

ADDENDUM NO. 3
KINGMAN MUNICIPAL AIRPORT
RUNWAY 3-21 REHABILITATION PROJECT
FAA AIP NO.: 3-04-0021-TBD

In accordance with the FAA General Provisions, Subsection 20-15, Discrepancies and Omissions, the following revisions to the Plans and Specifications shall become a part of the Contract Documents and each bidder shall acknowledge receipt thereof on page PROPOSAL-18 of the Proposal Forms.

GENERAL

- ITEM 1:** **Attachment A-A3** contains photographs taken during the site visit on 5/18/2020. These photographs are for information only and are not part of the Contract Documents.
- ITEM 2:** Clarification: Construction equipment may not be left parked within the runway object free area when work is not taking place.
- ITEM 3:** Clarification: Item P-152 is a non-pay item. The specification is included in the Contract Documents to establish performance requirements for miscellaneous items of work.
- ITEM 4:** Clarification: Badging is not required.

SPECIFICATIONS

- ITEM 5:** PROPOSAL FORM, pages Proposal-2 through Proposal-4. Delete these pages in their entirety and replace them with the revised pages included as **Attachment B-A3**
- ITEM 6:** ITEM P-101, Subsection 101-3.1.1 a.(2) Removal of Existing Sealant. Delete the third paragraph in its entirety.
- ITEM 7:** ITEM P-101, Subsection 101-3.1.1 a.(2) Removal of Existing Sealant. Delete the fourth paragraph in its entirety and replace it with the following:

“Cracks greater than 1 inch wide shall be filled with a mixture of emulsified asphalt and aggregate. The aggregate shall consist of limestone, volcanic ash, sand, or other material that will cure to form a hard substance. The combined gradation shall be as shown in the following table.”
- ITEM 8:** ITEM P-101, Subsection 101-3.9. Add the following new section:

“101-3.9 Preparation of Cracks in Flexible Pavement prior to sealing. Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR that the method used cleans the cracks and does not damage the pavement.

101-3.9.1 Preparation of Crack. Widen crack with router by removing a minimum of 1/16 inch (2 mm) from each side of crack. Immediately before sealing, cracks will be blown out with a hot air lance combined with oil and water-free compressed air.

101-3.9.2 Removal of Existing Crack Sealant. Existing sealants will be removed by routing. Following routing any remaining debris will be removed by use of a hot lance combined with oil and water-free compressed air.

101-3.9.3 Crack Sealant. Crack sealant material and installation will be in accordance with Item P-605.”

ITEM 9: ITEM P-101, Subsection 101-5.1 Payment. Delete the existing pay items and add the following new pay items:

Item P 101-5.1	Milling - per square yard
Item P 101-5.2	Crack Seal – Cracks ¼” to 1” Wide - per linear foot
Item P 101-5.3	Crack Seal – Cracks Greater than 1” Wide - per linear foot

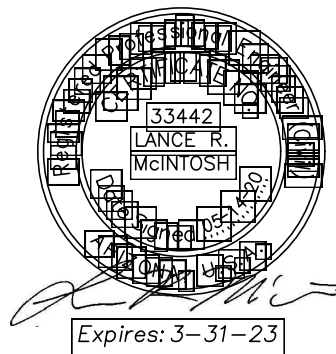
ITEM 10: FAA TECHNICAL PROVISIONS, after page TS P-603-3, insert **Attachment E-A3** Item P-605 Joint Sealants for Pavements.

PLANS

ITEM 11: Modify the Estimated Quantities Tables on Plan Sheet G-002 to reflect the revised bid items and quantities contained in Attachment B-A3.

ITEM 12: Add the Crack Seal Details contained in **Attachment C-A3** to Plan Sheet CD-501.

ITEM 13: Replace sheet G-101 with **Attachment D-A3**.



C&S ENGINEERS, INC.

ATTACHMENT A-A3

KINGMAN MUNICIPAL AIRPORT RUNWAY 3-21 REHABILITATION PROJECT PICTURES FROM THE SITE VISIT - CONDUCTED MAY 18, 2020

Stop 1 – (Runway 3 End)



Stop 2 – (Taxiway D3 Intersection)



Stop 3 – (Runway 21 End)



ATTACHMENT B-A3

KINGMAN MUNICIPAL AIRPORT
 KINGMAN, ARIZONA
 RUNWAY 3-21 REHABILITATION PROJECT

ITEM NO.	FAA SPEC NO.	QUANTITY	ITEM LIST ITEM DESCRIPTION (PRICE WRITTEN IN WORD)	UNIT PRICE IN FIGURES		TOTAL AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
BASE BID							
1	C-105	1 LS	MOBILIZATION				
			AT				
				PER LUMP SUM			
2	C-106	1 LS	TRAFFIC CONTROL, SAFETY AND SECURITY				
			AT				
				PER LUMP SUM			
3	M-150	1 LS	PROJECT SURVEY AND STAKEOUT				
			AT				
				PER LUMP SUM			
4	P-101	59,500 SY	MILLING				
			AT				
				PER SQUARE YARD			
5	P-101	70,000LF	CRACK SEAL - CRACKS 1/4 INCH TO 1 INCH				
			AT				
				PER LINEAR FOOT			
6	P-101	8,000 LF	CRACK SEAL - CRACKS GREATER THAN 1 INCH				
			AT				
				PER LINEAR FOOT			
7	P-603	59,500 SY	BITUMINOUS TACK COAT				
			AT				
				PER SQUARE YARD			
8	P-401	59,500 SY	3" THICK BITUMINOUS SURFACE COURSE				
			AT				
				PER SQUARE YARD			
9	P-620	5,080 SF	INTERIM PAINTSTRIPING (WHITE NON-REFLECTORIZED)				
			AT				
				PER SQUARE FOOT			
10	P-620	45,830 SF	PAINTSTRIPING (WHITE REFLECTORIZED)				
			AT				
				PER SQUARE FOOT			
11	P-620	2,355 SF	PAINTSTRIPING (YELLOW REFLECTORIZED)				
			AT				
				PER SQUARE FOOT			

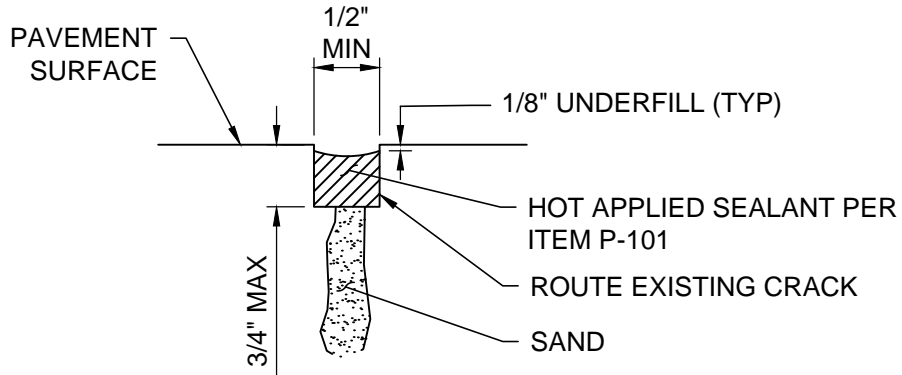
KINGMAN MUNICIPAL AIRPORT
KINGMAN, ARIZONA
RUNWAY 3-21 REHABILITATION PROJECT

ITEM NO.	FAA SPEC NO.	QUANTITY	ITEM LIST ITEM DESCRIPTION (PRICE WRITTEN IN WORD)		UNIT PRICE IN FIGURES		TOTAL AMOUNT	
					DOLLARS	CENTS	DOLLARS	CENTS
BID ALTERNATE NO. 1								
12	C-105	1 LS	MOBILIZATION					
			AT					
					PER LUMP SUM			
13	C-106	1 LS	TRAFFIC CONTROL, SAFETY AND SECURITY					
			AT					
					PER LUMP SUM			
14	M-150	1 LS	PROJECT SURVEY AND STAKEOUT					
			AT					
					PER LUMP SUM			
15	P-101	60,500 SY	MILLING					
			AT					
					PER SQUARE YARD			
16	P-101	71,000 LF	CRACK SEAL - CRACKS 1/4 INCH TO 1 INCH					
			AT					
					PER LINEAR FOOT			
17	P-101	8,000 LF	CRACK SEAL - CRACKS GREATER THAN 1 INCH					
			AT					
					PER LINEAR FOOT			
18	P-603	60,500 SY	BITUMINOUS TACK COAT					
			AT					
					PER SQUARE YARD			
19	P-401	60,500 SY	3" THICK BITUMINOUS SURFACE COURSE					
			AT					
					PER SQUARE YARD			
20	P-620	5,420 SF	INTERIM PAINTSTRIPING (WHITE NON-REFLECTORIZED)					
			AT					
					PER SQUARE FOOT			
21	P-620	46,170 SF	PAINTSTRIPING (WHITE REFLECTORIZED)					
			AT					
					PER SQUARE FOOT			
22	P-620	1,645 SF	PAINTSTRIPING (YELLOW REFLECTORIZED)					
			AT					
					PER SQUARE FOOT			

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ITEM NO.	FAA SPEC NO.	QUANTITY	ITEM LIST ITEM DESCRIPTION (PRICE WRITTEN IN WORD)	UNIT PRICE IN FIGURES		TOTAL AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
BID ALTERNATE NO. 2							
23	L-125	22 EA	DIRECTIONAL SIGN PANEL REPLACEMENT. REMOVE AND REPLACE EXISTING SIGN PANELS WITH NEW SIGN PANELS AT PER EACH				
TOTAL PRICE (WRITTEN IN WORD) - BASE BID						DOLLARS	CENTS
TOTAL PRICE (WRITTEN IN WORD) - BID ALTERNATE No. 1						DOLLARS	CENTS
TOTAL PRICE (WRITTEN IN WORD) - BID ALTERNATE No. 2						DOLLARS	CENTS

ATTACHMENT C-A3

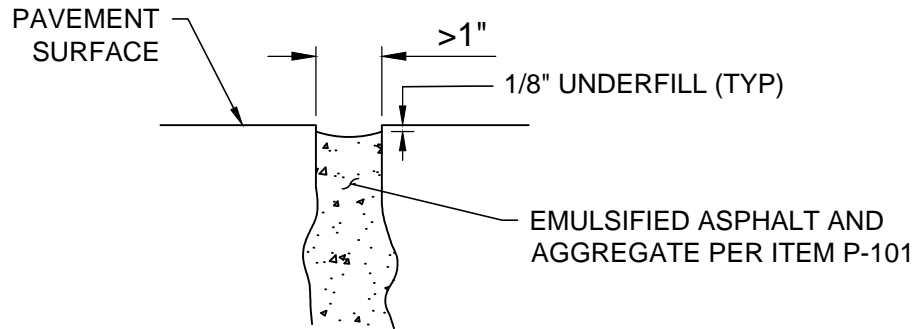


NOTES:

1. CRACKS 1" AND LESS SHALL BE ROUTED TO REMOVE AT LEAST 1/16" FROM EACH SIDE OF THE CRACK TO SOUND PAVEMENT.
2. CRACKS SHALL BE AIR-BLASTED CLEAN PRIOR TO APPLYING SEALANT, PER ITEM P-101.
3. CRACKS SHALL NOT BE OVERBANDED. TO MINIMIZE CONTAMINATION OF THE ASPHALT WITH THE CRACK SEALANT, UNDERFILL THE CRACK SEALANT A MINIMUM OF 1/8 INCH, NOT TO EXCEED 1/4 INCH. ANY EXCESS JOINT OR CRACK SEALER SHALL BE REMOVED FROM THE PAVEMENT SURFACE.

3-1 CRACK SEAL DETAIL - 1/4" TO 1"

NOT TO SCALE



NOTES:

1. CRACKS GREATER THAN 1" SHALL BE AIR-BLASTED CLEAN PRIOR TO APPLYING SEALANT, PER ITEM P-101.
3. CRACKS SHALL NOT BE OVERFILLED.

3-2 CRACK SEAL DETAIL - GREATER THAN 1"

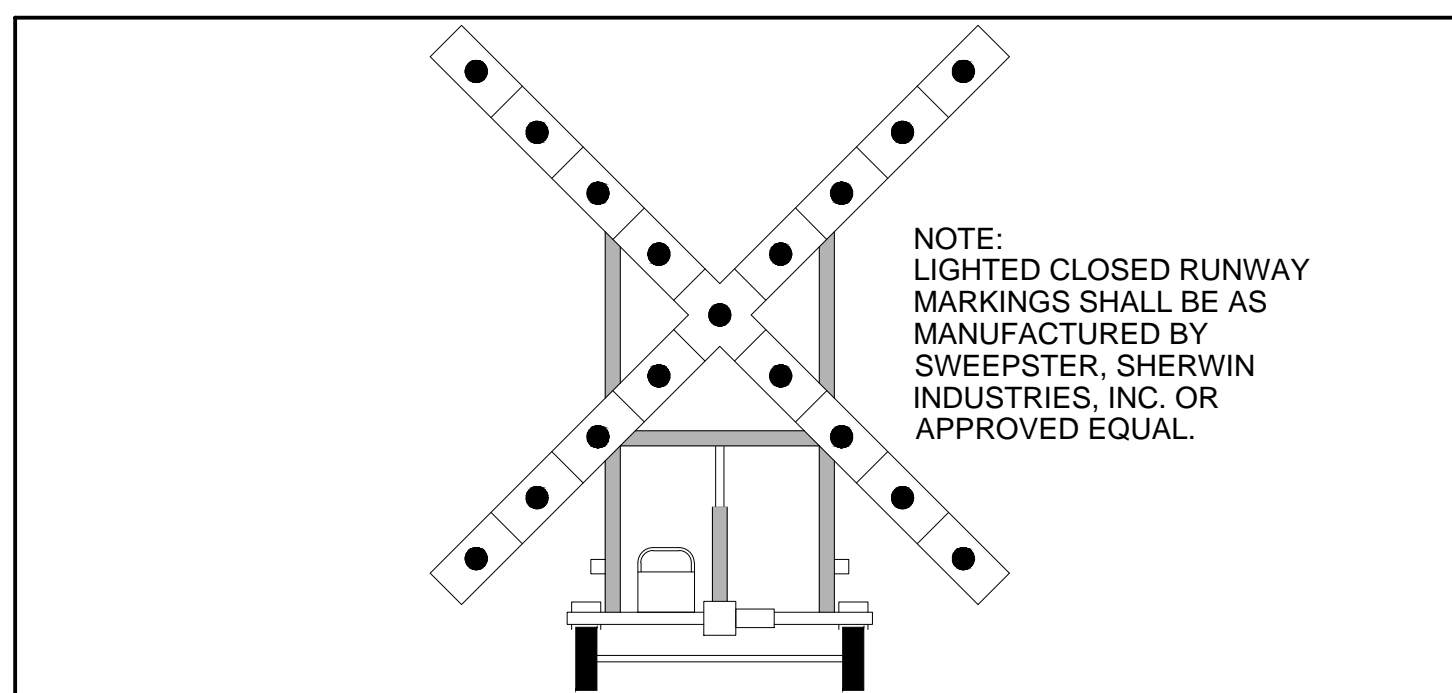
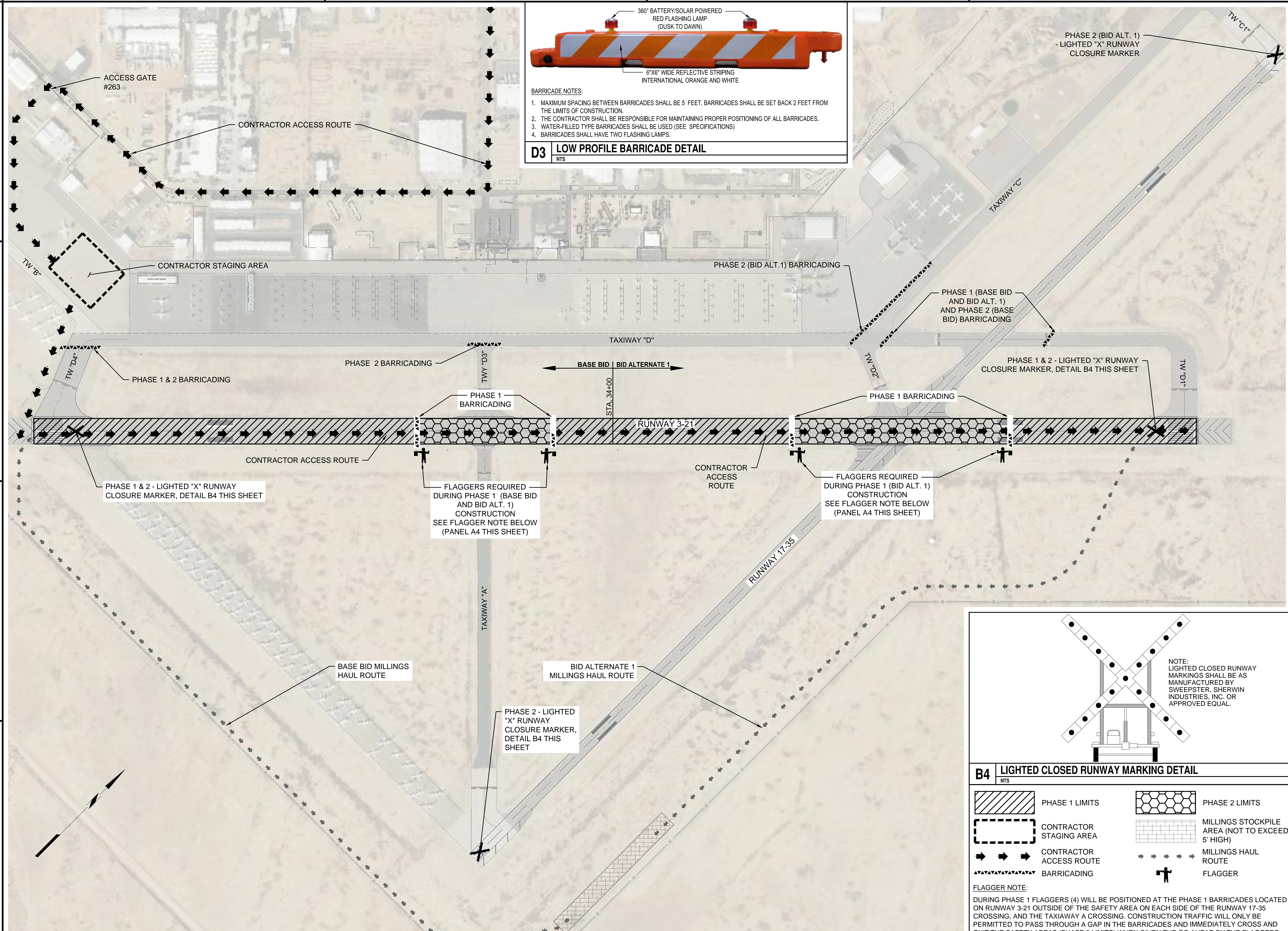
NOT TO SCALE



- BARRICADE NOTES:**
1. MAXIMUM SPACING BETWEEN BARRICADES SHALL BE 5 FEET. BARRICADES SHALL BE SET BACK 2 FEET FROM THE LIMITS OF CONSTRUCTION.
 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING PROPER POSITIONING OF ALL BARRICADES.
 3. WATER-FILLED TYPE BARRICADES SHALL BE USED (SEE SPECIFICATIONS)
 4. BARRICADES SHALL HAVE TWO FLASHING LAMPS.

D3 LOW PROFILE BARRICADE DETAIL

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B4 LIGHTED CLOSED RUNWAY MARKING DETAIL

- LEGEND**
- PHASE 1 LIMITS
 - PHASE 2 LIMITS
 - MILLINGS STOCKPILE AREA (NOT TO EXCEED 5' HIGH)
 - MILLINGS HAUL ROUTE
 - FLAGGER
 - CONTRACTOR STAGING AREA
 - CONTRACTOR ACCESS ROUTE
 - BARRICADE

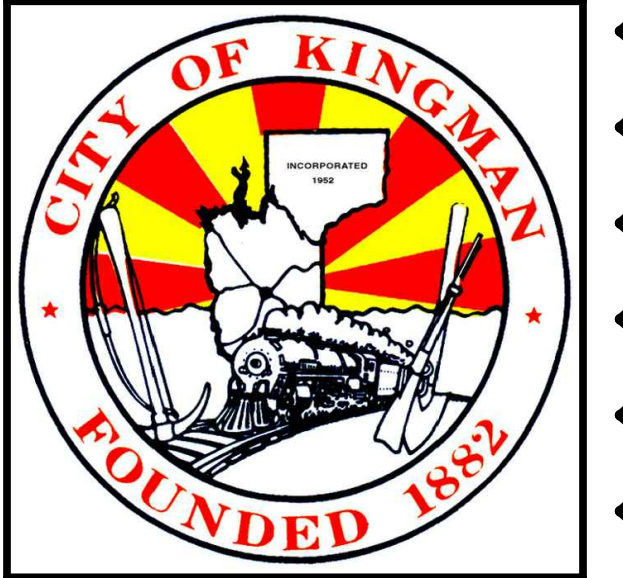
FLAGGER NOTE:
DURING PHASE 1 FLAGGERS (4) WILL BE POSITIONED AT THE PHASE 1 BARRICADES LOCATED ON RUNWAY 3-21 OUTSIDE OF THE SAFETY AREA ON EACH SIDE OF THE RUNWAY 17-35 CROSSING, AND THE TAXIWAY A CROSSING. CONSTRUCTION TRAFFIC WILL ONLY BE PERMITTED TO PASS THROUGH A GAP IN THE BARRICADES AND IMMEDIATELY CROSS AND EXIT THE SAFETY AREAS (PHASE 2 LIMITS) WHEN GIVEN THE GO AHEAD BY THE FLAGGERS.

A4 LEGEND

NTS

C&S COMPANIES
C&S Engineers, Inc.
2575 East Camelback Road
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Phoenix, Arizona 85016
Phone: 602-997-7536
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Professional Engineer
33442
LANCE R. McINTOSH
Expires: 3-31-23



RUNWAY 3-21 REHABILITATION PROJECT
KINGMAN MUNICIPAL AIRPORT
CITY OF KINGMAN
KINGMAN, ARIZONA

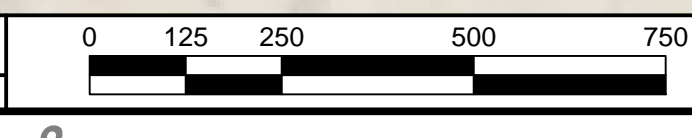
MARK	DATE	DESCRIPTION
Δ	5/14/2020	ADDENDUM No. 3
REVISIONS		
PROJECT NO: K32007001		
DATE: APRIL 2020		
DRAWN BY: NGM		
DESIGNED BY: NGM		
CHECKED BY: LRM		

CONSTRUCTION SAFETY AND PHASING PLAN

G101
4 of 13

A1 CONSTRUCTION SAFETY AND PHASING PLAN

SCALE: 1"=250'



A4 LEGEND

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Item P-605 Joint Sealants for Pavements

DESCRIPTION

605-1.1 This item shall consist of providing and installing a resilient and adhesive joint sealing material capable of effectively sealing joints in pavement; joints between different types of pavements; and cracks in existing pavement.

MATERIALS

605-2.1 Joint sealants. Joint sealant materials shall meet the requirements of the following types as indicated on the Contract Drawings:

ASTM D6690 Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

Each lot or batch of sealant shall be delivered to the jobsite in the manufacturer's original sealed container. Each container shall be marked with the manufacturer's name, batch or lot number, the safe heating temperature, and shall be accompanied by the manufacturer's certification stating that the sealant meets the requirements of this specification.

605-2.2 Backer rod. The material furnished shall be a compressible, non-shrinking, non-staining, non-absorbing material that is non-reactive with the joint sealant in accordance with ASTM D5249. The backer-rod material shall be 25% \pm 5 % larger in diameter than the nominal width of the joint. Type 1 backer rods shall be used for hot-applied sealants. Type 1 or Type 3 backer rods shall be used for cold-applied sealants.

605-2.3 Bond breaking tapes. Provide a bond breaking tape or separating material that is a flexible, non-shrinkable, non-absorbing, non-staining, and non-reacting adhesive-backed tape. The material shall have a melting point at least 5°F (3°C) greater than the pouring temperature of the sealant being used when tested in accordance with ASTM D789. The bond breaker tape shall be approximately 1/8 inch (3 mm) wider than the nominal width of the joint and shall not bond to the joint sealant.

CONSTRUCTION METHODS

605-3.1 Time of application. Joints shall be sealed as soon after completion of the curing period as feasible and before the pavement is opened to traffic, including construction equipment. The pavement temperature shall be 50°F (10°C) and rising at the time of application of the poured joint sealing material. Do not apply sealant if moisture is observed in the joint.

605-3.2 Equipment. Machines, tools, and equipment used in the performance of the work required by this section shall be approved before the work is started and maintained in satisfactory condition at all times. Submit a list of proposed equipment to be used in performance of construction work including descriptive data, 30 days prior to use on the project.

a. Tractor-mounted routing tool. Provide a routing tool, used for removing old sealant from the joints, of such shape and dimensions and so mounted on the tractor that it will not damage the sides of the joints. The tool shall be designed so that it can be adjusted to remove the old material to varying depths as

required. The use of V-shaped tools or rotary impact routing devices will not be permitted. Hand-operated spindle routing devices may be used to clean and enlarge random cracks.

b. Concrete saw. Provide a self-propelled power saw, with water-cooled diamond or abrasive saw blades, for cutting joints to the depths and widths specified.

c. Sandblasting equipment. Sandblasting is not allowed.

d. Waterblasting equipment. The Contractor must demonstrate waterblasting equipment including the pumps, hose, guide and nozzle size, under job conditions, before approval in accordance with paragraph 605-3.3. The Contractor shall demonstrate, in the presence of the RPR that the method cleans the joint and does not damage the joint.

e. Hand tools. Hand tools may be used, when approved, for removing defective sealant from a crack and repairing or cleaning the crack faces. Hand tools should be carefully evaluated for potential spalling effects prior to approval for use.

f. Hot-poured sealing equipment. The unit applicators used for heating and installing ASTM D6690 joint sealant materials shall be mobile and shall be equipped with a double-boiler, agitator-type kettle with an oil medium in the outer space for heat transfer; a direct-connected pressure-type extruding device with a nozzle shaped for inserting in the joint to be filled; positive temperature devices for controlling the temperature of the transfer oil and sealant; and a recording type thermometer for indicating the temperature of the sealant. The applicator unit shall be designed so that the sealant will circulate through the delivery hose and return to the inner kettle when not in use.

g. Cold-applied, single-component sealing equipment. Not Used

605-3.3 Preparation of joints. Pavement joints for application of material in this specification must be dry, clean of all scale, dirt, dust, curing compound, and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR that the method cleans the joint and does not damage the joint. All existing joint sealant in joints designated to be sealed shall be removed.

a. Sawing. All joints shall be sawed in accordance with specifications and plan details. Immediately after sawing the joint, the resulting slurry shall be completely removed from joint and adjacent area by flushing with a jet of water, and by use of other tools as necessary.

b. Sealing. Immediately before sealing, the joints shall be thoroughly cleaned of all remaining laitance, curing compound, filler, protrusions of hardened concrete, old sealant and other foreign material from the sides and upper edges of the joint space to be sealed. Cleaning shall be accomplished by tractor-mounted routing equipment, concrete saw or waterblaster as specified in paragraph 605-3.2. The newly exposed concrete joint faces and the pavement surface extending a minimum of 1/2 inch (12 mm) from the joint edge shall be sandblasted clean. Sandblasting shall be accomplished in a minimum of two passes. One pass per joint face with the nozzle held at an angle directly toward the joint face and not more than 3 inches (75 mm) from it. After final cleaning and immediately prior to sealing, blow out the joints with compressed air and leave them completely free of debris and water. The joint faces shall be surface dry when the seal is applied.

c. Backer Rod. Not Used

d. Bond-breaking tape. Not Used

605-3.4 Installation of sealants. Joints shall be inspected for proper width, depth, alignment, and preparation, and shall be approved by the RPR before sealing is allowed. Sealants shall be installed in accordance with the following requirements:

Immediately preceding, but not more than 50 feet (15 m) ahead of the joint sealing operations, perform a final cleaning with compressed air. Fill the joints in accordance with the plan details and specifications.

Remove and discard excess or spilled sealant from the pavement by approved methods. Install the sealant in such a manner as to prevent the formation of voids and entrapped air. In no case shall gravity methods or pouring pots be used to install the sealant material. Traffic shall not be permitted over newly sealed pavement until authorized by the RPR. When a primer is recommended by the manufacturer, apply it evenly to the joint faces in accordance with the manufacturer's instructions. Check the joints frequently to ensure that the newly installed sealant is cured to a tack-free condition within the time specified.

605-3.5 Inspection. The Contractor shall inspect the joint sealant for proper rate of cure and set, bonding to the joint walls, cohesive separation within the sealant, reversion to liquid, entrapped air and voids. Sealants exhibiting any of these deficiencies at any time prior to the final acceptance of the project shall be removed from the joint, wasted, and replaced as specified at no additional cost to the airport.

605-3.6 Clean-up. Upon completion of the project, remove all unused materials from the site and leave the pavement in a clean condition.

METHOD OF MEASUREMENT

605-4.1 Joint sealing material shall be measured in accordance with Item P-101.

BASIS OF PAYMENT

605-5.1 Payment for joint sealing material shall be made in accordance with Item P-101.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D789	Standard Test Method for Determination of Relative Viscosity of Polyamide (PA)
ASTM D5249	Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints
ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt

END ITEM P-605