



# Illinois Department of Transportation

Division of Aeronautics

1 Langhorne Bond Drive / Capital Airport / Springfield, Illinois / 62707-8415

May 30, 2015

SUBJECT: Rantoul National Aviation Center  
Rantoul, Illinois  
Champaign County  
Illinois Project Number: TIP-4333  
Contract No. RA015  
Item No. 13A, June 12, 2015  
Addendum A

## NOTICE TO PROSPECTIVE BIDDERS

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

Reason for Addendum: In response to Contractor's questions, & for added clarification to the specifications, ITEM 201671 CRACK CONTROL FABRIC is being replaced with the version on the following pages.

### To All Plan Holders:

Revisions to the Construction Plan Sheets: NONE

Revisions to Special Provisions:

REPLACE Page 21, ITEM 201671 CRACK CONTROL FABRIC with the attached **Revised** ITEM 201671 CRACK CONTROL FABRIC, Pages 21A, 21B, 21C & 21D in 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.

Questions about this addendum may be directed to Brian Quinlan, P.E. of Burns & McDonnell at (630) 724-3215 or [bquinlan@burnsmcd.com](mailto:bquinlan@burnsmcd.com).

## ITEM 201671 CRACK CONTROL FABRIC

### DESCRIPTION

#### 201-1.1

ADD: This item will be placed over the tie-down removal areas after backfill and bituminous cap has been placed.

ADD: This item will be placed over longitudinal and transverse joints in cracks in the concrete sub-base after asphalt surface has been milled off if Bid Alternate 1 is awarded.

### MATERIALS

#### 201-2.1

DELETE: This section.

#### 201-2.2

DELETE: This section.

#### 201-2.3

ADD: Asphalt Reinforcement Grid

- A. **Material shall be certified manufactured in the USA.**
- B. The asphalt reinforcement grid shall consist of a high strength, fiberglass grid custom knitted and coated with an elastomeric polymer and self-adhesive glue.
- C. In addition, the reinforcement grid shall have the following/adhere to the following Minimum Average Roll Values (MARV) for material properties and should adhere to the strength properties in Table 1.

Table 1 – Material and Strength

<b>PRODUCT PROPERTIES</b>	<b>METHOD</b>	<b>UNITS</b>	<b>Type 1</b>
Grid Size (Center to Center)		Inch (mm)	1.0 x 0.75 (25.0 x 19.0)
Mass / Unit Area	ASTM D 5261-92	Oz/yd <sup>2</sup> (g/m <sup>2</sup> )	18 (610)
Roll Width		Ft (m)	5 (1.5)
Melting Point Coating	ASTM D276	°F (°C)	>450 >(232)
Melting Point Glass	ASTM C338	°F (°C)	>1508 >(820)
Tensile Strength	ASTM D6637	Lbs/in (kN/m)	655 x 1,230 +/- 85 (115 x 215 +/- 15)
Tensile Elongation	ASTM D6637	%	2.5 +/- 0.5
Tensile Resistance @ 2% Strain	ASTM D6637	Lbs/in (kN/m)	542 x 1,030 +/- 115 (95 x 180 +/- 20)
Secant Stiffness EA @ 1% Strain	ASTM D6637	Lbs/in (N/mm)	26,265 x 49,110 +/- 3425 (4,600 x 8,600 +/- 600)
Young's Modulus E		Psi (MPa)	10.6 x 10 <sup>6</sup> (73,000)

201-2.4

ADD:

BUY AMERICAN

All materials for this item shall meet the requirements of the Buy American Preference as stated in Appendix 4. Contractor shall provide proof of 100% domestic materials and 100% domestic manufacture prior to delivering materials to the site. Materials that are unable to meet this requirement shall be reported in the bid documents under Certifications Required by State and/or Federal Law, Buy American Certificate.

201-2.5

ADD:

ROLL WIDTH

Crack control fabric shall be supplied in a minimum roll width of 5'.

201-3.1

DELETE: This section.

## 201-3.2 SURFACE PREPARATION

### ADD:

1. Surfaces shall be mechanically cleaned by sweeping and vacuuming and be free of oil, vegetation, sand, dirt water, gravel and other contaminants prior to placement of asphalt reinforcement grid.
2. Joint/crack locations shall be marked and recorded prior to and after the first lift of bituminous surface course. Identifying and preserving the crack locations will ensure the grid is properly centered on each crack.

## 201-3.3 INSTALLATION

### ADD:

1. Install asphalt reinforcement grid in accordance with the manufacturers installation guidelines.
2. Surface temperature shall be between 40-140°F prior to laying the asphalt reinforcement grid.
3. The placement of the surface shall be dry. Moisture affects the adhesion of the grid to the pavement surface, grid placement should not be undertaken if rain is likely to fall prior to covering the grid with the final lift of bituminous surface course. Grid that is placed and will not adhere to due to moisture shall be removed and replaced at the Contractor's expense.
4. Asphalt reinforcement grid shall be laid out by mechanical means or by hand using sufficient pressure to eliminate ripples. Remove any ripples by pulling the grid tight. Cutting of the may be done on a tight radii to prevent ripples.
5. Following the placement of the material, activate self-adhesive glue by rolling with a pneumatic tire roller. In no instance shall a steel-wheeled or vibratory roller be used. Rolling shall continue until the adhesive is activated and the grid bonded to the first lift of bituminous surface course. Roller tires shall be kept clean to the satisfaction of the Resident Engineer.
6. Construction vehicles will be allowed to run on the reinforcement grid after rolling. However, any damaged or de-bonded sections of the grid resulting from these vehicles, as determined by the Resident Engineer, shall be immediately replaced with new grid sections, taking care to place the adhesive backing down and to overlap the grid already in place. Replacement sections shall be rolled in accordance with manufacturer's recommendations. Grid shall be rolled until the adhesive is activated and the replacement grid section is bonded to the first lift of bituminous surface course. Any dirt, dust or other contaminants deposited on the asphalt reinforcement grid and surface course shall be removed by mechanical sweeping or vacuuming the surface. No additional payment will be made to replace the sections of grid damaged by construction equipment. No direct payment will be made for sweeping or vacuuming the surface.

7. Protect the asphalt reinforcement grid until the placement of the finished bituminous surface course is constructed. Repair damaged sections prior to placement of the bituminous surface course.
8. Place the asphaltic overlay course the same day the asphalt reinforcement grid is placed.
9. Overlay surface course shall be a minimum of 1-1/2".
10. Tack coat may be placed prior to or after the installation of the asphalt reinforcing grid. Tack coat shall be applied per the Bituminous Tack Coat specifications.

#### BASIS OF PAYMENT

##### 201-5.1

ADD: Payment will be made under:

Item AR201670 – Crack Control Fabric – per square yard.