



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

May 27, 2010

SUBJECT: FAP Route 310 (US 67/ IL 267)  
Project ACNHF-HPS-1570 (001)  
Section 60-16  
Madison County  
Contract No. 76311  
Item No. 17, June 11, 2010 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. Revised the Table of Content to the Special Provisions.
2. Revised pages 12, 13, 20 and 57 of the Special Provisions.
3. Added pages 148 - 152 to the Special Provisions.

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,

Scott E. Stitt, P.E.  
Acting Engineer of Design and Environment

A handwritten signature in cursive script, reading "Ted B. Walschleger P.E.".

By: Ted B. Walschleger, P. E.  
Engineer of Project Management

cc: Mary C. Lamie, Region 5, District 8; N. R. Stoner; Dave Lippert, Mike Renner; R. E. Anderson; Estimates

TBW:DB:jc

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Construction Requirements. The pipe underdrains cross road shall extend 2 feet behind the back of the type B curb and gutter into the existing median. Upgrade ends of all pipe underdrains cross road installation shall be encased in a fabric envelope. At the two median noses, pipe underdrains cross road should be installed prior to widening taking place at ramps. If a pavement patch is in close proximity to the proposed pipe underdrain cross road, the location of the pipe underdrain may be adjusted to the pavement patch location with the approval of the Engineer. A geotechnical fabric wrap shall be used around the granular backfill, separating the existing soil from the porous granular material. Porous granular backfill shall be placed according to the requirements of Section 209 of the Standard Specifications to a depth within 10 inches of the final pavement surface grade. The remainder of the trench will be patched with bituminous binder according to Section 406 of the Standard Specifications. Section 422 of the Standard Specifications will govern all pavement removal and class D patching for the installation of pipe underdrains cross road.

Method of Measurement. Pipe Underdrains Cross Road will be measured in linear feet, in place, as per Article 601.07 of the Standard Specifications. Aggregate used as granular backfill will be measured for payment in cubic yard according to the requirements of Article 209.04 of the Standard Specifications. Geotechnical fabrics for pipe underdrains cross road will be measured for payment in place and the area computed in square yard according to Article 601.07 of the Standard Specifications. The additional fabric required for overlaps will not be measured for payment. Pavement patching will be measured for payment in place and the area computed in square yard.

Basis of Payment. Furnishing and installing the pipe underdrains cross road will be paid for at the contract unit price per lineal foot for PIPE UNDERDRAINS CROSS ROAD. Aggregate (CA 16) used as granular backfill will be paid for at the contract unit price per cubic yards for POROUS GRANULAR BACKFILL. Geotechnical fabric used in the installation of pipe underdrains cross road will be paid for at the contract unit price per square yard for GEOTECHNICAL FABRIC. The pavement removal and bituminous binder course required to place and patch the areas where pipe underdrains cross road will be placed will be paid for at the contract unit price per square yard for CLASS D PATCHES.

#### **GLARE SCREEN BLADES 24”**

This work shall consist of constructing glare screens at the location shown in the plans in accordance with Section 638 and Highway Standard 638001.

This work shall be paid for at the contract unit price per each for GLARE SCREEN BLADES 24, which price shall include all costs for performing the work as shown on the drawings and as outlined herein.

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### **REMOVE EXISTING STRUCTURE NO 1**

Work under this item includes the staged removal of Existing Structure No 1 in accordance with section 501 of Standard Specifications. All material shall become the property of the Contractor and shall legally dispose of debris at a location outside of the right-of-way approved by the Engineer. Existing Structure No 1 is a buried foundation approximately a 8' x 8' and is a 4'-5' deep at Station 57+50.00 (RT).

This work shall be paid for at the contract unit price per each for REMOVAL OF EXISTING STRUCTURE NO 1, which price shall include all costs for performing the work as shown on the drawings and as outlined herein.

### **FENCE REMOVAL**

This work shall consist of removal of fences. All fences that exist inside the construction limits shall be removed and disposed of by the Contractor as specified by the Engineer.

This work will be paid for by the contract unit cost per foot for FENCE REMOVAL.

### **TREES AND SHRUBS TO BE PROTECTED**

This work shall consist of providing all labor, equipment and materials necessary for the protection of existing trees and shrubs other than those shown in the plans or designated by the Engineer for removal. This work shall be done in accordance with Section 201 of the Standard Specifications.

This work will not be paid for separately, but will be included in the contract unit price per cubic yard for EARTH EXCAVATION.

### **COMBINATION CURB AND GUTTER REMOVAL**

This work consists of removing curb and gutter at locations shown in the plans in accordance with Section 440. The bituminous surface shall be cut to ensure a smooth face to butt the bituminous widening against and to prevent tearing of the existing bituminous mat. All work as specified above shall be paid for at the contract unit price per foot for COMBINATION CURB AND GUTTER REMOVAL.

### **PAVEMENT REMOVAL**

This work shall consist of the removal and satisfactory disposal of existing pavements at various locations shown in the plans.

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Basis of Payment. Furnishing, installing and removing Temporary Storm Sewer 12", at locations specified in the plans, will be paid for at the contract unit price per foot for TEMPORARY STORM SEWER 12".

### **TEMPORARY STORM SEWER 24"**

Description. This work shall consist of furnishing, installing and removing temporary storm sewer as specified in Section 550 of the Standard Specifications, as shown in the plans and as herein specified.

Materials. Temporary Storm Sewer 24" shall be precast reinforced concrete and meet the applicable material requirements of Section 550 of the Standard Specifications. As the storm sewer is for temporary use, the material for the structure need not be new. The Engineer will visually inspect temporary structures for acceptance.

Construction Requirements. Temporary Storm Sewer 24" shall be installed as specified in applicable portions of Section 550 of the Standard Specifications. As the structure is for temporary use, upon removal, the structure shall become the property of the Contractor.

Basis of Payment. Furnishing, installing and removing Temporary Storm Sewer 24", at locations specified in the plans, will be paid for at the contract unit price per foot for TEMPORARY STORM SEWER 24".

### **CLEARING**

This work shall consist of the removal and disposal of all obstructions such as fences, walls, foundations, buildings, accumulations of rubbish of whatever nature, **which is not included in other pay items or building demo contracts**, for the construction of the proposed fence and fence gates as indicated in the plans. This removal shall be performed in accordance with the applicable articles of Section 201.

This item shall be paid for at the contract unit price per acre for CLEARING.

### **OFFICE COPY MACHINE**

*Effective: January 1, 1987*

*Revised: November 1, 2006*

The copier specified in Article 670.02 shall meet the following specifications:

- (1) Edge-to-edge copying.
- (2) Up to 11 in x 17 in (275 mm x 425 mm) size for copy-size capabilities.
- (3) A detachable platen cover in order to copy portions of large-bound documents.
- (4) A cabinet stand for the copier.

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**DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (DBE)**

Effective: September 1, 2000

Revised: January 1, 2010

FEDERAL OBLIGATION. The Department of Transportation, as a recipient of federal financial assistance, is required to take all necessary and reasonable steps to ensure nondiscrimination in the award and administration of contracts. Consequently, the federal regulatory provisions of 49 CFR part 26 apply to this contract concerning the utilization of disadvantaged business enterprises. For the purposes of this Special Provision, a disadvantaged business enterprise (DBE) means a business certified by the Department in accordance with the requirements of 49 CFR part 26 and listed in the Illinois Unified Certification Program (IL UCP) DBE Directory.

STATE OBLIGATION. This Special Provision will also be used by the Department to satisfy the requirements of the Business Enterprise for Minorities, Females, and Persons with Disabilities Act, 30 ILCS 575. When this Special Provision is used to satisfy state law requirements on 100 percent state-funded contracts, the federal government has no involvement in such contracts (not a federal-aid contract) and no responsibility to oversee the implementation of this Special Provision by the Department on those contracts. DBE participation on 100 percent state-funded contracts will not be credited toward fulfilling the Department's annual overall DBE goal required by the US Department of Transportation to comply with the federal DBE program requirements.

CONTRACTOR ASSURANCE. The Contractor makes the following assurance and agrees to include the assurance in each subcontract that the Contractor signs with a subcontractor:

The Contractor, subrecipient, or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of contracts funded in whole or in part with federal or state funds. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

OVERALL GOAL SET FOR THE DEPARTMENT. As a requirement of compliance with 49 CFR part 26, the Department has set an overall goal for DBE participation in its federally assisted contracts. That goal applies to all federal-aid funds the Department will expend in its federally assisted contracts for the subject reporting fiscal year. The Department is required to make a good faith effort to achieve the overall goal. The dollar amount paid to all approved DBE companies performing work called for in this contract is eligible to be credited toward fulfillment of the Department's overall goal.

CONTRACT GOAL TO BE ACHIEVED BY THE CONTRACTOR. This contract includes a specific DBE utilization goal established by the Department. The goal has been included because the Department has determined that the work of this contract has subcontracting opportunities that may be suitable for performance by DBE companies. This determination is based on an assessment of the type of work, the location of the work, and the availability of DBE companies to do a part of the work. The assessment indicates that, in the absence of unlawful discrimination, and in an arena of fair and open competition, DBE companies can be expected to perform **20.0%** of the work. This percentage is set as the DBE participation goal for this contract. Consequently, in addition to the other award criteria established for this contract, the Department will only award this contract to a bidder who makes a good faith effort to meet this goal of DBE participation in the performance of the work.

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**HOT MIX ASPHALT PAY FOR PERFORMANCE USING PERCENT WITHIN LIMITS (BMPR)**

Effective: April 4, 2008

Revised: January 29, 2010

Description. 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 for High ESAL and Low ESAL HMA and SMA mixtures that individually have a minimum quantity of 8000 tons (7260 metric tons) and are placed at a minimum nominal thickness equal to or greater than three times the nominal maximum aggregate size. This special provision shall not apply to shoulders, temporary pavements and patching. This work shall be according to the Standard Specifications except as specified herein.

Delete Articles:

406.06(b), 2 <sup>nd</sup> Paragraph	(Temperature requirements)
406.06 (e) 3 <sup>rd</sup> Paragraph	(Pavers speed requirements)
406.07	(Compaction)
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) paragraphs 3 (Before start-up...), 7(After an acceptable...), 8 (If a mixture...), & 9 (A nuclear/core...):	

The following documents have been added or modified to replace the equivalent documents in the current Manual of Test Procedures for Materials.

Existing	Replacement
ERS - HMA QC/QA Initial Daily Plant & Random Samples; Appendix E2	PFP Hot-Mix Asphalt Random Jobsite Sampling
ERS - Determination of Random Density Test Site Locations; Appendix E3	PFP Random Density Procedure
ERS - Quality Level Analysis; Appendix E1	PFP Quality Level Analysis

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.

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- (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), or adjusted to achieve a minimum of 10 tests. If a sublot consists of less than 200 tons (180 metric tons), it shall 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 10 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 2 in. (50 mm).

Pre-production Meeting:

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

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Quality Control (QC) by the Contractor:

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 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.

Quality Characteristic	Minimum Test Frequency	Sampling Location
Mixture Gradation	1/day	per QC Plan
Binder Content		
G <sub>mm</sub>		
G <sub>mb</sub>		
Density	per QC plan	per QC Plan

Revise Article 1030.05(d)(4) to read:

“(4)The QC Manager shall notify the Engineer when the following individual corrective action limits are exceeded and describe corrective action.

Gradation:	High & Low ESAL	SMA
½ inch	± 6 %	± 6 %
¾ inch		± 4 %
No. 4	± 5 %	± 5 %
No. 8	± 5 %	± 4 %
No. 30	± 4 %	± 4 %
No. 200	± 1.5 %	± 1.5 %
Voids	± 1.2 %	± 1.2 %
Field VMA <sup>1/</sup>	- 0.7 % or + 2.0 %	- 0.7 % or + 2.0 %
HMA Binder Content	± 0.3 %	± 0.2 %
Dust/AC Ratio	Min. 0.6 - Max 1.2	--
HMA Moisture Content	Max 0.3%	Max 0.3%”

1/ Based on minimum required VMA from mix design.

Initial Production Testing. The Contractor shall split and test the first two samples with the Department for comparison purposes regardless of whether a test strip is used. The Contractor and Engineer's laboratory shall complete all tests and report all results to the Engineer within two working days of sampling. PFP will begin after an acceptable test strip, if one is used.

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

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Voids, field VMA, and Dust/AC ratio: The mixture subplot size is 1000 tons (910 metric tons). The Engineer will determine the random tonnage and the Contractor shall be responsible for obtaining the sample according to the “PFP Hot-Mix Asphalt Random Jobsite Sampling” procedure.

Density: The Engineer will identify the random locations for each density testing interval. The Contractor shall be responsible for obtaining the cores according to the “PFP Random Density Procedure”. The locations will be identified after final rolling and cores shall be obtained under the supervision of the Engineer.

Test Results: The Department test results for the first subplot, or density testing interval, of every lot will be available to the Contractor within five working days from the time the secured sample from the subplot or density testing interval has been delivered, by the Contractor, to a Department’s Testing Facility or a location designated by the Engineer. Test results for the completed lot will be available to the Contractor within 14 working days from the time the last subplot or density testing interval has been delivered to a Department 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, as 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.

Dispute Resolution: Dispute resolution testing will only be permitted when the difference between the Contractor and Department split test results exceed the precision limits listed below:

Test Parameter	Limits of Precision
Voids	1.0 %
VMA	1.5%
No. 200 (75 µm)	1.5 %
Binder Content	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 request for dispute resolution must include the Contractor’s quality control and split sample test results. The Engineer will document receipt of the request. The Bureau of Materials and Physical Research (BMPR) laboratory will be used for dispute resolution testing.

For density disputes, the Engineer will locate and mark the dispute resolution core locations by adding 1 ft (300 mm) longitudinally to the location of the original cores tested using the same transverse offset. The Engineer will witness the coring process and take possession of the cores and submit them to the BMPR laboratory for testing.

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

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All dispute resolution results will replace original quality assurance test results for pay factor recalculation. 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.

Test	Cost
Mix Testing	\$700.00 / subplot
Core Density	\$100.00 / core

Acceptance by the Engineer and Basis of Payment: The Engineer may cease production and reject material produced under the following circumstances:

- (a) If the Contractor is not following the approved quality control plan
- (b) If PWL for any quality characteristic is below 50 percent for any lot
- (c) If visible pavement distress occurs such as, but not limited to, segregation or flushing
- (d) If any test exceeds the acceptable limits listed below:

Acceptable Limits

Parameter	Acceptable Range
Field VMA	-1.0 -+3.0% <sup>1/</sup>
Voids	2.0 – 6.0% <sup>2/</sup>
Density: IL-19.0, IL-25.0, IL-9.5, IL-12.5 IL-4.75, SMA	90.0 – 98.0% 92.0 – 98.0%
Dust / AC Ratio	0.4 – 1.5 <sup>3/</sup>

- 1/ Based on minimum required VMA from mix design.
- 2/ The acceptable range for SMA mixtures shall be 2.0% - 5.0%
- 3/ Does not apply to SMA

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.

Dust / AC Ratio. In addition to the PWL on VMA, voids, and density, a monetary deduction will be made using the pay adjustment table below for dust/AC ratios that deviate from the 0.6 to 1.2 range.

Dust / AC Pay Adjustment Table

Range	Deduct / subplot
$0.6 \leq X \leq 1.2$	\$0
$0.5 \leq X < 0.6$ or $1.2 < X \leq 1.4$	\$1000
$0.4 \leq X < 0.5$ or $1.4 < X \leq 1.6$	\$3000
$X < 0.4$ or $X > 1.6$	Shall be removed and replaced

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