

July 28, 2015

To: Plan Holders for Improvements to the

Rosecrans Memorial Aiport

St. Joseph, Missouri

MoDOT Project No. 13-012A-2

Air National Guard Project No. ULYB132006

Transmitted herewith is Addendum **No. 4** to the Issued for Bid Contract Documents, Specifications and Plans dated June 23, 2015 for Improvements to the Rosecrans Memorial Airport.

# Schedule I: Replacement of Assault Strip Runway 13/31



Sincerely,

Jviation, Inc.

Ryan B. Lorton, P.E. Project Manager

# ADDENDUM NO. 4 TO

# CONTRACT DOCUMENTS, SPECIFICATIONS AND PLANS FOR IMPROVEMENTS TO THE ROSECRANS MEMORIAL AIRPORT ST. JOSEPH, MISSOURI MODOT PROJECT NO. 13-012A-2 AIR NATIONAL GUARD PROJECT NO. ULYB132006

Bidders are informed that the above referenced Contract Documents, Specifications and Plans are modified as follows as of July 28, 2015:

## 1. CONTRACT DOCUMENTS

Section: Notice to Bidders

Subsection: Page 1-6

Revision: Add the following section at the end of the Notice to Bidders:

#### "Alternate Bid

In addition to the Schedule I bid, the Contractor shall include a lump sum additive or deductive cost to complete the work for the following alternate:

# Alternate 1: Bond Breaker Fabric in Lieu of Choke Stone

For this alternate, the Contractor shall provide a lump sum add or deduct to the Schedule I bid amount to install Bond Breaker Fabric per the requirements of P-314 in lieu of the Choke Stone bond breaker as described in P-CS. The Bond Breaker Fabric as well as the Choke Stone are to be considered incidental the construction of the 6" Cement Treated Permeable Base Course as described in the Technical Specifications."

Section: Section 80

Subsection: 80-08 Failure to Complete on Time.

Revision: Delete the Liquidated Damages Table in its entirety and replace with

the following:

| SCHEDULE I            | LIQUIDATED DAMAGES COST  | ALLOWED           |
|-----------------------|--|-------------------|
|                       |  | CONSTRUCTION TIME |
| Schedule I – Stage 1A | \$1,500 per calendar days(s)   | 120 calendar days |
| Schedule I - Stage 1B | \$1,500 per calendar days(s) 40 calendar days  |                   |
| Schedule I – Stage 2  | \$1,500 if Runway 17/35 is not opened by 6:00 a.m. each day during Stage 2 and an additional \$1,500 for each hour that Runway 17/35 remains closed after 6:00 a.m. each day during Stage 2. | 14 calendar days  |

The maximum construction time for the overall project is 120 calendar days. Work in Stage 1B and Stage 2 shall be performed concurrently with the work in Stage 1A.

Section: Part C Local Provisions

Subsection: 20. Grade Control and Surface Tolerance

Revision: Delete the first sentence in its entirety and replace with the following:

"The Contractor will be required to provide a survey crew on site as necessary during the work to assure compliance with Section 100 of the General Provisions and to provide the following at a minimum."

Section: Bid Proposal Form
Subsection: Bid Proposal Summary

Revision: Delete this page in its entirety and replace with the attached revised Bid Proposal

Summary that includes Alternate No. 1 - Add/Deduct Fabric (P-314) in Lieu of

Choke Stone (P-CS)

#### 2. TECHNICAL SPECIFICATIONS

**32 11 33:** PERMEABLE CEMENT STABILIZED BASE COURSE AT AIRFIELDS AND

ROADS

Page: Section 32 11 33 Page 10

Revision: 3.4.2 Choke Stone Bond Breaker

The following sentence has been added to the end of this section:

"In lieu of the Choke Stone Bond Breaker, a Bond Breaker Fabric meeting the requirements of P-314 provides an alternative to the use of Choke Stone as

described in Alternate Bid No. 1. "

32 11 33: PERMEABLE CEMENT STABILIZED BASE COURSE AT AIRFIELDS AND

ROADS

Page: Section 32 11 33 Page 13 Revision: 3.8.2 Density Testing

Section has been deleted in its entirety and replaced with the following:

"Within each sublot in the field, one in-place density test shall be performed in accordance with ASTM D6938. The location of the test shall be randomly selected per ASTM D3665. The in-place density for each sublot comprising the lot shall be averaged and compared with the corresponding average lot density. Acceptance criteria for CTB density are provided in paragraph 3.8.8. All testing shall be done

by the Engineer's testing firm for acceptance determination."

**P-314:** BOND BREAKER FABRIC

Page: All

Revision: Add Item P-314 Bond Breaker Fabric technical specification. This specification

has been added based on Alternate No. 1 as described in this addendum.

See attached P-314 Bond Breaker Fabric technical specification.

MoDOT-609: ROCK DITCH LINER

Page: MoDOT-609-1

Revision: Section 609.62 Material

First sentence of the first paragraph has been deleted and replaced with the

following:

"The material for rock lining shall consist of a predominantly one-sized, durable

stone or shot rock. Broken concrete will not be allowed."

# 3. PLAN SET

Sheet: G008

Title: Construction Safety Drawing - Schedule I, Stage 2

Revision: AIRPORT OPERATIONAL NOTES

Delete Note No. 2 in its entirety and replace with the following revised Note No.

2:

"CONTRACTOR SHALL RE-ESTABLISH THE RUNWAY SAFETY AREA PRIOR TO THE OPENING OF RUNWAY 17/35. THE CONTRACTOR WILL INCUR A \$1,500 LIQUIDATED DAMAGE IF RUNWAY 17/35 IS NOT OPENED BY 6:00 A.M. AND AN ADDITIONAL \$1,500 FOR EACH HOUR THAT RUNWAY 17/35 REMAINS CLOSED AFTER 6:00 A.M. THE REMOVAL OF THE LIGHTED "X"s AND BARRICADES SHALL BE COMPLETED PRIOR TO

REOPENING THE RUNWAY." See attached revised sheet G008.

Sheet: C350

Title: Storm, Underdrain and Erosion Control Details Revision: DETAIL "PAVEMENT UNDERDRAIN DETAIL"

Delete the overbuild call-off note in its entirety and replace with the following

revised note:

"7" OVERBUILD OF 6" AGGREGATE BASE COURSE FOR PAVEMENT

SECTION."

See attached revised sheet C350.

Sheet: C601

Title: Proposed Typical Sections

Revision: Revised the Bond Breaker call-offs on Typical Sections E and F to include:

"Alternate Bid No. 1: Proposed Bond Breaker Fabric (P-314)"

See attached revised sheet C601.

#### 4. QUESTIONS

1. Will fabric be considered in lieu of the choke stone to serve as the bond breaker between the permeable cement stabilized base course and the PCC?

Answer: An Alternate Bid No. 1 for the use of fabric in lieu of choke stone has been added per this Addendum No. 4.

2. Under Part C Local Provisions Subsection 20. Grade Control and Surface Tolerance, is it the intent to have a survey crew on site at all times?

Answer: A survey crew shall be on-site as needed to meet the requirements of the Contract Documents. See the revised verbiage for Subsection 20 per this Addendum No. 4.

3. What are the aggregate specifications for the Permeable Cement Stabilized Base Course? The specifications provide a gradation, PI, & LL, but no other quality specs? Can this be recycled crushed concrete?

Answer: The aggregates must meet the requirements of Specification 32 11 33 Permeable Cement Stabilized Base Course at Airfields and Roads. The use of recycled crushed concrete is <u>not</u> allowed.

4. The specifications for the Permeable Base also include a sliding scale for payment based on Average Dry Density. Density testing on a drainable base is highly variable and not very repeatable. This spec. looks like it was also to be used for a dense CTB. Should this density scale be used for the permeable base?

Answer: It is the intent of the specification to utilize the Sliding Pay Scale Factors for density as shown on page 15 of the Specification 32 11 33 Permeable Cement Stabilized Base Course at Airfields and Roads. However, Subsection 3.8.2 Density Testing has been modified per this Addendum No. 4.

5. The specification for Type 3 Rock Lining allows for the use of crushed recycled concrete. Was this intended to be allowed?

Answer: Technical Specification Section 609.60 Rock Ditch Liner has been revised per this Addendum No. 4 to eliminate the use of broken concrete as an allowable material for the rock lining.

6. In Section 32 13 11 – Concrete Pavement for Airfields; Paragraph 2.2.2.3 Size and Grading - Is the use of a sized #4 and sized #67 coarse aggregate required, or can you use one or the other?

Answer: The use of both ASTM C33, No. 4 and No. 67 to meet the coarseness and workability factor criteria is required.

7. Would the Airport consider an alternate haul route other than what is currently shown on the plans?

Answer: The Contractor shall use the haul route as indicated on the plans. See Plansheet G004, Note 9 regarding damage to existing roads.

\*\*END OF ADDENDUM NO. 4\*\*

| BID PROPOSAL SUMMARY  |     |
|---|-----|
| Bidder Name:  |     |
|   |     |
|   |     |
|   |     |
| SCHEDULE I - TOTAL  | €9: |
| ALTERNATE 1 - ADD/DEDUCT FABRIC (P-314) IN LIEU OF CHOKE STONE (P-CS) | ₩:  |

# ITEM P-314 BOND BREAKER FABRIC

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# DESCRIPTION

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**314-1.1** This item shall consist of furnishing and installing a bond breaker over the 6" cement treated permeable base course as a bid alternate in lieu of the choke stone material per technical specification P-CS.

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# **MATERIALS**

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**314-2.1** Bond Breaker Fabric shall be a needle-punched nonwoven geotextile composed of polypropylene fibers conforming to the following test methods and physical properties.

12 13

| Mechanical Properties                                | Test Method | Units                  | Roll<br>Value               |
|--|-------------|------------------------|-----------------------------|
| Mass per Unit Area                                   | ASTM D 5261 |                        |                             |
| Minimum  |             | oz/yd²                 | 13.3                        |
| Maximum  |             | oz/yd²                 | 16.2                        |
| Thickness Under Load                                 | ASTM D 5199 |                        |                             |
| 0.29 psi   |             | mm                     | 3.0 min                     |
| 2.9 psi  |             | mm                     | 2.5 min                     |
| 29 psi   |             | mm                     | 1.0 min                     |
| Wide Width Tensile Strength                          | ASTM D 4595 | lbs/ft                 | 684 min                     |
| Wide Width Elongation                                | ASTM D 4595 | %                      | 130 max                     |
| Water Permeability in Normal<br>Direction under load | ASTM D 5493 |                        |                             |
| 2.9 psi (20 kPa)                                     |             | m/s                    | 1 x 10 <sup>-4</sup><br>min |
| In-plane Water Permeability                          | ASTM D 6574 |                        |                             |
| 2.9 psi (20 kPa)                                     |             | m/s                    | 5 x 10 <sup>-4</sup><br>min |
| 29 psi (200 kPa)                                     |             | m/s                    | 2 x 10 <sup>-4</sup><br>min |
| Alkali Resistance                                    | EN 13249    | %                      | 96 min                      |
| UV Resistance (at 500 hours)                         | ASTM D 4355 | % Strength<br>Retained | 60 min                      |

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Alternate bond breaker materials will be evaluated provided that a submittal is provided two weeks prior to the bid. The alternate bond breaker submittal must include a design signed and sealed by a professional engineer registered to practice in the country, state or province in which the project is located and a list of at least 5 projects where the product has been in ground for over a year under similar environmental conditions in which performance can be documented.

| 20 |  |
|----|--|
| 21 |  |

## **STORAGE**

**314-3.1** Bond breaker rolls shall be furnished with suitable wrapping to protect against moisture and extended ultraviolet exposure prior to placement.

**314-3.2** Each roll shall be tagged or labeled with the name of the product and manufacturer. All rolls shall be tagged or labeled with the width, length, and unique roll number for quality tracking purposes. The tag or label shall be securely fastened to the outside of the roll.

**314-3.3** Rolls shall be stored and handled in a manner to prevent damage.

314-3.4 After unloading, inspect rolls for defects and damage.

**314-3.5** Bond breaker shall be stored per manufacturer's recommendations in a dry covered condition, free from dust, dirt and moisture.

**314.3.6** Rolls shall be stored off ground, protected from precipitation, ultraviolet radiation, strong chemicals, sparks and flames, temperatures in excess of 71 °C (160 °F) and other environmental condition that could cause damage to bond breaker.

# **CONSTRUCTION METHODS**

#### 314-4.1 Base Course Preparation

**a.** Before installing fabric, all base course materials must be accepted for grade, and approved by the engineer for installation of fabric.

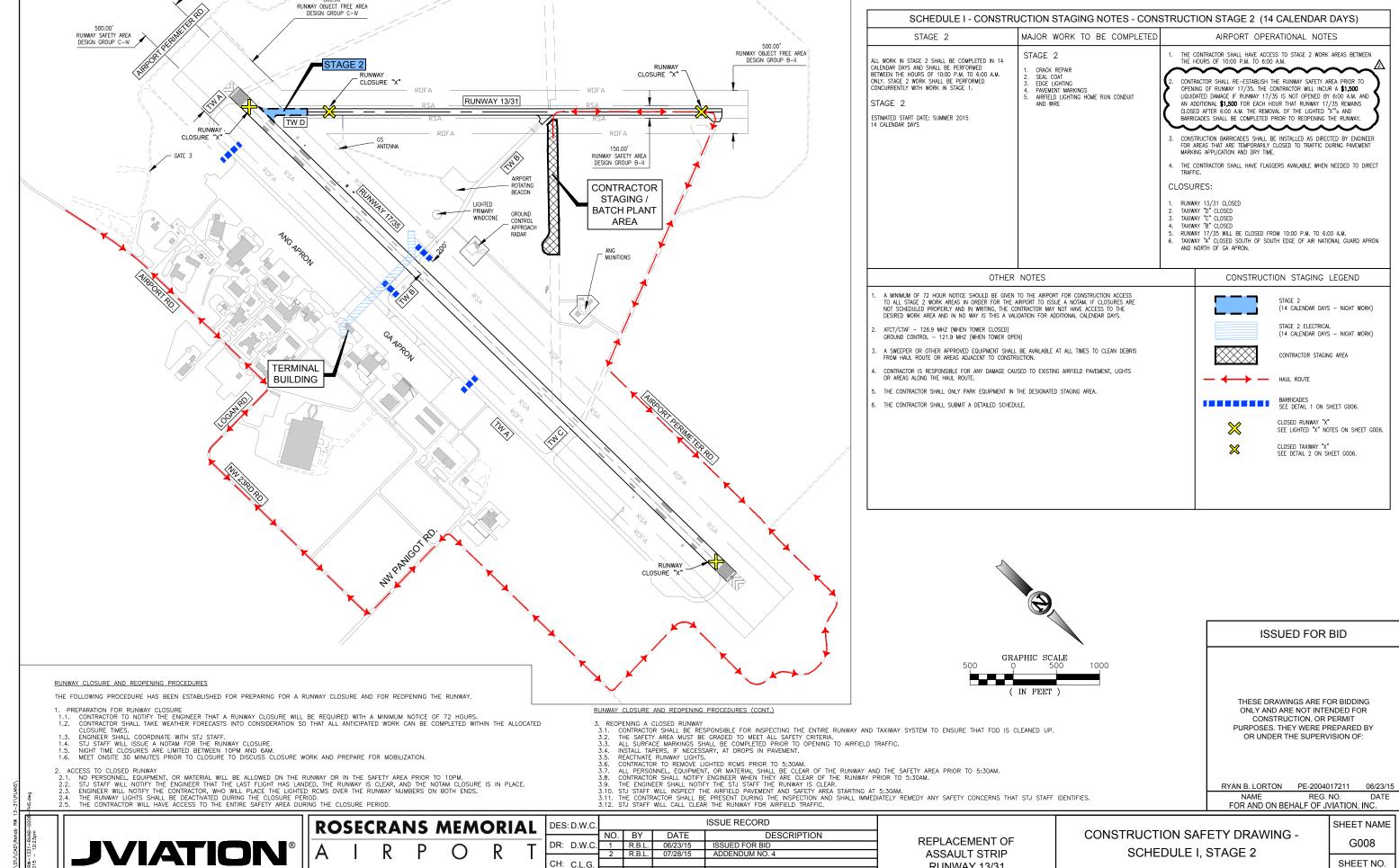
#### 314-4.2 Bond Breaker Fabric Installation

**a.** In areas which will exposed to traffic, fabric shall not be installed until immediately prior to paving operations. But in no case shall fabric be installed more than 3 days prior to paving operations.

**b.** Bond Breaker Fabric shall be secured to underlying layer with pins or nails punched through 2 to 2.75 inch galvanized washers or discs every 6 feet or less. Additional fasteners can be used as needed to ensure that the fabric does not shift or fold before or during concrete placement.

**c.** Where it occurs, edges of the fabric shall overlap by 8 inches minimum.

| 66 | METHOD OF MEASUREMENT   |
|----|---|
| 67 |   |
| 68 | 314-5.1 Bond Breaker Fabric shall not be measured separately but shall be considered incidental to Item |
| 69 | MO-307a – 6" Cement Treated Permeable Base Course.  |
| 70 |   |
| 71 | BASIS OF PAYMENT  |
| 72 |   |
| 73 | 314-6.1 No separate payment shall be made for Bond Breaker Fabric as it will be considered incidental   |
| 74 | to Item MO-307a – 6" Cement Treated Permeable Base Course.  |
| 75 |   |
| 76 |   |
| 77 | **END OF ITEM P-314**   |
| 78 |   |

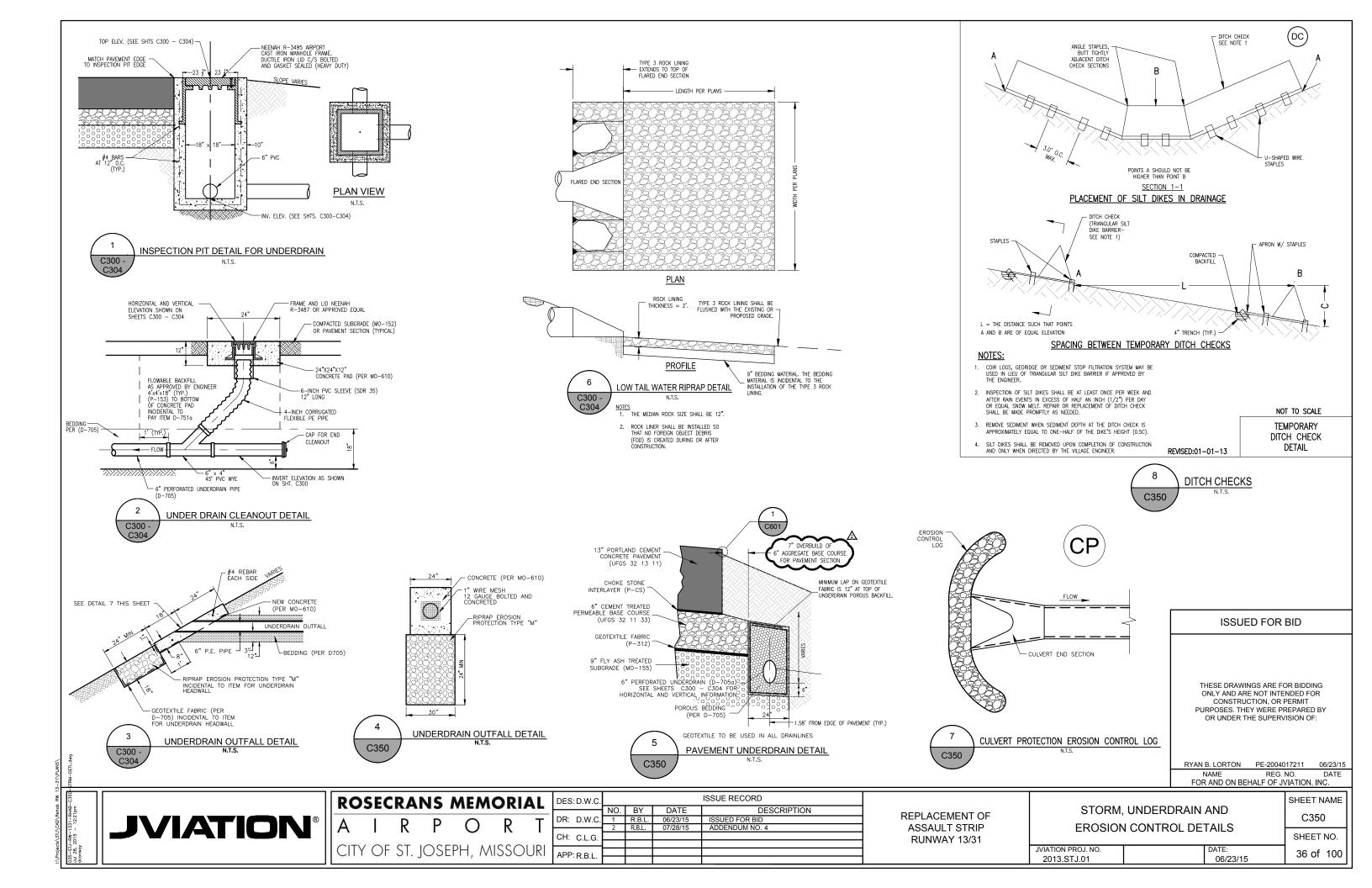


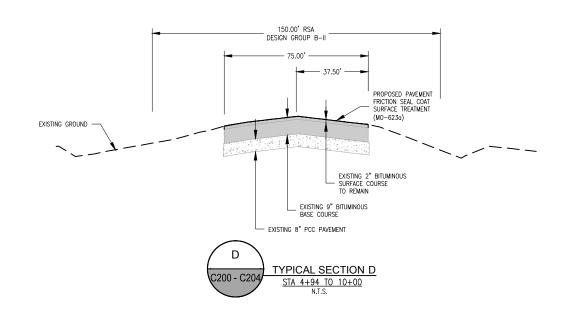
CITY OF ST. JOSEPH, MISSOURI

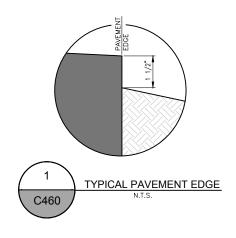
**RUNWAY 13/31** 

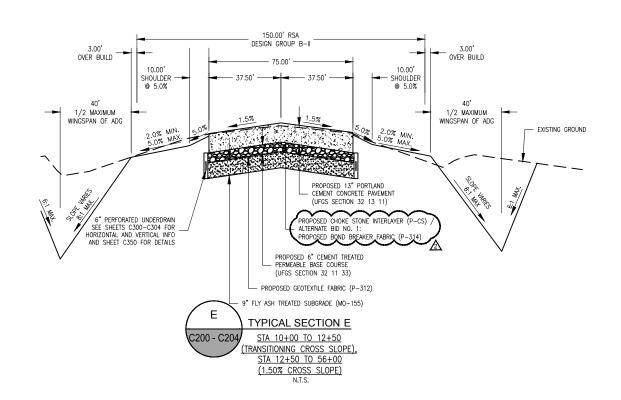
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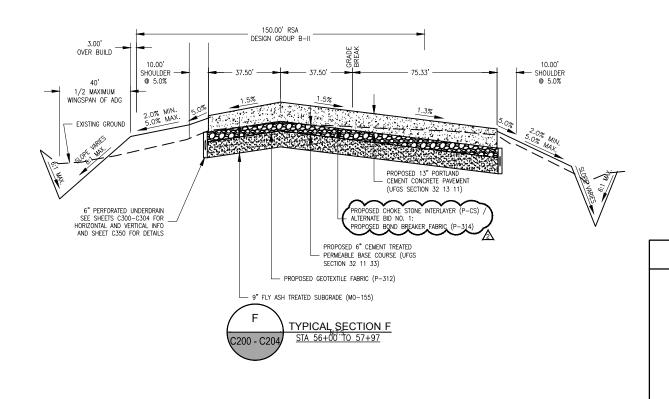
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ISSUED FOR BID

THESE DRAWINGS ARE FOR BIDDING ONLY AND ARE NOT INTENDED FOR CONSTRUCTION, OR PERMIT PURPOSES. THEY WERE PREPARED BY OR UNDER THE SUPERVISION OF:

RYAN B. LORTON PE-2004017211 06/23/15

06/23/15

NAME REG. NO. DATE FOR AND ON BEHALF OF JVIATION, INC.

**JVIATION**<sup>®</sup>

**ROSECRANS MEMORIA** city of st. Joseph, Missou

| A L     | DES: D.W.C.     |     | ISSUE RECORD |          |                |
|---------|-----------------|-----|--------------|----------|----------------|
| ~_      |                 | NO. | BY           | DATE     | DESCRIPTION    |
| T       | DR: D.W.C.      | 1   | R.B.L.       | 06/23/15 | ISSUED FOR BID |
|         |                 | 2   | R.B.L.       | 07/28/15 | ADDENDUM NO. 4 |
|         | CH: C.L.G.      |     |              |          |                |
| IDI     |                 |     |              |          |                |
| JRI     | APP: R.B.L.     |     |              |          |                |
| 1000000 | / " · · /\.D.L. |     |              |          |                |

REPLACEMENT OF ASSAULT STRIP **RUNWAY 13/31** 

2013.STJ.01

SHEET NAME PROPOSED TYPICAL SECTIONS C601 SHEET NO. 57 of 100