



Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

June 8, 2017

SUBJECT: FAP Route 397 (IL 83)
Section 104-BR
Cook County
Contract No. 62D99
Item No. 230, June 16, 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 the Table of Contents to the Special Provisions
3. Added pages 65-70 to the Special Provisions
4. Revised sheets 3 & 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

A handwritten signature in black ink, appearing to read "Ted B. Walschleger P.E." with a stylized flourish at the end.

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

cc: Anthony Quigley, Region 1, District 1; Tim Kell; D. Carl Puzey;
Estimates

MS/ck

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

62D99

State Job # - C-91-182-17

Project Number
 *REVISED: JUNE 07, 2017

Route
 FAP 397

County Name - COOK - -
 Code - 31 - -
 District - 1 - -
 Section Number - 104-BR

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
X0326766	CLEAN RESEAL RLF JNT	FOOT	88.000				
X0327980	PAVMT MRKG REM WTR BL	SQ FT	866.000				
*DEL X0900043	PREF JNT STRP SEAL 1"	FOOT	128.000				
*ADD X0900046	PREF JNT SEAL 1"	FOOT	128.000				
X5870015	BR DK CONCRETE SEALER	SQ FT	538.000				
X7010216	TRAF CONT & PROT SPL	L SUM	1.000				
X7030005	TEMP PAVT MKING REMOV	SQ FT	1,688.000				
Z0001700	APPROACH SL REP (FD)	SQ YD	1.000				
Z0001800	APPROACH SL REP (PD)	SQ YD	3.000				
Z0012102	CONC BR DECK SCAR 3/8	SQ YD	939.000				
Z0012193	BR DK TH POLY OVL 3/8	SQ YD	939.000				
Z0012755	STR REP CON DP OVER 5	SQ FT	4.000				
Z0016200	DECK SLAB REP (PART)	SQ YD	14.000				
Z0030850	TEMP INFO SIGNING	SQ FT	51.400				
Z0041895	POLYMER CONCRETE	CU FT	6.600				

ILLINOIS DEPARTMENT OF TRANSPORTATION
 SCHEDULE OF PRICES
 CONTRACT
 NUMBER -

62D99

State Job # - C-91-182-17

Project Number
 *REVISED: JUNE 07, 2017

Route
 FAP 397

County Name - COOK - -

Code - 31 - -

District - 1 - -

Section Number - 104-BR

Item Number	Pay Item Description	Unit of Measure	Quantity	x	Unit Price	=	Total Price
42001300	PROTECTIVE COAT	SQ YD	517.000				
50900105	ALUM RAILING TY L	FOOT	29.000				
67000400	ENGR FIELD OFFICE A	CAL MO	6.000				
67100100	MOBILIZATION	L SUM	1.000				
70300904	PAVT MARK TAPE T4 4	FOOT	5,064.000				
78000200	THPL PVT MK LINE 4	FOOT	1,001.000				
78008210	POLYUREA PM T1 LN 4	FOOT	288.000				
78100300	REPLACEMENT REFLECTOR	EACH	55.000				

CONTRACT NUMBER

62D99

THIS IS THE TOTAL BID

\$ _____

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.**

TABLE OF CONTENTS

LOCATION OF IMPROVEMENT	1
DESCRIPTION OF IMPROVEMENT	1
MAINTENANCE OF ROADWAYS	1
APPROACH SLAB REPAIR	2
CLEAN AND RESEAL RELIEF JOINT	8
BRIDGE DECK THIN POLYMER OVERLAY	8
STRUCTURAL REPAIR OF CONCRETE	16
BRIDGE DECK CONCRETE SEALER.....	26
TRAFFIC CONTROL AND PROTECTION (ARTERIALS).....	27
TRAFFIC CONTROL PLAN.....	28
PUBLIC CONVENIENCE AND SAFETY (DIST 1)	29
TEMPORARY INFORMATION SIGNING.....	29
COMPENSABLE DELAY COSTS (BDE).....	31
CONSTRUCTION AIR QUALITY – DIESEL RETROFIT (BDE).....	36
DISADVANTAGED BUSINESS ENTERPRISE PARTICIPATION (BDE).....	38
PAVEMENT MARKING REMOVAL (BDE)	49
PROGRESS PAYMENTS (BDE)	50
TEMPORARY PAVEMENT MARKING (BDE).....	51
WEEKLY DBE TRUCKING REPORTS (BDE).....	53
WORKING DAYS (BDE).....	53
VETERAN BUSINESS PROGRAM	54
PREFORMED BRIDGE JOINT SEAL.....	65

PREFORMED BRIDGE JOINT SEAL

Effective: December 21, 2016

Description. This work shall consist of furnishing all labor, equipment and materials necessary to prepare the joint opening and install preformed bridge joint seal(s) at the locations specified. Unless otherwise detailed on the plans or specified herein, the maximum rated movement for this joint type is 4 inches (100 mm).

Materials: Unless otherwise specified, one of the following prefabricated joint seals will be permitted.

- (a) Preformed Pre-compressed, Silicone Coated, Self-Expanding Sealant System. This Sealant system shall be comprised of three components: 1) cellular polyurethane foam impregnated with hydrophobic 100% acrylic, water-based emulsion, factory coated with highway-grade, fuel resistant silicone; 2) field-applied epoxy adhesive primer, 3) field-injected silicone sealant bands.

The preformed, pre-compressed silicone joint seal shall, as a minimum, be according to the following:

- The joint seal shall be held in place by a non-sag, high modulus silicone adhesive.
- The joint seal shall be compatible with the epoxy and header material.
- The joint seal shall withstand the effects of vertical and lateral movements, skew movements and rotational movement without adhesive or cohesive failure.
- The joint seal shall be designed so that, the material is capable of movement of +50%, -50% (100% total) of nominal material size.
- Changes in plane and direction shall be executed using factory fabricated transition assemblies fabricated to the angle(s) specified on the plans. The transitions shall be watertight at the inside and outside corners through the full movement of the product.
- The depth of the joint shall be recessed 3/4 in. (19 mm) below the riding surface throughout the normal limits of joint movement.
- The joint seal shall be resistant to ultraviolet rays.
- The joint seal shall be resistant to abrasion, oxidation, oils, gasoline, salt, and other materials that may be spilled on or applied to the surface.
- The manufacturer shall certify that the joint composition shall be free of any waxes or wax compounds; asphalts or asphalt compounds.

Added 6-8-17

The joint material shall meet the following physical properties:

Property	Requirement	Test Method
Tensile Strength of Silicone Coating (min)	140 psi	ASTM D 412
UV Resistance of Joint System	No Changes--2000 Hours	ASTM G155-00A
Density of Cellular Polyurethane Foam	12.5lb/ cu ft (200kg/cu m)	ASTM D545
Heat Aging Effects (Silicone Coating)	No cracking, chalking	ASTM C 792
Resilience (Silicone Coating)	≥ 95%	ASTM D 5329
Joint System Operating temp range (min)	-40° F to 185° F	ASTM C 711

The adhesive shall be a two-component, 100% solid, modified epoxy meeting the requirements of ASTM C881, Type I, Grade 3, Class B & C. The adhesive shall also have the following properties:

Property	Requirement	Test method
Tensile Strength	2,500 psi (24 MPa) min.	ASTM D638
Compressive Strength	7000 psi (48 MPa) min.	ASTM D695
Bond Strength (Dry Cure)	2000 psi (28MPa) min	ASTM C882
Water Absorption	0.1% by weight	ASTM D570

Added 6-8-17

The silicone band adhesive shall have the following properties:

Property	Requirement	Test Method
Movement Capability	+100/-50%	ASTM C 719
Elongation at Break	>1400%	ASTM D 412
Slump	≤0.3"	ASTM D 2202
Hardness (Shore A) max.	20	ASTM C 661
Tack free time (max)	60 minutes	ASTM C 679
Heat Aging Effects	No cracking, chalking	ASTM C 792
Resilience	≥ 95%	ASTM D5329
Bond	0% Adhesive or Cohesive Failure after 5 cycles @100%extension	ASTM D 5329

(b) Preformed Silicone Joint Seal. The preformed silicone joint seal used for this item shall conform to the following specifications:

Table 1
Physical Properties of Preformed Silicone Gland

Property	Requirement	Test Method
Rated Movement Capability	+2 ¼ inch total	N/A
Tensile Strength, psi.	1000 min	ASTM D 412
Elongation	400% min	ASTM D 412
Tear (die B)	100 ppi. min	ASTM D 624
Hardness Durometer (Shore A).	55 +/- 5 max	ASTM D 2240
Compression set at 212°F, 70 hrs	30% max	ASTM D 395
Heat Aged Properties	5pt max loss on Durometer	ASTM D 573
Tensile and Elongation % Loss	10 % max	
Color	Black	Visual

The color of the preformed silicone seal shall be black, made by the addition of Carbon Black fillers which increases UV resistance, tensile strength, and abrasion wear properties.

The locking adhesive shall be non-sag, high modulus silicone adhesive conforming to the following specifications:

Table 2
Physical Properties of the Silicone Locking Adhesive

Property	Requirement	Test Method
Tensile Strength, psi.	200 min	ASTM D 412
Elongation, %	450 min	ASTM D 412
Tack Free Time, minutes.	20 max.	ASTM C 679
Cure Time ¼" bead, hrs	24 max	ASTM C 679
Resistance to U.V.	No cracking, chalking, or degradation	ASTM C793
VOC (g/L)	0	ATSM D 3960

Any rips, tears, or bond failure will be cause for rejection.

The two part epoxy primer shall be supplied for application to the vertical faces of the joint opening. The supplied primer shall be equally as effective when bonded to concrete or steel. This primer shall meet the following criteria:

Table 3
Physical Properties of Preformed Silicone Joint System Primer

Property	Requirement	Test Method
Viscosity (cps)	44	ASTM D 2196
Color	Light Amber	Visual
Solids (%)	41	ASTM D 4209
Specific Gravity	0.92	ATSM D 1217
Product Flash Point (°F, T.C.C.)	48	ATSM D 56
Package Stability	N/A	One year in tightly sealed containers
Cleaning	N/A	Mineral Spirits
VOC (g/L)	520	ATSM D 3960

Added 6-8-17

- (c) Bonded Preformed Joint Seal. This joint system shall consist of preformed elastomeric seal bonded to the side walls of the joint opening using an adhesive as specified by the Manufacturer of the joint seal.

The bonded preformed joint seal shall be according to Table 1 of ASTM D2628 with the following exceptions: Compression set shall not be over 40 percent when tested according to Method B (Modified) of ASTM D 395 after 70 hours at 212 °F (100 °C). The Compression-Deflection requirement will not apply to the bonded preformed joint seal.

The adhesive shall be epoxy base, dual component, which resists salt, diluted acids, alkalis, solvents, greases, oils, moisture, sunlight and weathering. Temperatures up to 200 °F (93 °C) shall not reduce bond strength. At 68 °F (20 °C), the bond strength shall be a minimum of 1000 psi (6.9 MPa) within 24 hours.

Any primers or cleaning solutions used on the faces of the joint or on the profile of the sides of the bonded preformed joint seal shall be supplied by the manufacturer of the bonded preformed joint seal.

Any additional installation materials and adhesive for splicing joint sections shall be as supplied by the manufacturer of the preformed joint seal.

The Contractor shall submit the Manufacturer's material certification documentation stating that their materials meet the applicable requirements of this specification for the joint seal(s) installed.

CONSTRUCTION REQUIREMENTS

General. The Contractor shall furnish the Engineer with the manufacturer's product information and installation procedures at least two weeks prior to installation.

The minimum ambient air temperature in which the joint seal can be installed is 40° F (4.4° C) and rising, except for bonded preformed joint seals which shall not be installed when temperatures below 50 °F (10 °C) are predicted within a 48 hour period.

The joint surface shall be completely dry before installing the Joint Seal. For newly placed concrete, the concrete shall be fully cured and allowed to dry out a minimum of seven additional days prior to placement of the seal. Cold, wet, inclement weather will require an extended drying time.

The Joint Seal shall not be installed immediately after precipitation or if precipitation is forecasted for the day. Joint preparation and installation of Joint Seal shall be done during the same day.

Surface Preparation. Surface preparation shall be according to the joint seal manufacturer's written instructions.

After surface preparation is completed, the joint shall be cleaned of debris using compressed air with a minimum pressure of 90 psi (620 kPa). The air compressor shall be equipped with traps to prevent the inclusion of water and/or oil in the air line. The compressed air shall be according to the cleanliness requirements of ASTM D 4285.

When priming is required per the manufacturer's instruction, this operation shall immediately follow cleaning.

Joint Installation. The Joint installation shall be per the manufacturer's instructions; special attention shall be given to insure the joint seal is properly recessed below the top of the riding surface as recommended by the manufacturer.

For bonded joint seals the seal shall be inserted into the joint and held tightly against both sides of the joint until sufficient bond strength has been developed to resist the expected expansion forces.

Opening to traffic. As these joint systems are supposed to be recessed below the top of the riding surface, there should be no restriction, based on the joint seal installation, on when these joints can be reopened to traffic.

Method of Measurement. The installed preformed joint seal will be measured for payment in feet (meters) measured along the centerline of joint, from out to out of the deck, no measurement will be made for joint material used to turn up into the parapet, sidewalk, or median.

Basis of Payment. The preformed bridge joint seal will be paid for at the contract unit price per foot (meter) for PREFORMED JOINT SEAL, of the design movement specified, rounded to the nearest half inch (13 mm).

Added 6-8-17