January 9, 2017

SUBJECT: FAP Route 349 (US 30)

Project ACNHPP-0349(018) Section (15 & 16)RS-12 Will & Kendall Counties Contract No. 62C38

Item No. 122, January 20, 2017 Letting

Addendum A

NOTICE TO PROSPECTIVE BIDDERS:

Attached is an addendum to the plans or proposal. This addendum involves revised and/or added material.

- 1. Replaced the Schedule of Prices
- 2. Revised page ii of the Table of Contents to the Special Provisions
- 3. Added pages 78 83 to the Special Provisions
- 4. Revised sheets 3, 4 and 5 of the Plans

Prime contractors must utilize the enclosed material when preparing their bid and must include any Schedule of Prices changes in their bidding proposal.

Bidders using computer-generated bids are cautioned to reflect any and all Schedule of Prices changes, if involved, into their computer programs.

Very truly yours,

Maureen M. Addis, P.E.

Engineer of Design and Environment

By: Ted B. Walschleger, P. E.

Tett Deluklyon B.E.

Engineer of Project Management

cc: John Fortmann, Region 1, District 1; Tim Kell; Estimates

MTS/ck

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT 62C38 NUMBER -

State Job # - C-91-345-16

County Name - VARIOUS- -

Code - 0 - - District - 0 - -

Section Number - (15 & 16) RS-12

Project Number

ACNHPP-0349/018/

*REVISED: JANUARY 04, 2017

Route

FAP 349

ltem Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X0320050	CONSTRUCTN LAYOUT SPL	L SUM	1.000				
X0327980	PAVMT MRKG REM WTR BL	SQ FT	51,111.000				
X2020110	GRADING & SHAP SHLDRS	UNIT	381.000				
Z0004562	COMB C C&G REM & REPL	FOOT	53.000				
Z0030850	TEMP INFO SIGNING	SQ FT	51.400				
*DEL Z0033700	LONG JOINT SEALANT	FOOT	48,000.000				
20200100	EARTH EXCAVATION	CU YD	5.000				
21101615	TOPSOIL F & P 4	SQ YD	198.000				
25200110	SODDING SALT TOLERANT	SQ YD	198.000				
40600290	BIT MATLS TACK CT	POUND	84,111.000				
40600400	MIX CR JTS FLANGEWYS	TON	245.000				
*REV 40600827	P LB MM IL-4.75 N50	TON	5,234.000				
40600982	HMA SURF REM BUTT JT	SQ YD	955.000				
40601005	HMA REPL OVER PATCH	TON	144.000				
40603340	HMA SC "D" N70	TON	10,658.000				

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C-91-345-16 State Job # -

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Section Number - (15 & 16) RS-12

Project Number

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*REVISED: JANUARY 04, 2017

Route		
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FAP 349

ltem Number	Pay Item Description	Unit of Measure	Quantity	х	Unit Price	=	Total Price
42001300	PROTECTIVE COAT	SQ YD	80.000				
42400200	PC CONC SIDEWALK 5	SQ FT	559.000				
42400800	DETECTABLE WARNINGS	SQ FT	66.000				
44000158	HMA SURF REM 21/4	SQ YD	126,886.000				
44000600	SIDEWALK REM	SQ FT	559.000				
44002209	HMA RM OV PATCH 2 1/4	SQ YD	1,143.000				
44201773	CL D PATCH T1 11	SQ YD	5.000				
44201777	CL D PATCH T2 11	SQ YD	58.000				
44201783	CL D PATCH T4 11	SQ YD	1,080.000				
48102100	AGG WEDGE SHLD TYPE B	TON	1,524.000				
66900200	NON SPL WASTE DISPOSL	CU YD	5.000				
66900450	SPL WASTE PLNS/REPORT	L SUM	1.000				
66900530	SOIL DISPOSAL ANALY	EACH	1.000				
67000400	ENGR FIELD OFFICE A	CAL MO	3.000				
67100100	MOBILIZATION	L SUM	1.000				

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Route

FAP 349

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
70100460	TRAF CONT-PROT 701306	L SUM	1.000				
70102640	TR CONT & PROT 701801	L SUM	1.000				
70300100	SHORT TERM PAVT MKING	FOOT	41,250.000				
70300150	SHRT TRM PAVT MK REM	SQ FT	13,750.000				
70300210	TEMP PVT MK LTR & SYM	SQ FT	1,153.200				
70300220	TEMP PVT MK LINE 4	FOOT	130,459.000				
70300240	TEMP PVT MK LINE 6	FOOT	6,406.000				
70300250	TEMP PVT MK LINE 8	FOOT	391.000				
70300260	TEMP PVT MK LINE 12	FOOT	792.000				
70300280	TEMP PVT MK LINE 24	FOOT	822.000				
72501000	TERMINAL MARKER - DA	EACH	1.000				
78000100	THPL PVT MK LTR & SYM	SQ FT	1,153.200				
78000200	THPL PVT MK LINE 4	FOOT	130,459.000				
78000400	THPL PVT MK LINE 6	FOOT	6,218.000				
78000500	THPL PVT MK LINE 8	FOOT	391.000				

Route

ILLINOIS DEPARTMENT OF TRANSPORTATION SCHEDULE OF PRICES CONTRACT

NUMBER -

62C38

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Section Number - (15 & 16) RS-12

Project Number

ACNHPP-0349/018/ FAP 349

*REVISED: JANUARY 04, 2017

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
78000600	THPL PVT MK LINE 12	FOOT	1,459.000				
78000650	THPL PVT MK LINE 24	FOOT	822.000				
78100100	RAISED REFL PAVT MKR	EACH	1,198.000				
78300200	RAISED REF PVT MK REM	EACH	1,198.000				
88600600	DET LOOP REPL	FOOT	2,919.000				

CONTRACT NUMBER	62C38	
THIS IS THE TOTAL RID		\$

NOTES:

- 1. Each PAY ITEM should have a UNIT PRICE and a TOTAL PRICE.
- 2. The UNIT PRICE shall govern if no TOTAL PRICE is shown or if there is a discrepancy between the product of the UNIT PRICE multiplied by the QUANTITY.
- 3. If a UNIT PRICE is omitted, the TOTAL PRICE will be divided by the QUANTITY in order to establish a UNIT PRICE.
- 4. A bid may be declared UNACCEPTABLE if neither a unit price nor a total price is shown.

FUEL	COS	ST AD.	JUSTI	MEN	IT (B	DE) (RETUR	N FO	RM W	ITH BID)				.74
НОТ	MIX	ASPI	HALT	- P	PAY	FOR	PERF	ORMA	NCE	USING	PERCE	ENT	WITHIN	LIMITS	S -
JOBS	ITE S	SAMP	LING	(BDE	E)										.78

HOT MIX ASPHALT - PAY FOR PERFORMANCE USING PERCENT WITHIN LIMITS - JOBSITE SAMPLING (BDE)

Effective: November 1, 2014 Review: April 1, 2016

<u>Description</u>. This special provision describes the procedures used for production, placement and payment for hot-mix asphalt (HMA). This special provision shall apply to all pay items as specified in the plans. This work shall be according to the Standard Specifications except as specified herein.

Delete Articles: 406.06(b)(1), 2nd paragraph (Temperature requirements)

406.06(e), 3rd paragraph (Paver speed requirements)

406.07(b) (Rolling) 406.07(c) (Density)

1030.04, last two sentences of first paragraph (Mix design verification)

1030.05(a)(4, 5, 7, 8, 9, & 10)(QC/QA Documents)

1030.05(d)(2)a. (Plant Tests)

1030.05(d)(2)b. (Dust-to-Asphalt and Moisture Content)

1030.05(d)(2)d. (Small Tonnage) 1030.05(d)(2)f. (HMA Sampling) 1030.05(d)(3) (Required Field Tests)

1030.05(d)(4) (Control Limits) 1030.05(d)(5) (Control Charts)

1030.05(d)(6) (Corrective Action for Required Plant Tests) 1030.05(d)(7) (Corrective Action for Field Tests (Density))

1030.05(e) (Quality Assurance by the Engineer)

1030.05(f) (Acceptance by the Engineer)

1030.06(a), 2nd paragraph (Before start-up...)

Definitions.

- (a) Quality Control (QC): All production and construction activities by the Contractor required to achieve the required level of quality.
- (b) Quality Assurance (QA): All monitoring and testing activities by the Engineer required to assess product quality, level of payment, and acceptability of the product.
- (c) Percent Within Limits (PWL): The percentage of material within the quality limits for a given quality characteristic.
- (d) Quality Characteristic: The characteristics that are evaluated by the Department for payment using PWL. The quality characteristics for this project are field Voids in the Mineral Aggregate (VMA), voids, and density. Field VMA will be calculated using the combined Aggregates Bulk Specific Gravity (G_{sb}) from the mix design.
- (e) Quality Level Analysis (QLA): QLA is a statistical procedure for estimating the amount of product within specification limits.

- (f) Sublot: A sublot for field VMA, and voids, will be 1000 tons (910 metric tons). If the quantity is less than 8000 tons (7260 metric tons), the sublot size will be adjusted to achieve a minimum of 8 tests. If the last sublot consists of less than 200 tons (180 metric tons), it will be combined with the previous sublot.
- (g) Density Testing Interval: The interval for density testing will be 0.2 mile (320 m) for lift thickness equal to or less than 3 in. (75 mm) and 0.1 mile (160 m) for lift thickness greater than 3 in. (75 mm). If a density testing interval is less than 200 ft (60 m), it will be combined with the previous test interval.
- (h) Lot: A lot consists of ten sublots or 30 density intervals. If seven or less sublots or 19 or less density intervals remain at the end of production of a mixture, the test results for these sublots will be combined with the previous lot for evaluation of percent within limits and pay factors. Lots for mixture testing are independent of lots for density testing.
- (i) Density Test: A density test consists of a core taken at a random longitudinal and transverse offset within each density testing interval. The HMA maximum theoretical gravity (G_{mm}) will be based on the running average of four including the current day of production. Initial G_{mm} will be based on the average of the first four test results. The random transverse offset excludes the outer 1.0 ft (300 mm) from an unconfined edge. For confined edges, the random transverse offset excludes a distance from the outer edge equal to the lift thickness or a minimum of 4 in. (100 mm).
- (j) Unconfined Edge Density: The outer 1.0 ft (300 mm) of an unconfined edge will be excluded from the effective pavement width used for calculating random transverse density location. The unconfined edge density will be randomly selected within each 1/2 mile (800 m) section for each unconfined edge. Longitudinal joint testing shall be located at a distance equal to the lift thickness or a minimum of 4.0 in. (100 mm), from each pavement edge.

<u>Pre-production Meeting.</u> The Engineer will schedule a pre-production meeting a minimum of seven calendar days prior to the start of production. The HMA QC Plan, test frequencies, random test locations, and responsibilities of all parties involved in testing and determining the PWL will be addressed. Personnel attending the meetings will include the following:

- (a) Resident Engineer
- (b) District Mixture Control Representative
- (c) QC Manager
- (d) Contractor Paving Superintendent
- (e) Any consultant involved in any part of the HMA sampling or testing on this project

<u>Quality Control (QC) by the Contractor</u>. The Contractor's quality control plan shall include the schedule of testing for both quality characteristics and non-quality characteristics required to control the product such as asphalt binder content and mixture gradation. The schedule shall include sample location. The minimum test frequency shall not be less than outlined in the Minimum Quality Control Sampling and Testing Requirements table below.

Table 1
Minimum Quality Control Sampling and Testing Requirements

minimum adamy control camping and recting requirements					
Quality Characteristic	Minimum Test Frequency	Sampling Location			
Mixture Gradation					
Binder Content	1/day	nor OC Plan			
G_{mm}	i/uay	per QC Plan			
G_{mb}					
Density	per QC plan	per QC Plan			

The Contractor shall submit QC test results to the Engineer within 48 hours of the time of sampling.

<u>Initial Production Testing</u>. The Contractor shall split and test the first two samples with the Department for comparison purposes. The Contractor shall complete all tests and report all results to the Engineer within two working days of sampling. The Engineer will make Department test results of the initial production testing available to the Contractor within two working days from the receipt of the samples.

Quality Assurance (QA) by the Engineer. The Engineer will test each sublot for field VMA, voids, and dust/AC ratio; and each density interval for density to determine payment for each lot. A sublot shall begin once an acceptable test-strip has been completed and the AJMF has been determined. All Department testing will be performed in a qualified laboratory by personnel who have successfully completed the Department HMA Level I training.

<u>Voids, field VMA, and Dust/AC ratio</u>. For each sublot, the Engineer will determine the random tonnage for the sample and the Contractor shall be responsible for obtaining the sample according to the "PFP and QCP Hot-Mix Asphalt Random Jobsite Sampling" procedure. The Engineer will not disclose the random location of the sample until after the truck containing the random tonnage has been loaded and en-route to the project.

<u>Density</u>. The Engineer will identify the random locations for each density testing interval. The Contractor shall be responsible for obtaining the 4 in. (100 mm) diameter cores within the same day and prior to opening to traffic unless otherwise approved by the Engineer according to the "PFP and QCP Random Density Procedure". The locations will not be disclosed to the Contractor until after final rolling. The cores shall be obtained under the supervision of the Engineer. All core holes shall be filled immediately upon completion of coring. All water shall be removed from the core holes prior to filling. All core holes shall be filled with a rapid hardening mortar or concrete which shall be mixed in a separate container prior to placement in the hole. Any depressions in the surface of the filled core holes greater than 1/4 in. (6 mm) at the time of final inspection will require removal of the fill material to the depth of the lift thickness and replacement.

<u>Test Results</u>. The Department's test results for the first sublot, or density testing interval, of every lot will be available to the Contractor within three working days from the time the secured sample was delivered, by the Contractor, to the Department's testing facility or a location designated by the Engineer. Test results for a completed lot will be available to the Contractor within ten working days from the time the secured sample from the last sublot or density testing interval was delivered to the Department's testing facility or a location designated by the Engineer.

The Engineer will maintain a complete record of all Department test results. Copies will be furnished upon request. The records will contain, at a minimum, the originals of all Department test results and raw data, random numbers used and resulting calculations for sampling locations, and quality level analysis calculations.

<u>Dispute Resolution</u>. Dispute resolution testing will only be permitted when the Contractor submits their split sample test results prior to receiving Department split sample test results and: 1) the difference between the Contractor and Department split test results exceed the precision limits shown in Table 2 below; or 2) the Department's test results are outside the acceptable limits shown in Table 4. For density disputes, the Contractor shall use the Department's running average for G_{mm} when determining compliance with the Limits of Precision.

Table 2

Test Parameter	Limits of Precision
Voids	1.0 %
VMA	1.0 %
Ratio - Dust / Asphalt Binder	0.2
Core Density	1.0 %

If dispute resolution is necessary, the Contractor shall submit a request in writing within four working days of receipt of the results of the quality index analysis for the lot. The Engineer will document receipt of the request. The Bureau of Materials and Physical Research (BMPR) laboratory will be used for dispute resolution testing.

Density cores for dispute resolution testing shall be taken at the same time as the random density core. The density core for dispute resolution testing shall be taken within 1 ft (300 mm) longitudinally of the random density core and at the same transverse offset. Density dispute resolution will replace original density test results.

If three or more consecutive mix sublots are contested, corresponding density results will be recalculated with the new $G_{\rm mm}$.

Test results from the dispute resolution testing will replace voids, VMA and Dust/AC results from the original quality assurance testing. The lot pay factor for the lot under dispute resolution will be recalculated. If the recalculated lot pay factor is less than or equal to the original lot pay factor, laboratory costs listed below will be borne by the Contractor.

Table 3

*** * * *								
Test	Cost							
Mix Testing	\$1000.00 / sublot							
Core Density	\$300.00 / core							

<u>Acceptance by the Engineer</u>. All of the Department's tests shall be within the acceptable limits listed below:

Table 4

	•				
Acceptable Limits					
Parameter	Acceptable Range				
Field VMA	-1.0 - +3.0 % ^{1/}				
Voids	2.0 – 6.0 %				
Density:					
IL-19.0, IL-9.5	90.0 – 98.0 %				
IL-4.75, SMA	92.0 – 98.0 %				
Dust / AC Ratio	$0.4 - 1.6^{2/}$				

1/ Based on minimum required VMA from mix design

2/ Does not apply to SMA

In addition, the PWL for any quality characteristic shall be 50 percent or above for any lot. No visible pavement distress shall be present such as, but not limited to, segregation, excessive coarse aggregate fracturing or flushing.

<u>Basis of Payment</u>. Payment will be based on the calculation of the Composite Pay Factor for each mix according to the "PFP Quality Level Analysis" document. Payment for full depth pavement will be based on the calculation of the Full Depth Pay Factor according to the "PFP Quality Level Analysis" document.

<u>Additional Pay Adjustments</u>. In addition to the Composite Pay Factor for each mix, monetary deductions will be made for dust/AC ratios and unconfined edge densities as shown in Tables 5 and 6 as follows.

Table 5

Dust / AC Pay Adjustment Table 1/					
Range	Deduct / sublot				
0.6 ≤ X ≤ 1.2	\$0				
$0.5 \le X < 0.6$ or $1.2 < X \le 1.4$	\$1000				
$0.4 \le X < 0.5$ or $1.4 < X \le 1.6$	\$3000				
X < 0.4 or X > 1.6	Shall be removed and replaced				

1/ Does not apply to SMA.

Table 6

. 5.5.0	
Unconfined Edge Density Adjustment Table	
Density	Deduct / 0.5 mile (800 m)
≥ 90%	\$0
89.0% to 89.9%	\$1000
88.0% to 88.9%	\$3000
< 88.0%	Outer 1.0 ft (300 mm) will require remedial action acceptable to the Engineer