
SQ	11/12/2012	192.24	N/A	N/A			\$0.00
<b>Totals</b>		<b>5138.78</b>	<b>\$3,432.39</b>	<b>\$3,034.11</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$6,466.50</b>

Date: September 21, 2012  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE12 2996

**Lot 1**

Date Placed:	08/27/2012	Technician:	Rodrigo Vivar
Date Received:	08/27/2012	Item:	341
Producer/Plant Loc:	APAC – Wheeler, Liberty Hill	Type:	"B"
Prime Contractor:	HNTB	Design:	832-64LH
Paving Contractor:	APAC – Texas		

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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

Cc: File

Reviewed by: *Donald L. O'Connor*

nn:Doc:clients:Williamson County  
Docname:RE12 2996,TypeB



TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:		DATE LOT OPENED:	8/27/12
LOT NUMBER:	1	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	10WC821
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Rodrigo Vivar 1861	SPEC ITEM:	341
SAMPLE LOCATION:	plant/truck	SPECIAL PROVISION:	
MATERIAL CODE:	Type B HMAC	MIX TYPE:	ITEM341_B_Fine_Base
MATERIAL NAME:			
PRODUCER:	APAC-Wheeler Liberty Hill		
AREA ENGINEER:		PROJECT MANAGER:	

COURSE/LIFT:	Non-Surface (<8	STATION:		DIST. FROM CL:	
Total Quantity Actually Placed, Tons:		1,750.21	Bid Price / Tons:		\$56.50
Quantity Placed But No Air Void Testing Was Required, Tons:			First Lot?		Yes

**LABORATORY MOLDED DENSITY**

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	96.3	96.4	96.1	96.7
Absolute Deviation:	0.7	0.6	0.9	0.3
Auto 1.000 Pay Factor:				
Pay Factor:	1.019	1.025	1.006	1.044
Average Pay Factor:	1.024			
Production Pay Factor:	1.024			

**IN PLACE AIR VOIDS**

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	7.5	6.1	7.4	6.2
Auto 1.000 Pay Factor:				
Pay Factor:	1.020	1.048	1.022	1.046
Average Pay Factor:	1.034			
Placement Pay Factor:	1.034			

**TOTAL PAY ADJUSTMENTS**

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.  
 A = \$56.50 x 1,750.21 x 1.024  
 A = \$101,260.15  
 TPA1 = \$101,260.15

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).  
 Production Only Bonus\* = \$101,260.15 - (\$56.50 x 1,750.21)  
 Production Only Bonus\* = \$2,373.28  
 Bonus\* = only applies when Contractor is not responsible for placement of mix.  
 Production Bonus Paid on Estimate = Bonus / 2  
 Production Bonus Paid on Estimate = \$2,373.28 / 2  
 Production Bonus Paid on Estimate = \$1,186.64

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
 + (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)  
 B = (\$56.50 x 1,750.21 x 1.034) + (\$56.50 x 0.00)  
 B = \$102,249.02  
 TPA2 = (A+B) / 2  
 TPA2 = (\$101,260.15 + \$102,249.02) / 2  
 TPA2 = \$101,754.59

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.  
 Placement Bonus Paid on Estimate = \$101,754.59 - (\$56.50 x 1,750.21) - \$1,186.64  
 Placement Bonus Paid on Estimate = \$1,681.08

Actual Bid Price for  
 Tx B HMAC = \$63.50/ton  
 See attached corrected  
 calculations.



Signature of Contractor Representative

Signature of TX DOT Representative

PAYMENT FOR ITEM = P<sub>1</sub>

QC/QA PAY ADJUSTMENT

Mix: Ty B

Lot: 1

Bid Price: \$ 63.50

Quantity Actually Placed: 1,750.21

Pay Adjustment Factor for Production: 1.024

Pay Adjustment Factor for Placement: 1.034

PRODUCTION BONUS/PENALTY

TPA1 = A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production

A = \$ 113,805.66

Production Only Bonus = A - (Bid Price x Production Lot Quantity Placed)

Production Only Bonus = \$ 2,667.32

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$ 1,333.66

PLACEMENT BONUS/PENALTY

TPA2 = (A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
+ (Bid Price x Placement Lot Quantity Not Tested for Air Voids)

B = \$ 114,917.04

TPA2 = (A + B)/2

TPA2 = \$ 114,361.35

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Bonus

Placement Bonus Paid on Estimate = \$ 1,889.35

Date: September 21, 2012  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE12 2997

**Lot 2**

Date Placed: 08/28/2012	Technician: Rodrigo Vivar
Date Received: 08/28/2012	Item: 341
Producer/Plant Loc: APAC – Wheeler, Liberty Hill	Type: "B"
Prime Contractor: HNTB	Design: 832-64LH
Paving Contractor: APAC – Texas	

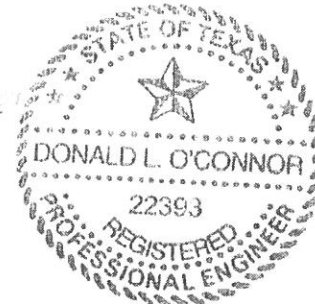
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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

Cc: File

Reviewed by: *Donald L. O'Connor*

nn:Doc:clients:Williamson County  
Docname:RE12 2997,TypeB



TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd ST	DATE LOT OPENED:	8-28-12
LOT NUMBER:	2	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	10WC821
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Rodrigo Vivar 1861	SPEC ITEM:	341
SAMPLE LOCATION:	plant/truck	SPECIAL PROVISION:	
MATERIAL CODE:	Type B HMAc	MIX TYPE:	ITEM341_B_Fine_Base
MATERIAL NAME:			
PRODUCER:	APAC-Wheeler Liberty Hill		
AREA ENGINEER:		PROJECT MANAGER:	
COURSE/LIFT:	Non-Surface (<8	STATION:	
		DIST. FROM CL:	
Total Quantity Actually Placed, Tons:		1,502.31	Bid Price / Tons: \$56.50
Quantity Placed But No Air Void Testing Was Required, Tons:			First Lot?:

LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	96.8	96.8	96.5	
Absolute Deviation:	0.2	0.2	0.5	
Auto 1.000 Pay Factor:				
Pay Factor:	1.050	1.050	1.031	
Average Pay Factor:	1.044			
Production Pay Factor:	1.044			

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	7.3	7.2	7.4	
Auto 1.000 Pay Factor:				
Pay Factor:	1.024	1.026	1.022	
Average Pay Factor:	1.024			
Placement Pay Factor:	1.024			

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

$$A = \$56.50 \times 1,502.31 \times 1.044$$

$$A = \$88,615.26$$

$$TPA1 = \$88,615.26$$

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

$$\text{Production Only Bonus*} = \$88,615.26 - (\$56.50 \times 1,502.31)$$

$$\text{Production Only Bonus*} = \$3,734.75$$

Bonus\* = only applies when Contractor is not responsible for placement of mix.

Production Bonus Paid on Estimate = Bonus / 2

$$\text{Production Bonus Paid on Estimate} = \$3,734.75 / 2$$

$$\text{Production Bonus Paid on Estimate} = \$1,867.38$$

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement) + (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

$$B = (\$56.50 \times 1,502.31 \times 1.024) + (\$56.50 \times 0.00)$$

$$B = \$86,917.65$$

$$TPA2 = (A+B) / 2$$

$$TPA2 = (\$88,615.26 + \$86,917.65) / 2$$

$$TPA2 = \$87,766.46$$

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

$$\text{Placement Bonus Paid on Estimate} = \$87,766.46 - (\$56.50 \times 1,502.31) - \$1,867.37$$

$$\text{Placement Bonus Paid on Estimate} = \$1,018.57$$

Actual Bid Price for Ty B HMAc = \$63.50/ton  
see attached corrected calculations.

*[Handwritten signature]*

Signature of Contractor Representative

Signature of TX DOT Representative

PAYMENT FOR ITEM = P<sub>1</sub>

QC/QA PAY ADJUSTMENT

Mix: Ty B

Lot: 2

Bid Price: \$ 63.50

Quantity Actually Placed: 1,502.31

Pay Adjustment Factor for Production: 1.044

Pay Adjustment Factor for Placement: 1.024

PRODUCTION BONUS/PENALTY

TPA1 = A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production

A = \$ 99,594.14

Production Only Bonus = A - (Bid Price x Production Lot Quantity Placed)

Production Only Bonus = \$ 4,197.45

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$ 2,098.73

PLACEMENT BONUS/PENALTY

TPA2 = (A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
+ (Bid Price x Placement Lot Quantity Not Tested for Air Voids)

B = \$ 97,686.21

TPA2 = (A + B)/2

TPA2 = \$ 98,640.17

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Bonus

Placement Bonus Paid on Estimate = \$ 1,144.76

**Second Street Roadway  
Project: 10WC821  
Item: 341-WC02 D-GR HMA(QCQA) TY-C PG 64-22 BONUS/PENALTY**

**Production Placement Bonus/Penalty Summary**

<b>Lot #</b>	<b>Date</b>	<b>Tons</b>	<b>Production Bonus</b>	<b>Placement Bonus</b>	<b>Production Penalty</b>	<b>Placement Penalty</b>	<b>Total Bonus / Penalty</b>
1	11/12/2012	1596.80	\$2,439.11	\$882.23			\$3,321.34
2	12/03/2012	1234.38	\$906.96	\$668.29			\$1,575.25
SQ	12/04/2012	762.71	N/A	N/A			\$0.00
3	12/17/2012	1450.62	\$2,121.53	\$2,357.26			\$4,478.79
4	01/22/2013	894.27	\$668.47	\$1,307.87			\$1,976.34
SQ	01/24/2013	24.35	N/A	N/A			\$0.00
SQ	01/25/2013	161.88	N/A	N/A			\$0.00
SQ	02/01/2013	74.52	N/A	N/A			\$0.00
SQ	02/04/2013	23.68	N/A	N/A			\$0.00
<b>Totals</b>		<b>6223.21</b>	<b>\$6,136.07</b>	<b>\$5,215.65</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$11,351.72</b>

Date: November 28, 2012  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REI Lab No.: RE12 3644

**Lot 1**

Date Placed: 11/12/2012  
Producer/Plant Loc: APAC – Ironhorse Asphalt, Manor  
Prime Contractor: HNTB  
Paving Contractor: APAC – Texas

Technician: Jose Orozco  
Item: 341  
Type: "C"  
Design: 11CRAP17.0-RAZ3.0-64-M

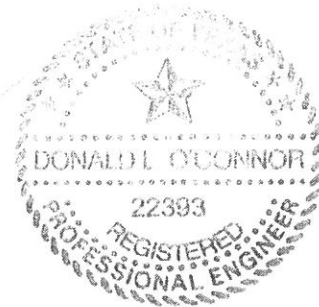
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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

Cc: File

Reviewed by: *Donald L. O'Connor*

nn:Doc:clients:Williamson County  
Docname:RE12 3644, Type C



TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd Street, Taylor, Texas	DATE LOT OPENED:	11/12/12
LOT NUMBER:	1	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - MANOR		
AREA ENGINEER:		PROJECT MANAGER:	

COURSE/LIFT:	Non-Surface (<8 in)	STATION:		DIST. FROM CL:	
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Total Quantity Actually Placed, Tons:	1,596.80	Bid Price / Tons:	\$65.00
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Quantity Placed But No Air Void Testing Was Required, Tons:		First Lot?	Yes
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LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	96.6	96.9	97.0	96.9
Absolute Deviation:	0.4	0.1	0.0	0.1
Auto 1.000 Pay Factor:				
Pay Factor:	1.038	1.050	1.050	1.050
Average Pay Factor:	1.047			
Production Pay Factor:	1.047			

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	7.9	6.6	8.5	7.6
Auto 1.000 Pay Factor:				
Pay Factor:	1.012	1.038	1.000	1.018
Average Pay Factor:	1.017			
Placement Pay Factor:	1.017			

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

A = \$65.00 x 1,596.80 x 1.047

A = \$108,670.22

**TPA1 = \$108,670.22**

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

Production Only Bonus\* = \$108,670.22 - (\$65.00 x 1,596.80)

Production Only Bonus\* = \$4,878.22

Bonus\* = only applies when Contractor is not responsible for placement of mix.

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$4,878.22 / 2

**Production Bonus Paid on Estimate = \$2,439.11**

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement) + (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

B = (\$65.00 x 1,596.80 x 1.017) + (\$65.00 x 0.00)

B = \$105,556.46

TPA2 = (A+B) / 2

TPA2 = (\$108,670.22 + \$105,556.46) / 2

**TPA2 = \$107,113.34**

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

Placement Bonus Paid on Estimate = \$107,113.34 - (\$65.00 x 1,596.80) - \$2,439.11

**Placement Bonus Paid on Estimate = \$882.23**

Signature of Contractor Representative

Signature of TX DOT Representative

Rodriguez  
Engineering  
Laboratories

Feb 17

Date: December 13, 2012  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE12 3817

**Lot 2**

Date Placed: 12/03/2012  
Producer/Plant Loc: APAC - Ironhorse Asphalt,  
Liberty Hill  
Prime Contractor: HNTB  
Paving Contractor: APAC - Texas

Technician: Jose Orozco  
Item: 340  
Type: "C"  
Design: 11CRAP17.0-RAS3.0-64-M

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**FOR TESTS PERFORMED BY R.E.L.,  
SEE TXDOT FORMS ATTACHED.**

Cc: File

Reviewed by:

*Donald L. O'Connor*



nn:Doc:clients:Williamson County  
Docname:RE12 3817,Type C

TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd Street, Taylor, Texas	DATE LOT OPENED:	12/03/12
LOT NUMBER:	2	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - Liberty Hill, TX.		
AREA ENGINEER:		PROJECT MANAGER:	

COURSE/LIFT:	Non-Surface (<8	STATION:		DIST. FROM CL:	
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Total Quantity Actually Placed, Tons:	1,214.34	Bid Price / Tons:	\$65.00
Quantity Placed But No Air Void Testing Was Required, Tons:		First Lot?	

LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	97.6	96.6		
Absolute Deviation:	0.6	0.4		
Auto 1.000 Pay Factor:				
Pay Factor:	No Pay 0.000	1.038		
Average Pay Factor:	1.038			
Production Pay Factor:	1.038			

-1 NO PAY  
SUBLOT(S)

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	11.5	7.1		
Auto 1.000 Pay Factor:				
Pay Factor:	No Pay 0.000	1.028		
Average Pay Factor:	1.028			
Placement Pay Factor:	1.028			

-1 NO PAY  
SUBLOT(S)

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production

A = \$65.00 x 714.34 x 1.038

A = \$48,196.52

TPA1 = \$48,196.52

Production Only Penalty\* = A - (Bid Price x Production Lot Quantity Placed)

Production Only Penalty\* = \$48,196.52 - (\$65.00 x 1,214.34)

Production Only Penalty\* = (\$30,735.58)

Penalty\* = only applies when Contractor is not responsible for placement of mix.

Production Penalty Deducted from Estimate = Penalty / 2

Production Penalty Deducted from Estimate = (\$30,735.58) / 2

Production Penalty Deducted from Estimate = (\$15,367.79) ✓

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement) + (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

B = (\$65.00 x 714.34 x 1.028) + (\$65.00 x 0.00)

B = \$47,732.20

TPA2 = (A+B) / 2

TPA2 = (\$48,196.52 + \$47,732.20) / 2

TPA2 = \$47,964.36

Placement Penalty Deducted from Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment

Placement Penalty Paid on Estimate = \$47,964.36 - (\$65.00 x 1,214.34) - (\$15,367.79)

Placement Penalty Deducted from Estimate = (\$15,599.95)

Actual Tons Delivered and Placed = 1234.38. Sublot 1 failed tests so only 734.38 ton eligible for bonus. See attached corrected calculations.

*[Handwritten Signature]*

Signature of Contractor Representative

Signature of TX DOT Representative

PAYMENT FOR ITEM = P<sub>1</sub>

QC/QA PAY ADJUSTMENT

Mix: Ty C

Lot: 2

Bid Price: \$ 65.00

Quantity Actually Placed: 734.38

Pay Adjustment Factor for Production: 1.038

Pay Adjustment Factor for Placement: 1.028

PRODUCTION BONUS/PENALTY

TPA1 = A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production

A = \$ 49,548.62

Production Only Bonus = A - (Bid Price x Production Lot Quantity Placed)

Production Only Bonus = \$ 1,813.92

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$ 906.96

PLACEMENT BONUS/PENALTY

TPA2 = (A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
+ (Bid Price x Placement Lot Quantity Not Tested for Air Voids)

B = \$ 49,071.27

TPA2 = (A + B)/2

TPA2 = \$ 49,309.95

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Bonus

Placement Bonus Paid on Estimate = \$ 668.29

## Corrected Report

Date: January 29, 2013  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE12 3892

### Lot 3

Date Placed: 12/17/2012  
Producer/Plant Loc: APAC – Ironhorse Asphalt,  
Manor  
Prime Contractor: HNTB  
Paving Contractor: APAC – Texas

Technician: Jose Orozco  
Item: 340  
Type: "C"  
Design: 11CRAP17.0-RAZ3.0-64-M

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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

**Correction: Original QC/QA Pay Adjustment Sheet should be replaced with the attached sheet.**

Cc: File

Reviewed by: *Donald L. O'Connor*

dp:Doc:clients:Williamson County  
Docname:RE12 3892,Type C



TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd ST	DATE LOT OPENED:	12/17/12
LOT NUMBER:	3	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - MANOR		
AREA ENGINEER:		PROJECT MANAGER:	
COURSE/LIFT:	Non-Surface (<8	STATION:	
		DIST. FROM CL:	
Total Quantity Actually Placed, Tons:		1,450.62	Bid Price / Tons: \$65.00
Quantity Placed But No Air Void Testing Was Required, Tons:			First Lot? <input type="checkbox"/>

LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	97.2	96.9	96.5	97.1
Absolute Deviation:	0.2	0.1	0.5	0.1
Auto 1.000 Pay Factor:				
Pay Factor:	1.050	1.050	1.031	1.050
Average Pay Factor:	1.045			
Production Pay Factor:	1.045			

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	6.1	5.1	5.4	5.3
Auto 1.000 Pay Factor:				
Pay Factor:	1.048	1.050	1.050	1.050
Average Pay Factor:	1.050			
Placement Pay Factor:	1.050			

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

A = \$65.00 x 1,450.62 x 1.045

A = \$98,533.36

**TPA1 = \$98,533.36**

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

Production Only Bonus\* = \$98,533.36 - (\$65.00 x 1,450.62)

Production Only Bonus\* = \$4,243.06

Bonus\* = only applies when Contractor is not responsible for placement of mix.

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$4,243.06 / 2

**Production Bonus Paid on Estimate = \$2,121.53**

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
+ (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

B = (\$65.00 x 1,450.62 x 1.050) + (\$65.00 x 0.00)

B = \$99,004.82

TPA2 = (A+B) / 2

TPA2 = (\$98,533.36 + \$99,004.82) / 2

**TPA2 = \$98,769.09**

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

Placement Bonus Paid on Estimate = \$98,769.09 - (\$65.00 x 1,450.62) - \$2,121.53

**Placement Bonus Paid on Estimate = \$2,357.26**

Signature of Contractor Representative

Signature of TX DOT Representative

**PAYMENT FOR ITEM = P<sub>1</sub>**

Date: February 1, 2013  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE13 0141

**Lot 4**

Date Placed:	1/22/13	Technician:	Jose Orozco
Producer/Plant Loc:	APAC – Ironhorse Asphalt, Manor	Item:	341
Prime Contractor:	HNTB	Type:	"C"
Paving Contractor:	APAC – Texas	Design:	11CRAP17.0-RAZ3.0-64-M

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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

**Note: Although there were only three sublots, an extra pair of cores was taken and results are reported on Sublot 4 form.**

Cc: File

Reviewed by: \_\_\_\_\_

*Donald L. O'Connor*



dp:Doc:clients:Williamson County  
Docname:RE13 0141,Type C

TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd Str.	DATE LOT OPENED:	1/22/13
LOT NUMBER:	4	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - MANOR		
AREA ENGINEER:		PROJECT MANAGER:	

COURSE\LIFT:	Non-Surface (<8	STATION:		DIST. FROM CL:	
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Total Quantity Actually Placed, Tons:	894.27	Bid Price / Tons:	\$65.00
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Quantity Placed But No Air Void Testing Was Required, Tons:		First Lot?	
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LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	98.0	97.4	97.5	
Absolute Deviation:	1.0	0.4	0.5	
Auto 1.000 Pay Factor:				
Pay Factor:	1.000	1.038	1.031	
Average Pay Factor:	1.023			
Production Pay Factor:	1.023			

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	6.5	5.6	6.3	4.1
Auto 1.000 Pay Factor:				
Pay Factor:	1.040	1.050	1.044	
Average Pay Factor:	1.045			
Placement Pay Factor:	1.045			

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

A = \$65.00 x 894.27 x 1.023

A = \$59,464.48

TPA1 = \$59,464.48

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

Production Only Bonus\* = \$59,464.48 - (\$65.00 x 894.27)

Production Only Bonus\* = \$1,336.93

Bonus\* = only applies when Contractor is not responsible for placement of mix.

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$1,336.93 / 2

Production Bonus Paid on Estimate = \$668.47

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement) + (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

B = (\$65.00 x 894.27 x 1.045) + (\$65.00 x 0.00)

B = \$60,743.29

TPA2 = (A+B) / 2

TPA2 = (\$59,464.48 + \$60,743.29) / 2

TPA2 = \$60,103.89

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

Placement Bonus Paid on Estimate = \$60,103.89 - (\$65.00 x 894.27) - \$668.47

Placement Bonus Paid on Estimate = \$1,307.87

Signature of Contractor Representative

Signature of TX DOT Representative

PAYMENT FOR ITEM = P<sub>1</sub>

**Second Street Roadway  
 Project: 10WC821  
 Item: 341-WC03 D-GR HMA(QCQA) TY-C SAC-B PG 70-22  
 BONUS/PENTALTY**

**Production Placement Bonus/Penalty Summary**

<b>Lot #</b>	<b>Date</b>	<b>Tons</b>	<b>Production Bonus</b>	<b>Placement Bonus</b>	<b>Production Penalty</b>	<b>Placement Penalty</b>	<b>Total Bonus / Penalty</b>
1	01/23/2013	1551.34	\$1,861.61	\$1,396.21			\$3,257.82
2	01/24/2013	1309.00	\$1,845.69	\$1,335.18			\$3,180.87
SQ	01/25/2013	249.19	N/A	N/A			\$0.00
3	01/31/2013	1229.86	\$1,623.42	\$922.40			\$2,545.82
4	02/01/2013	1701.72	\$1,991.01	\$2,297.32			\$4,288.33
SQ	02/04/2013	229.85	N/A	N/A			\$0.00
<b>Totals</b>		<b>6270.96</b>	<b>\$7,321.73</b>	<b>\$5,951.11</b>	<b>\$0.00</b>	<b>\$0.00</b>	<b>\$13,272.84</b>

Date: January 31, 2013  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE13 0139

**Lot 1 (Surface)**

Date Placed:	1/23/13	Technician:	Jose Orozco
Producer/Plant Loc:	APAC – Ironhorse Asphalt, Manor	Item:	340
Prime Contractor:	HNTB	Type:	"C"
Paving Contractor:	APAC – Texas	Design:	11CRAP17.0-RAS3.0-64-M

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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

Cc: File

Reviewed by: 



dp:Doc:clients:Williamson County  
Docname:RE13 0139,Type C

**TEXAS DEPARTMENT OF TRANSPORTATION**

**QC/QA PAY ADJUSTMENT**

SAMPLE ID:	2nd Street	DATE LOT OPENED:	1/23/13
LOT NUMBER:	1	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Travis	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - MANOR		
AREA ENGINEER:		PROJECT MANAGER:	
COURSE/LIFT:	Surface	STATION:	
		DIST. FROM CL:	
Total Quantity Actually Placed, Tons:		1,551.34	Bid Price / Tons: \$60.00
Quantity Placed But No Air Void Testing Was Required, Tons:			First Lot? Yes

**LABORATORY MOLDED DENSITY**

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	97.1	97.4	97.5	
Absolute Deviation:	0.1	0.4	0.5	
Auto 1.000 Pay Factor:				
Pay Factor:	1.050	1.038	1.031	
Average Pay Factor:	1.040			
Production Pay Factor:	1.040			

**IN PLACE AIR VOIDS**

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	4.9	4.7	5.0	
Auto 1.000 Pay Factor:				
Pay Factor:	1.035	1.005	1.050	
Average Pay Factor:	1.030			
Placement Pay Factor:	1.030			

**TOTAL PAY ADJUSTMENTS**

**TPA1=A**

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

A = \$60.00 x 1,551.34 x 1.040

A = \$96,803.62

**TPA1 = \$96,803.62**

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

Production Only Bonus\* = \$96,803.62 - (\$60.00 x 1,551.34)

Production Only Bonus\* = \$3,723.22

*Bonus\* = only applies when Contractor is not responsible for placement of mix.*

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$3,723.22 / 2

**Production Bonus Paid on Estimate = \$1,861.61**

**TPA2=(A+B)/2**

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
+ (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

B = (\$60.00 x 1,551.34 x 1.030) + (\$60.00 x 0.00)

B = \$95,872.81

TPA2 = (A+B) / 2

TPA2 = (\$96,803.62 + \$95,872.81) / 2

**TPA2 = \$96,338.22**

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

Placement Bonus Paid on Estimate = \$96,338.22 - (\$60.00 x 1,551.34) - \$1,861.61

**Placement Bonus Paid on Estimate = \$1,396.21**

Signature of Contractor Representative \_\_\_\_\_

Signature of TX DOT Representative \_\_\_\_\_

**PAYMENT FOR ITEM = P<sub>1</sub>**

Corrected Report

Date: January 31, 2013  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE13 0140

**Lot 2 (Surface)**

Date Placed: 1/24/13  
Producer/Plant Loc: APAC – Ironhorse Asphalt,  
Liberty Hill  
Prime Contractor: HNTB  
Paving Contractor: APAC – Texas

Technician: Jose Orozco  
Item: 340  
Type: "C"  
Design: 11CRAP17.0-RAS3.0-64-M

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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

**Correction: Changed the REL Lab No.: from 12 3817 to RE13 0140.**

Cc: File

Reviewed by: Donald L. O'Connor

dp:Doc:clients:Williamson County  
Docname:RE13 0140,Type C



TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd Street	DATE LOT OPENED:	1/24/13
LOT NUMBER:	2	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - MANOR		
AREA ENGINEER:		PROJECT MANAGER:	

COURSE/LIFT:	Surface	STATION:		DIST. FROM CL:	
Total Quantity Actually Placed, Tons:				1,284.29	Bid Price / Tons: \$60.00
Quantity Placed But No Air Void Testing Was Required, Tons:					First Lot?

LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	97.3	97.1	97.1	96.7
Absolute Deviation:	0.3	0.1	0.1	0.3
Auto 1.000 Pay Factor:				
Pay Factor:	1.044	1.050	1.050	1.044
Average Pay Factor:	1.047			
Production Pay Factor:	1.047			

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	9.8	6.2	6.6	5.4
Auto 1.000 Pay Factor:	yes			
Pay Factor:	1.000	1.046	1.038	1.050
Average Pay Factor:	1.034			
Placement Pay Factor:	1.034			

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

A = \$60.00 x 1,284.29 x 1.047

A = \$80,679.10

TPA1 = \$80,679.10

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

Production Only Bonus\* = \$80,679.10 - (\$60.00 x 1,284.29)

Production Only Bonus\* = \$3,621.70

Bonus\* = only applies when Contractor is not responsible for placement of mix.

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$3,621.70 / 2

Production Bonus Paid on Estimate = \$1,810.85

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement) + (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

B = (\$60.00 x 1,284.29 x 1.034) + (\$60.00 x 0.00)

B = \$79,677.35

TPA2 = (A+B) / 2

TPA2 = (\$80,679.10 + \$79,677.35) / 2

TPA2 = \$80,178.23

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

Placement Bonus Paid on Estimate = \$80,178.23 - (\$60.00 x 1,284.29) - \$1,810.85

Placement Bonus Paid on Estimate = \$1,309.98

Actual Tons Delivered + Placed = 1309.00. See attached corrected calculations.

Signature of Contractor Representative

Signature of TX DOT Representative

PAYMENT FOR ITEM = P<sub>1</sub>

QC/QA PAY ADJUSTMENT

Mix: Ty C Surface

Lot: 2

Bid Price: \$ 60.00

Quantity Actually Placed: 1,309.00

Pay Adjustment Factor for Production: 1.047

Pay Adjustment Factor for Placement: 1.034

PRODUCTION BONUS/PENALTY

TPA1 = A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production

A = \$ 82,231.38

Production Only Bonus = A - (Bid Price x Production Lot Quantity Placed)

Production Only Bonus = \$ 3,691.38

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$ 1,845.69

PLACEMENT BONUS/PENALTY

TPA2 = (A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
+ (Bid Price x Placement Lot Quantity Not Tested for Air Voids)

B = \$ 81,210.36

TPA2 = (A + B)/2

TPA2 = \$ 81,720.87

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Bonus

Placement Bonus Paid on Estimate = \$ 1,335.18

Date: February 5, 2013  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE13 0196

**Lot 3 (Surface)**

Date Placed: 1/31/13  
Producer/Plant Loc: APAC – Ironhorse Asphalt,  
Manor  
Prime Contractor: HNTB  
Paving Contractor: APAC – Texas

Technician: Jose Orozco  
Item: 340  
Type: "C"  
Design: 11CRAP17.0-RAZ3.0-64-M

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**FOR TESTS PERFORMED BY R.E.L.,**  
**SEE TXDOT FORMS ATTACHED.**

Cc: File

Reviewed by:

*Donald L. O'Connor*

dp:Doc:clients:Williamson County  
Docname:RE13 0196,Type C



TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd. Street	DATE LOT OPENED:	1/31/13
LOT NUMBER:	3	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - MANOR		
AREA ENGINEER:		PROJECT MANAGER:	
COURSE\LIFT:	Surface	STATION:	
		DIST. FROM CL:	
Total Quantity Actually Placed, Tons:		1,229.86	Bid Price / Tons: \$60.00
Quantity Placed But No Air Void Testing Was Required, Tons:			First Lot?

LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	97.0	97.4	97.0	97.4
Absolute Deviation:	0.0	0.4	0.0	0.4
Auto 1.000 Pay Factor:				
Pay Factor:	1.050	1.038	1.050	1.038
Average Pay Factor:	1.044			
Production Pay Factor:	1.044			

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	4.6	5.2	6.6	7.4
Auto 1.000 Pay Factor:				
Pay Factor:	0.990	1.050	1.038	1.022
Average Pay Factor:	1.025			
Placement Pay Factor:	1.025			

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

A = \$60.00 x 1,229.86 x 1.044

A = \$77,038.43

TPA1 = \$77,038.43

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

Production Only Bonus\* = \$77,038.43 - (\$60.00 x 1,229.86)

Production Only Bonus\* = \$3,246.83

Bonus\* = only applies when Contractor is not responsible for placement of mix.

Production Bonus Paid on Estimate = Bonus / 2

Production Bonus Paid on Estimate = \$3,246.83 / 2

**Production Bonus Paid on Estimate = \$1,623.42**

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement)  
+ (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

B = (\$60.00 x 1,229.86 x 1.025) + (\$60.00 x 0.00)

B = \$75,636.39

TPA2 = (A+B) / 2

TPA2 = (\$77,038.43 + \$75,636.39) / 2

TPA2 = \$76,337.41

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

Placement Bonus Paid on Estimate = \$76,337.41 - (\$60.00 x 1,229.86) - \$1,623.42

**Placement Bonus Paid on Estimate = \$922.40**

\_\_\_\_\_  
Signature of Contractor Representative

\_\_\_\_\_  
Signature of TX DOT Representative

**PAYMENT FOR ITEM = P<sub>1</sub>**

Rodriguez  
Engineering  
Laboratories

Date: February 5, 2013  
Client: HNTB  
Project: 2<sup>nd</sup> Street (Taylor, Texas)  
CSJ No.: 10WC821  
REL Lab No.: RE13 0197

**Lot 4 (Surface)**

Date Placed: 2/1/13  
Producer/Plant Loc: APAC – Ironhorse Asphalt, Manor  
Prime Contractor: HNTB  
Paving Contractor: APAC – Texas

Technician: Jose Orozco  
Item: 341  
Type: "C"  
Design: 11CRAP17.0-RAZ3.0-64-M

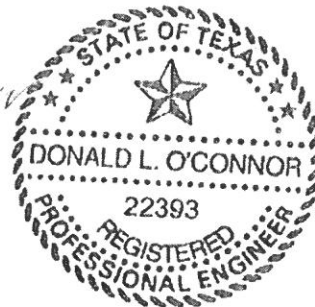
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**FOR TESTS PERFORMED BY R.E.L.,  
SEE TXDOT FORMS ATTACHED.**

Cc: File

Reviewed by: *Donald L. O'Connor*

dp:Doc:clients:Williamson County  
Docname:RE13 0197,Type C



TEXAS DEPARTMENT OF TRANSPORTATION

QC/QA PAY ADJUSTMENT

SAMPLE ID:	2nd Street	DATE LOT OPENED:	2/1/13
LOT NUMBER:	4	LETTING DATE:	
SAMPLE STATUS:		CONTROLLING CSJ:	
COUNTY:	Williamson	SPEC YEAR:	2004
SAMPLED BY:	Jose Orozco 2344	SPEC ITEM:	341
SAMPLE LOCATION:		SPECIAL PROVISION:	
MATERIAL CODE:		MIX TYPE:	SS3224_C_Coarse_Surface
MATERIAL NAME:			
PRODUCER:	APAC TX IRONHORSE ASPHALT - MANOR		
AREA ENGINEER:		PROJECT MANAGER:	

COURSE/LIFT:	Surface	STATION:		DIST. FROM CL:	
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Total Quantity Actually Placed, Tons:	1,701.72	Bid Price / Tons:	\$60.00
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Quantity Placed But No Air Void Testing Was Required, Tons:		First Lot?	
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LABORATORY MOLDED DENSITY

TxDOT Sublot:	1	2	3	4
Design Target Density:	97.0	97.0	97.0	97.0
Average Percent Density:	97.1	97.2	97.3	97.8
Absolute Deviation:	0.1	0.2	0.3	0.8
Auto 1.000 Pay Factor:				
Pay Factor:	1.050	1.050	1.044	1.013
Average Pay Factor:	1.039			
Production Pay Factor:	1.039			

IN PLACE AIR VOIDS

TxDOT Sublot:	1	2	3	4
Average Percent Air Voids:	6.4	6.1	6.6	5.6
Auto 1.000 Pay Factor:				
Pay Factor:	1.042	1.048	1.038	1.050
Average Pay Factor:	1.045			
Placement Pay Factor:	1.045			

TOTAL PAY ADJUSTMENTS

TPA1=A

A = Bid Price x Quantity Actually Placed x Pay Adjustment Factor for Production.

$$A = \$60.00 \times 1,701.72 \times 1.039$$

$$A = \$106,085.22$$

$$TPA1 = \$106,085.22$$

Production Only Bonus\* = A - (Bid Price x Production Lot Quantity Placed).

$$Production\ Only\ Bonus^* = \$106,085.22 - (\$60.00 \times 1,701.72)$$

$$Production\ Only\ Bonus^* = \$3,982.02$$

Bonus\* = only applies when Contractor is not responsible for placement of mix.

$$Production\ Bonus\ Paid\ on\ Estimate = Bonus / 2$$

$$Production\ Bonus\ Paid\ on\ Estimate = \$3,982.02 / 2$$

$$Production\ Bonus\ Paid\ on\ Estimate = \$1,991.01$$

TPA2=(A+B)/2

B = (Bid Price x Placement Lot Quantity Tested for Air Voids x Pay Adjustment Factor for Placement) + (Bid Price x Placement Lot Quantity Not Tested for Air Voids.)

$$B = (\$60.00 \times 1,701.72 \times 1.045) + (\$60.00 \times 0.00)$$

$$B = \$106,697.84$$

$$TPA2 = (A+B) / 2$$

$$TPA2 = (\$106,085.22 + \$106,697.84) / 2$$

$$TPA2 = \$106,391.53$$

Placement Bonus Paid on Estimate = TPA2 - (Bid Price x Quantity Actually Placed) - Production Estimate Adjustment.

$$Placement\ Bonus\ Paid\ on\ Estimate = \$106,391.53 - (\$60.00 \times 1,701.72) - \$1,991.01$$

$$Placement\ Bonus\ Paid\ on\ Estimate = \$2,297.32$$

Signature of Contractor Representative

Signature of TX DOT Representative

PAYMENT FOR ITEM = P<sub>1</sub>